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WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

**Responsiveness Summary for Revision 7 of the
Hanford Facility Resource Conservation and
Recovery Act Permit**

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Responsiveness Summary for Revision 7 of the Hanford Facility Resource Conservation and Recovery Act Permit

Prepared by: Laura Ruud

Washington State Department of Ecology
Nuclear Waste Program

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RESPONSIVENESS SUMMARY
FOR THE
HANFORD FACILITY RESOURCE CONSERVATION AND RECOVERY ACT PERMIT
FOR THE TREATMENT, STORAGE, AND DISPOSAL
OF DANGEROUS WASTE, REVISION 7

Introduction

This Responsiveness Summary is the result of written comments on the draft Permit modification (Modification E) which was available for public comment from October 4, 1999, through December 6, 1999. A public hearing was held on November 9, 1999; however, no verbal testimony was offered at that time. The Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit (Permit) sets the conditions for the management of dangerous and mixed waste at the U.S. Department of Energy, Hanford Facility, located north of Richland, Washington.

The Washington State Department of Ecology (Ecology) received written comments from two citizens and from the Permittees [the U.S. Department of Energy and its contractors; specifically, the comment Preamble states, "These comments were prepared by the U.S. Department of Energy, Richland Operations Office, Fluor Daniel Hanford, Inc., Bechtel Hanford Company, Inc., Pacific Northwest National Laboratory, and Lockheed Martin Hanford Corporation (hereinafter referred to as the Permittees)."] Ecology appreciates the input received from the commenters.

As in previous public comment periods for this Permit, Ecology received numerous comments from the Permittees. The Permittees provided a comment package including an introductory section which they called the Preamble, a section commenting on the Fact Sheet that was issued with the modification package, and a large section responding to each of the draft permit conditions. Many of these comments were repetitive. In the interest of providing a succinct response by Ecology, Ecology's response to a comment may refer back to the text of this Responsiveness Summary, where the comment was originally addressed, rather than repeating a lengthy response.

As stated in the second Responsiveness Summary (dated August 29, 1994) for the original issuance of the Permit, the following is still true for this permit modification (*italicized words added for clarification*):

"It is important for the Permittees to recognize that they are the regulated entity. Although negotiations have played, and will continue to play, an important role in bringing the Hanford Facility into compliance with the regulations, the Department (*of Ecology*) must maintain and exercise its regulatory authorities as is done with other regulated entities. In short, permits are based upon the regulations and information submitted by the prospective Permittees. While, [sic] input from the Permittees is factored into the Permit, the Department (*of Ecology*) must set the final permit conditions."

"Many of the issues raised by the Permittees are valid concerns and the changes to the Permit based upon these comments reflect the Department's willingness to consider and incorporate, where appropriate, the Permittees' suggestions. In this respect, the Permittees receive the same treatment as other Commenters."

"The Department (*of Ecology*) intends to treat the Hanford Facility in a manner which is consistent with other entities in Washington State and similar facilities around the country. The

Permittees must recognize, however, that the Hanford Facility is considerably more complex than a typical commercial treatment, storage, and disposal facility and therefore, the final regulatory requirements placed upon the facility will reflect this complexity.”

Modification E was planned to:

- ◆ Include two new operating Dangerous Waste Treatment, Storage, and Disposal (TSD) units through the introduction of two new chapters to Part III of the Permit:
 - Part III, Chapter 7 – Waste Receiving and Processing Plant (WRAP)
 - Part III, Chapter 8 – Central Waste Complex (CWC)
- ◆ Modify one existing operating unit (add conditions for closure of the permitted unit):
 - Part III, Chapter 1 – 616 Nonradioactive Dangerous Waste Storage Facility
- ◆ Approve two units for closure:
 - Part V – 300 Area Waste Acid Treatment System (300 WATS)
 - Part V – 2401-W Waste Storage Building (a partial closure of CWC)

Ecology also made minor changes throughout the Permit for consistency in punctuation, grammar, and presentation; included various Class 1 Permit Modifications; and updated the list of attachments and table of contents.

This Responsiveness Summary is intended to address all the comments received and show how the comments were evaluated. This Responsiveness Summary will be made part of the Hanford Facility Administrative Record for future reference.

This Responsiveness Summary is organized as follows:

Response to PUBLIC CITIZENS (p. 3):

- ◆ Alton Haymaker (p. 3)
- ◆ John H. Browne, Jr. (p. 3)

Response to the U.S. DEPARTMENT OF ENERGY (p. 5):

- ◆ Preamble (p. 5)
- ◆ Comments on the Fact Sheet (p. 16)
- ◆ Comments on the Proposed Modifications to the Introduction (p. 36)
- ◆ Comments on the Proposed Modifications to Attachment 3, Permit Applicability Matrix (p. 38)
- ◆ Comments on the Proposed Modifications to Attachment 27, Permit Modification Schedule (p. 41)
- ◆ Comments on the Proposed Modifications to Attachment 45, Selecting a Laboratory and Quality Assurance/Control (p. 45)
- ◆ Comments on the Proposed Modifications to Part III, Chapter 1, 616 Nonradioactive Dangerous Waste Storage Facility (p. 57)
- ◆ Comments on the Proposed Modifications to Part III, Chapter 7, Waste Receiving and Processing Facility (p. 58)
- ◆ Comments on the Proposed Modifications to Part III, Chapter 8, Central Waste Complex (p. 178)

- ♦ Comments on the Proposed Modifications to Part V, Chapter 20, 300 Area Waste Acid Treatment Facility (p. 245)
- ♦ Comments on the Proposed Modifications to Part V, Chapter 21, 2401-W Waste Storage Building (p. 246)

As noted in Ecology's response to comments, some conditions have been deleted and replaced with the term "Reserved" so that all permit conditions retained the same numbers as given to them in the public comment package. This will assist the public in visualizing the changes made to the Permit.

COMMENTER:

ALTON HAYMAKER
1721 COTTONWOOD DRIVE
PASCO, WASHINGTON 99301

1. Summation lacks refinement. Preserve Ecology enforcement capabilities.

Ecology Response: Ecology acknowledges and appreciates your comment; however, inasmuch as your comment addresses the proposed conditions in a general manner rather than a request for specific action, no changes to the proposed conditions result. The Introduction and Part I, Standard Conditions, describe Ecology's enforcement authority regarding compliance with the Permit.

COMMENTER:

JOHN H. BROWNE, JR.
P.O. BOX 13378
BURTON, WASHINGTON 98013

Re: FFTF Restart
Hanford RCRA Permit

To whom, etc;
Wherever You may Be

October 19, 1999
Vashon, Washington

There is too much rage and grief in my heart to tolerate the company of earnest, intelligent men (it is mostly men) who have been reduced to posturing fools by their proximity to the Power of the Union of Politics and Atomic Fission. Rather than attend a meeting scheduled nearby, last night, I tried my best to simply be civil to my wife, do the necessary chores, and sleep. There was, however, not much comfort in sleeping.

I'm a 1961 graduate of Columbia H.S. in Richland, Washington; & lived there as a child, watching that great Social Experiment from the days when everyone rented a home from General Electric (who 'inherited' the Hanford site from Du Pont, and passed it on to Westinghouse . . . but that's another story). The fathers of my friends (it has always been "mostly men") were important men, who accepted the power and the secrecy with the same enthusiasm they displayed when they put on warrior's clothing and went off to fight WW2. Weeklong trips to Oakridge, short hops to D.C. and more mysterious places were just "part of the job." Their own families simply accepted it; and the rest of us were supposed to ignore it. And so we did, proud to be an outpost of supporting warriors, there, in the desert, by the Great River whose power 'we' had harnessed, and whose waters were cooling the reactors upstream. Oh, we all knew about That! We had the best public schooling on the planet—grade school orchestras, beautiful, well-equipped Jr. High gymnasias and science classrooms, a High School that offered 5 foreign languages,

including Russian . . . all this before Sputnik! I learned of the 'accident' at Arco, Idaho, in a film, "A' is for "Atom" in 1956. We were beyond 'duck and cover' drills; we knew that we were a Target. We had posters in the Jr. Hi warning us to "beware the Red saboteur;" and our community police force was calculated to be sufficient, by National Standards, for a city of 75,000. It served the 28,000 of us with a persevering ubiquity that eventually inured us to them. Crime was almost non-existent, beyond the alcohol-inspired tavern parking lot fight and occasional 'domestic' violence. There was so much money, social support, so many 'good' jobs, that there weren't many reasons to indulge in 'criminal' behavior. Hell, if Our Young Turks kicked the shit out of the Bad Boys from a neighboring town after a football game at a 'drag strip' somewhere, why, that was smirking & bragging rights. We were a bunch of Warriors, by God! . . . the children of those who wielded the Atom, the People of the Future, the inhabitants of the instant 'Atomic City,' there by the Great River, on the edge of the Desert. We were not ignorant country bumpkins! (The white farm families mostly did business in Kennewick, or 'up the valley' in Prosser.) Nor were we the pitiful 'working class!' (The black families of railroad workers all lived in East Pasco.) We were Different! We were all . . . Middle Class! And we were Tolerant; there was a Black Family, whose athletic children were lionized as Sports Heroes. Plus, we had a Jewish Doctor, upon whose gate no swastikas were painted (to my knowledge). Yes, we were all Americans, Together, in Richland. We had control of the Greatest Power on Earth; & We would Win, no matter What.

So, I know these people at these Public Hearings. I have known them since I was a child, visiting their children. Now their children have become Them: the socially adept Administrator; the earnest Technocrat; the enthusiastic, visionary Scientist; the thin-lipped, tight-jawed Representative of a Regulatory Agency; the thoughtful, nodding Politician; the eternally raised eyebrows of the Budget Planners; the sharp tongues of lean and exasperated representatives of the Environmental NGOS; the enigmatic, long-suffering Tribal Observer; the power suits from the Industrial Complex; the cheap suits from the Local Business Populists; the (rare) Naive Private Citizen; the Salem Witch Trials, over & over again, waiting for their Arthur Miller.

At a meeting here, in the 1980s, when I questioned the size of the security budget (by proposing a terrorist with a bucket of plutonium heading for the water supply), the spokesman for the cleanup at the time said that his biggest nightmare was radioactive solvents leaking out of underground storage (a problem similar to the one facing computer chip mfrs, with radiation added). While standing in a grocery checkout line in Richland, the following summer, and listening to a conversation of two housewives, I learned of 'the plumes' entering the water table, not far from their North Richland homes. They were discussing the pros & cons of selling and moving before it became such common knowledge that it might take away from their property value. (The climate of secrecy has apparently slipped quite a ways down the list of Prime Directives from the Richland of my youth.) This was 6 or 7 years before a 'more forthcoming' collaboration of State & Federal agencies got around to discussing 'potential problems' in the 'vadose zone.' Obviously the Public's Right to Know still doesn't kick in until the Problem is Out of Hand . . . same-old, etc.

How do "WE" deal with the question (request?) of starting the FFTF up again, after deciding to shut it down, remove it (& the other radioactive detritus), AND clean the spot it once graced, when it was the darling toy of nuclear scientists? Well, "WE" might play "Let's Make a Deal": when "WE" clean up Our Mess along The River to standards that were agreed upon, not so long ago, why, then, "WE" may play with our nuclear toys again, (in a responsible way, of course!).

Realistically, there's one way to get the Hanford sites all decommissioned & cleaned up: deactivate the Dept. of Energy; and bring in the Army Corps of Engineers. One reason the politicians fear (and placate) the military is because armies have the Power to Transform. They also have visible chains of command, people who shoulder responsibility, and comprehend the meaning of words like 'reconnoiter' & 'retreat.' They also have experts in enough disciplines to deal with the multiple problems of this troubled place. They're "Our Boys & Girls;" & unlike the corporate mercenaries from BNFL, or the like, they're 'on the payroll' now.

The results of the bombs we dropped on Dresden, Berlin, Nagasaki, etc are obvious. Our former enemies will certainly remember them to us, even when those cities are renewed. It's the bombs we drop on ourselves that are harder to recognize. The Bomb at Hanford is still going off. That explosion should not herald a "business opportunity" nor proclaim "eternal bureaucratic morass" It silently announces "A Sacred Place, Sullied;" & Travesty Underway." Go & look from White Bluffs, and taste the wind. How is there anything more than grieving?
John H. Browne, Jr.

Ecology Response: Ecology acknowledges and appreciates your comment; however, inasmuch as your comment addresses the proposed conditions in a general manner rather than a request for specific action, no changes to the proposed conditions result.

COMMENTER:

UNITED STATES DEPARTMENT OF ENERGY (USDOE)
RICHLAND OPERATIONS OFFICE
P.O. BOX 550
RICHLAND, WASHINGTON 99352

PREAMBLE

In general, Ecology does not agree with the comments or approach expressed in the Permittees' Preamble. The entire text of the Preamble is not reproduced below, but is available as Appendix 1 to this Responsiveness Summary. Only the portions of the Preamble that state a comment concisely are quoted. In other cases, Ecology has provided a summary of the comment.

COMMENT P1 (PAGE 1, "COMMENT CRITERIA," LINES 4 THROUGH 6):

"The Permittees believe that WAC 173-303 provides sufficient protection of human health and the environment. Thus, the Permittees request that any Draft Permit conditions that go beyond regulatory requirements carefully be re-evaluated in the interest of management efficiency."

Ecology's Response: Ecology believes that proper waste management promotes management efficiency and cost effectiveness. This Permit sets standards and requirements for proper waste management and, therefore, will help ensure management efficiency and cost effectiveness. In this permit modification, specifically in conditions related to the Waste Analysis Plans (WAPs), Ecology has provided flexibility in the interpretation of certain requirements, such as the rate and methods of verification of waste received at TSD units. Further, Ecology has made exceptions to some requirements because of the radioactive components of the mixed waste managed at the Hanford Facility and the inherent danger posed to human health. (This is frequently stated as the ALARA principle, i.e., limiting worker exposure to radiation "as low as reasonably achievable.") Conversely, also because of the potential danger to human health and the environment posed by managing mixed wastes at the TSD units of the Hanford Facility or because of the size and complexity of the Hanford Site, Ecology has included additional requirements which Ecology believes are necessary to protect human health and the environment. Authority for those requirements is found in WAC 173-303-283(2) which states, in part: "... These general performance standards must be used to determine whether more stringent facility standards should be applied than those spelled out in WAC 173-303-280, 173-303-290 through 173-303-400 and 173-303-600 through 173-303-670."

Furthermore, in this modification, Ecology's approach is consistent with the approach taken in the issuance of the original Permit and is best addressed by quoting text from the second Responsiveness Summary (note: "Department" refers to Ecology throughout the following quotation):

“The Department has based the Permit on the regulations. It is also the Department’s prerogative to make interpretive decisions on how the regulations are applied to a specific facility. These interpretive, case-by-case decisions are necessary in order to ensure the peculiarities of any given facility are addressed appropriately.”

“With respect to the use of the omnibus provisions (WAC 173-303-800(8)), the regulations allow for the Department to apply these provisions when, in the Department’s view, they are necessary to protect human health and the environment.”

“The Department recognizes two general types of applications of the “omnibus” provision. First, it is appropriate to use this provision in order to add conditions to the Permit that reflect proposed or pending rules . . . Second, the “omnibus” provision has been used to design conditions deemed appropriate on the basis of site-specific characteristics unique to the Hanford Facility that are not accommodated by the general regulations. The provision requires the permit writer to assess the effectiveness of the permit conditions that have been established under other regulations. If the permit writer then concludes that additional or different conditions are necessary in order to protect human health or the environment, such conditions should be included in the permit. The Department believes that in cases where the omnibus provision has been used in this Permit, additional protection of human health and/or the environment is evident and necessary. However, what is difficult to articulate is whether the incremental benefit is worth the time and expense of more protective requirements. Such cost/benefit analyses are subjective and likened to insurance policies in that they may never actually provide additional protection but in an unforeseen (sic) event, they become invaluable. Considering the size and the complexity of the waste management at the Hanford Facility, it is the Department’s position that the existence of Conditions not identical to the regulations is consistent with the intent of permitting regulations which are meant to be preventative in nature. Similarly, the Commenter maintains that the regulations themselves are generally sufficient to protect human health and the environment but have created elaborate and numerous waste management systems unique to the Hanford Facility . . . It should be noted that many of the “non-standard” conditions do not require the Permittees to perform activities in a manner inconsistent with what is currently being done or provide information that does not currently exist. For these reasons, it is the Department’s position that the requirements of the Permit were designed on the basis of site-specific characteristics specifically to maximize the Department’s ability to ensure protection of human health and the environment.”

Ecology believes the conditions written for this permit modification are necessary to protect human health and the environment. In some cases, the conditions are needed because the regulations apply to the facility. Because Ecology and the Permittees have agreed to permit the Hanford Facility on a piecemeal basis by addressing each TSD unit with its own application and its own chapter in the Permit, Ecology must translate the “facility” requirements into requirements for each TSD unit. The result is that the facility, as an aggregate of TSD units, will then meet regulatory requirements. One example is the requirement for waste tracking, which will identify what waste constituents and volumes are present in a TSD unit, so that in case of disasters such as a fire or explosion, emergency personnel or cleanup personnel can identify what may have been released to the environment, or what hazards personnel need to be protected against. In other cases, the conditions are necessary because past compliance history has shown that certain management practices need to be explicitly required so that human health and the environment are protected (e.g., management of drummed waste in covered structures to prevent exposure of drums to extremes of climate which results in loss of container integrity and subsequent release or potential release of waste to the environment).

Finally, Ecology agrees with the Permittees' statement that "WAC 173-303 provided sufficient protection of human health and the environment" to the extent that the omnibus provisions are contained within WAC 173-303. Thus, all permit conditions are solidly grounded in WAC 173-303 and do not "go beyond regulatory requirements."

COMMENT P2 (PAGE 1, "ACHIEVE CONSISTENCY WITH THE HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT)," LINES 1 THROUGH 10):

"The Permit must be consistent with the Tri-Party Agreement, because the Tri-Party Agreement is the governing document for all RCRA/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cleanups and for all RCRA permitting on the Hanford Site. The Tri-Party Agreement is binding on the Department of Ecology, the U.S. Environmental Protection Agency, and the U.S. Department of Energy, Richland Operations Office. Permit conditions developed by the Department of Ecology must be compatible with the provisions of the Tri-Party Agreement. All schedules of compliance must be maintained and controlled in the Tri-Party Agreement to ensure consistency and proper prioritization of work. The Permit conditions must not place the U.S. Department of Energy, Richland Operations Office or its contractors in a position where the conditions of the Permit only can be met by a failure to comply with the Tri-Party Agreement."

Ecology's Response: Ecology agrees that the Tri-Party Agreement (TPA) is the governing document which established the *framework* by which the requirements were identified to bring the Hanford Site into compliance with federal and state laws and regulations for managing dangerous and mixed waste (i.e., the federal RCRA and the state Dangerous Waste Regulations). However, the TPA (e.g., Article IV, paragraph 16; Section 3.2 of the Action Plan) also states that USDOE is required to comply with the Revised Code of Washington (RCW) and the Dangerous Waste Regulations, WAC Chapter 173-303. The schedules of compliance in the TPA related to RCRA/Dangerous Waste permitting are limited to the initial submission of draft closure plans for interim status TSD units, or the initial submission of draft applications for final status for an operating TSD unit. No milestone schedule for finalization of closure requirements or operating requirements appears in the TPA. This enforceable schedule, however, does appear in the Permit as Attachment 27. In addition, as allowed by WAC 173-303-815(3), compliance schedules have been established previously in this Permit. Furthermore, by establishing milestones for submittal of permit applications and closure plans, the TPA is a vehicle for transferring dangerous and mixed waste management to a Facility Permit.

The contractors, who are co-operators, are not signatories to the TPA. However, through the Permit and the regulations, the owner and co-operators must comply with regulatory requirements. It would not be appropriate for Ecology to establish requirements in TPA that should apply to the co-operators because the contractors, who are co-operators, are not signatories to the TPA. Furthermore, the Permittees must comply with regulatory requirements and their various permits, whether or not these requirements are specifically identified in the TPA.

Ecology believes that the Permit is consistent with the TPA and believes that compliance with the proposed permit conditions will not cause noncompliance with TPA.

COMMENT P3 (PAGE 2, "REGULATE WITHIN THE SCOPE OF REGULATORY AUTHORITY AND ACHIEVE RESPONSIBLE INTERPRETATION OF REQUIREMENTS," LINES 1 THROUGH 6 AND LINES 44 THROUGH 47):

"The Permit Conditions must be based on clear regulatory authority. Federal and state environmental regulations are comprehensive and complex. While the regulated community has an obligation to comply with applicable environmental requirements, enforcement agencies such as the Department of Ecology

also have an obligation to regulate within the bounds of their authority in accordance with the federal Administrative Procedures Act and its implementing regulations . . . The Department of Ecology is required to administer its program within certain parameters. The Department of Ecology does not have the authority to create or amend existing requirements without specific delegation from the legislature. The legislature is directly responsible for authorizing others or personally making substantial policy decisions affecting the public.”

Ecology’s Response: The Permittees appear to argue that Ecology has violated the Washington State Administrative Procedures Act, RCW Chapter 34.05 (APA) and WAC 173-303-815(3) by creating a new permit program or new policies without adopting rules in the WAC, or without publishing policies in the State Register, as required by the APA¹. Rules or regulations are requirements of general applicability. Ecology has not adopted requirements that it intends to apply to all facilities, or a class of facilities. Rather, Ecology has made several determinations that additional site-specific conditions are necessary to protect public health and the environment at the Hanford Facility. The omnibus authority, found in the Dangerous Waste Regulations at WAC 173-303-800(8) and 173-303-815(2)(a)(ii), (discussed above in the quotation from the second Responsiveness Summary in Ecology’s response to Comment P1) already enables the Director of Ecology to impose additional conditions in these circumstances. Those regulations were adopted pursuant to the rulemaking provisions of the Washington APA. These conditions do not constitute adoption of a policy or program that would require rulemaking or publication in the State Register.

COMMENT P4 (PAGE 2, “ACHIEVE CONSISTENCY WITH EXISTING REGULATORY REQUIREMENTS,” LINE 1 AND PAGE 3, LINES 1 THROUGH 3):

“The Permit must be consistent with regulatory requirements that form the basis for permitting . . . Specifically, WAC 173-303-600 contains sufficient final status standards, and WAC 173-303-800 contains sufficient criteria for issuance of permits. These regulations have been proposed properly before the public, and promulgated after response to public comments.”

Ecology’s Response: Ecology believes that the permit conditions are consistent with regulatory requirements. To ensure consistency with other dangerous waste permitting in the state of Washington, the permit conditions were subject to review by other Ecology permit writers. In addition, see Ecology’s response to Comment P1 regarding conditions based upon the omnibus authority conferred by WAC 173-303-815(2)(b)(ii) and 173-303-808(8).

COMMENT P5 (PAGE 3, LINES 3 THROUGH 5):

“The Department of Ecology should ensure that permits do not impose excessively prescriptive or ambiguous conditions. Such conditions present unnecessary compliance issues and drive costs up and have no basis.”

Ecology’s Response: Ecology believes that the conditions established through this permit modification are not ambiguous; in addition, some conditions clarify text in the permit application which Ecology believed to be ambiguous (see Conditions III.7.B.d.12. and III.7.B.d.85.), incorrect (see Conditions III.7.B.d.3. and III.7.B.d.14.), or not sufficiently descriptive (see Conditions III.7.B.d.8. and III.7.B.d.25.). Ecology determined much of the text of the WAPs to be lacking in sufficient description of procedures and in addressing quality assurance and quality control requirements. Based upon review and comments by Ecology, the Permittees had an opportunity to incorporate revised text in the application prior to submitting the certified, true, accurate, and complete permit application, but did not do so for every

¹ The Permittees’ comment refers to the federal Administrative Procedure Act (APA). As a state agency apply state law and regulations, the applicable statute is the Washington State APA.

deficiency noted in the review comments. In discussions with the Permittees prior to submission of the certified application, the Permittees agreed to supply text to be used as insertions in the certified application when they were not able to accomplish the revision prior to submission of the certified permit application. When such text was provided, Ecology included it as a permit condition. Occasionally, Ecology found it necessary to modify the text provided or, in the absence of such text, to write the inserted text. In many cases, the text described as "excessively prescriptive or ambiguous" by the Permittees, in this and later comments, was supplied to Ecology by the Permittees after submission of the certified application, according to that agreement (e.g., Conditions III.7.B.d.8., III.7.B.d.22., and screening method descriptions such as III.7.B.d.62. [e-mail message from Glen C. Triner to Elizabeth M. Bowers, Anthony G. Miskho, Daniel G. Saueressig, Brett M. Barnes, Norman P. Willis, Joel F. Jr. Williams, Gregory L. Sinton, Joan K. Bartz, Anthony C. McKarns, dated Friday, July 10, 1998]).

COMMENT P6 (PAGE 3, LINES 5 THROUGH 7):

"The Department of Ecology must act in accordance with the requirements of the Administrative Procedures Act in establishing permit conditions."

Ecology's Response: See response above to Comment P3 regarding the Washington State APA.

COMMENT P7 (PAGE 3, LINES 7 THROUGH 10):

"The Department of Ecology cannot legally impose restrictions that go beyond the regulations. Substantial shifts in policy from existing regulatory programs must be accomplished through legislation. The Department of Ecology cannot create new or amend existing permit programs without following Administrative Procedures Act procedures."

Ecology's Response: Ecology agrees that it "cannot legally impose restrictions which go beyond the regulations." The conditions in this modification are well grounded in the regulations and are, therefore, within Ecology's authority to impose. See responses above to Comments P1 and P3 regarding omnibus authority and the APA, respectively.

COMMENT P8 (PAGE 3, LINES 14 THROUGH 36):

The Permittees challenge the adequacy of the Fact Sheet prepared for this modification of the Permit.

Ecology's Response: WAC 173-303-840(2)(f)(iii)(c) requires that the Fact Sheet "include, where applicable: a brief summary of the basis for the draft permit conditions, including supporting references." Ecology believes that the Fact Sheet prepared for this permit modification fully complies with the requirement.

COMMENT P9 (PAGE 3, "FIVE KEY COMMENT AREAS," CONTINUING ON PAGE 4, THROUGH LINE 24):

The Permittees define "Five Key Comment Areas" which are the following: "(1) exceeds delegated regulatory authority, (2) reflects approach inconsistent with regulations, (3) imposes potential for unnecessary compliance issues, (4) hinders cost effectiveness without added protection, and (5) imposes redundant or unenforceable conditions." Please refer to the complete text of the Permittees' comment in Appendix 1.

Ecology's Response: Regarding item 1, "exceeds delegated regulatory authority," see the responses to Comments P1 and P3.

Regarding item 2, “reflects approach inconsistent with regulations,” all draft permit conditions were based on the regulations and/or the actual operations of the TSD units. In some cases, Ecology accepts the manner in which the TSD units are presently operating, even though those operations may be different than, or contrary to, the procedures required or expected at commercial TSD units and facilities that handle only dangerous waste. In addition, as stated in the second Responsiveness Summary, “The Permit is intended for application at the Hanford Facility. The Permit language is consistent with other permits to the extent possible given differences due to Hanford Facility specific conditions. The language of (*a specific condition*) as it stands merely clarifies that of WAC 173-303 . . . ; it does not expand the requirements beyond the intent of the regulation. It is not necessary for permit language to blindly parrot the word of the regulation. In some instances it may be necessary to use the Permit language to clarify a regulatory requirement.” See also responses to Comments P1 and P4.

Regarding item 3, “imposes potential for unnecessary compliance issues,” see response above to Comment P5. The Permittees contend that “ambiguity regarding interpretation” will be a problem. However, Ecology believes that the Permit is clear. Ecology has written many of the permit conditions based on text supplied by the Permittees. Also, the conditions have been subjected to multiple expert reviews.

Regarding item 4, “hinders cost effectiveness without added protection,” see response above to Comment P1.

Regarding item 5, “imposes redundant or unenforceable conditions,” Ecology acknowledges that some conditions in the TSD unit-specific chapters may be somewhat repetitive of conditions in the general chapters; however, generally the TSD unit-specific conditions further define the requirements for the TSD unit. Ecology is not aware of any TSD unit-specific conditions that impose requirements that already have been met through submission of the permit applications. However, Ecology is aware of many conditions which request that the Permittees provide or insert text, some of which was provided to Ecology by the Permittees, in order to result in adequate description of procedures. The Permittees state that some “conditions are written in a manner that do not impose requirements at all” or “would have no substantial impact on the operation of the Hanford Facility.” It appears the Permittees are referring to conditions where Ecology has decided to delete, correct, or expand text in the permit application. In most cases, such conditions were written only after the Permittees failed to revise the permit applications in response to review comments (e.g., III.7.B.d.74). It is important to have correct text and adequate descriptions of procedures in the permit applications, including the WAP. The Permittees state that some conditions “would create controversy regarding intent and/or implementation.” However, as stated above, Ecology believes that the Permit is clear because Ecology has written many of the permit conditions based on text supplied by the Permittees and the permit writers who wrote the conditions were very familiar with the TSD units. Also, the conditions have been subjected to multiple expert reviews.

COMMENT P10 (PAGE 4, “PREFERRED ALTERNATIVE FOR WASTE ANALYSIS, WASTE ANALYSIS PLANS, AND QUALITY ASSURANCE/QUALITY CONTROL” THROUGH PAGE 6, LINE 8):

The Permittees provide their “Preferred Alternative for Waste Analysis, WAPs, and Quality Assurance/Quality Control” which includes the following:

- ◆ “Provide performance-based standards based on written regulatory requirements instead of detailed individual requirements.” (page 4, line 51, through page 5, line 2)
- ◆ Consolidate waste analysis and waste analysis plan requirements which are located in several sections of the Permit: “generally in Part II.D. and specifically in the unit-specific Draft Permit Conditions

- III.7., III.8., and associated appendices. These unit-specific sections of the Permit contain many conditions that are not regulation-based.” (page 5, lines 4 through 7)
- ◆ Consolidate quality assurance and quality control: The Permittees characterize these as “lengthy and well beyond the scope of regulatory basis, giving rise to overly restrictive requirements and conflicting procedures. Quality assurance/quality control language can be found in the Permit, Part II.E. and specifically in the unit-specific Draft Permit Conditions III.7, III.8, and Attachment 45.” (page 5, lines 11 through 13)

Ecology’s Response: Regarding the first bullet, Ecology will consider the possibility of performance-based standards for waste analysis after all TSD units which are intended to attain final status are incorporated into the Permit and when the Permit is reissued in 2004. At that time, Ecology expects all TSD units, including those that were incorporated into the Permit in modifications prior to Modification E, will be addressed in a more consistent manner. In addition, TSD unit-specific data should be available to assist Ecology in evaluating appropriate performance-based standards. Also, at that time, it is expected that guidance from EPA might be developed to assist in defining such standards. Nevertheless, it is not likely that what the Permittees characterize as “detailed individual requirements” would be replaced entirely by performance-based standards. Generally, the conditions containing “detailed individual requirements” are included because the certified permit application did not address specific review comments regarding omissions of information. The Permittees could best ensure replacement of the “detailed individual requirements” by addressing Ecology’s Notices of Deficiency and other review comments prior to submission of future certified, true, accurate, and complete permit applications.

Regarding the second bullet, Ecology is aware that the structure of this Permit results in waste analysis and WAP requirements appearing in multiple locations in the Permit. The conditions in Part II are general in nature, whereas Part III contains TSD unit-specific conditions. The appendices contain the actual WAP for each TSD unit and also a document describing quality assurance and quality control requirements applying to laboratories performing waste analysis. The original approach agreed to by Ecology and the Permittees resulted in this structure. That approach was to forego the submission of a WAP for the entire Hanford Facility in favor of providing individual WAPs specific to each TSD unit. This phased approach has been used since the Permit was issued in 1994.

It is possible that prior to the reissuance of the Permit in 2004, the Permittees could submit a revised WAP for each TSD unit and/or a consolidated WAP for TSD units that function in a coordinated fashion (e.g., Central Waste Complex, Waste Receiving and Processing Facility, and T Plant). Ecology would entertain this possibility only if the Permittees were to work cooperatively with Ecology and address Ecology’s review comments in the revised document(s).

For a response to the regulatory basis for these conditions, see responses to Comments P1, P4, and P9.

Regarding the third bullet: Ecology agrees that the conditions are “lengthy”; however, this would not have been necessary if the Permittees had responded to Ecology’s review comments by addressing quality assurance and quality control in the WAPs or in a separate document addressing quality assurance and quality control, as required by Condition II.E. in Part II of the Permit. In that case, Ecology would have made those portions of the certified application enforceable without writing additional conditions. In addition, Ecology believes that the conditions are necessary to protect human health and the environment because the information, data, and resulting decisions must be technically sound, statistically valid, and properly documented in order to ensure appropriate waste management to prevent possible releases of waste constituents to the environment. Such decisions are achieved by appropriate quality assurance and quality control. Ecology disagrees that the conditions are beyond the scope of regulations and this Permit (see responses to Comments P1, P4, and P9). In general, Ecology requested and used language provided

by the Permittees as the wording of the conditions and Appendix 45, with little or no modification. That language is responsible for what the Permittees are now characterizing as "overly restrictive requirements." Ecology is unaware of any conflicting procedures in these conditions.

Ecology is aware that the structure of this Permit results in quality assurance and quality control requirements appearing in multiple locations in the Permit. The conditions in Part II are general in nature, whereas Part III contains TSD unit-specific conditions. The appendices contain the actual WAP for each TSD unit and also a document describing quality assurance and quality control requirements applying to laboratories performing waste analysis. As described above for the WAPs, the original approach agreed to by Ecology and the Permittees resulted in this structure. That approach was to forego the submission of a WAP for the entire Hanford Facility in favor of providing a WAP that is specific to each TSD unit. This phased approach has been used since the Permit was issued in 1994. No certified permit application submissions to date have included a separate quality assurance and quality control plan.

COMMENT P11 (PAGE 2, LINES 15 THROUGH 21):

"The Permit should reflect a consistent approach for incorporation of waste analysis and quality assurance/quality control requirements. As currently structured, the Permit provides very little detail on the requirements for waste analysis plans (Permit Condition II.D.) and an extraordinary amount of detail on quality assurance/quality control (Permit Condition II.E.). It is the Permittees' experience that these two conditions are applied inconsistently to individual units incorporated into the Permit and, in many cases, leads to the imposition of requirements on individual units that exceed the requirements of the Dangerous Waste Regulations."

Ecology's Response: Ecology believes that additional detail on the requirements for WAPs is not needed in Part II of this Permit because the Dangerous Waste Regulations address those requirements in WAC 173-303-300. In addition, various guidance documents are available which Ecology discussed with the Permittees in working sessions held in late 1996 through early 1997. For example; (1) "Waste Analysis at Facilities That Generate, Treat, Store, and Dispose of Hazardous Waste: A Guidance Manual," U.S. Environmental Protection Agency, OSWER 9938.4-03, April 1994; (2) a draft guidance that was compiled and written by Miskho and Bartz; this draft guidance incorporated consensus definitions, agreements on topics such as verification rates, and discussions on format and content of WAPs; (3) various draft and final RCRA/Dangerous Waste permits. By agreement with the Permittees, TSD unit applications submitted in 1997 (including 242-A Evaporator, Liquid Effluent Retention Facility/Effluent Treatment Facility) were not expected to address the substance of those discussions. Ecology plans to make the TSD unit-specific chapters of the Permit more consistent at the time the Permit is reissued in 2004. Even though detail regarding quality assurance and quality control is provided in the General Conditions of Part II, Ecology believes that those requirements have not been fully addressed to date. Ecology plans to remedy that inconsistency with the existing permit conditions when the Permit is reissued in 2004. Regarding the Permittees' position that these requirements "exceed the requirements of the Dangerous Waste Regulations," see responses to Comments P1, P4, and P9.

COMMENT P12 (PAGE 5, LINE 22, THROUGH PAGE 6, LINE 8):

"The Permittees request that an alternative permitting approach be used for units within the Permit. This alternative approach would require modifications to Permit Conditions II.D. and II.E. The Permittees recognize that these conditions are not open for public comment or modification as the modification currently is proposed. As an alternative approach, the Permittees request that unit-specific conditions for WRAP and CWC be removed or significantly reworded to reduce the amount of Department of Ecology oversight to a reasonable level. The acceptable level should be provided in Part II Permit conditions to ensure consistent implementation for all permitted units. However, to implement this approach at CWC and WRAP, the Permittees propose similar Permit Conditions be incorporated into Part III during this

Permit modification. This will allow WRAP and CWC to implement this approach while a Class 3 Permit modification process is completed for Permit Conditions II.D. and II.E. It is the Permittees' intention to request a modification to incorporate the suggested language into Conditions II.D. and II.E. as soon as possible."

"This approach requires revising Permit Conditions III.7.B.d. and III.8.B.d. to closely parallel the regulatory requirements for waste analysis plans and quality assurance/quality control. These Permit Conditions would allow the Department of Ecology to establish baseline requirements for WRAP and CWC. These requirements would result in the maintenance of up-to-date waste analysis plans and quality assurance/quality control measures at WRAP and CWC without the necessity of incorporating this documentation into the Permit."

"Currently, Permit incorporation of plans and other documents submitted during the permitting process triggers a detailed Permit modification process described in WAC 173-303-830 each time that a modification is made to such documents. Conversion of the proposed Draft Permit Conditions to the preferred alternative will allow the Department of Ecology to ensure that all relevant requirements are met without triggering permit modifications each time a document is changed. It also will allow the Department of Ecology, on a real-time basis, to verify that relevant requirements are being met during unit operations."

"To meet the objective of performance-based requirements in the Permit while still maintaining regulatory compliance, the Permittees propose that individual requirements that must be contained in a waste analysis plan be identified as Draft Permit Condition III.7.B.d and III.8.B.d., based on WAC 173-303-110 and -300. The waste analysis plan and associated quality assurance/quality control measures should remain separate from the Permit and contain all requirements of WAC 173-303-110 and -300. The only enforceable regulatory requirements are that a waste analysis plan be developed and that the waste analysis plan meets a number of criteria. The waste analysis plan and associated quality assurance/quality control measures are not part of the Permit, but a document that is generated by the Permittees in compliance with regulations. WAC 173-303-806(4)(a)(iii) requires that a copy of the waste analysis plan be included in a Part B permit application. WAC 173-303-810 and -815 do not require that waste analysis plans, quality assurance/quality control measures, or other Permittee-supplied documentation be incorporated in the final status Permit. The proposed Draft Permit Conditions restate and expand on waste analysis and quality assurance/quality control requirements provided in the Dangerous Waste Regulations. Restatement and expansion where necessary provide clarity and are consistent with the Department of Ecology's approach in Parts I and II of the Permit, where the requirements are restated instead of referenced."

"This preferred alternative benefits the Department of Ecology by providing a clear and concise Permit that reduces the administrative effort and cost required to maintain the Permit. A clear and concise Permit improves the enforceability for the Department of Ecology compliance inspectors by providing a regulatory basis for the requirements identified in the Permit."

Ecology's Response: Ecology disagrees with the alternative permitting approach detailed in the Permittees' comment. Ecology believes that the Dangerous Waste Regulations are clear that the revision of the Permit by the submission of the plans and documents mentioned above trigger a permit modification process, as described in WAC 173-303-830. In general, changes to "waste sampling or analysis methods" or "analytical quality assurance/control plan" are identified in WAC 173-303-830, Appendix I, as Class 2 modifications, unless the change is needed to "conform with agency guidance or regulations." Ecology believes that the current General Permit Conditions in Part II, along with the regulations and agency guidance, are sufficient to describe the expected content of the subject plans and

documents. Therefore, Ecology does not intend to modify those conditions prior to the reissuance of the Permit in 2004. In addition, Ecology believes that the plans and documents submitted with the certified Part B Permit Application are intended to be integral and enforceable parts of the Permit. These plans and documents establish the "as-built" equipment, materials, and safety systems necessary for operation of the TSD unit; the conditions and procedures for safe management of waste at the TSD unit; the training requirements for personnel, the handling of various emergencies that might arise, the documentation requirements for the Operating Record. Finally, Ecology believes that the adequacy of the content of the various plans and documents are best addressed by the permit writers and supporting technical specialists during the permitting process. Therefore, inspectors may focus on compliance with stated requirements.

COMMENT P13 (PAGE 6, "COST ESTIMATE IMPACTS OF IMPLEMENTING DRAFT PERMIT CONDITIONS," LINES 1 THROUGH 5):

"Preliminary cost estimates for compliance with only 14 of the Draft Permit conditions (WRAP Conditions: III.7.B.d.19., III.7.B.d.23., III.7.B.d.25., III.7.B.d.35., III.7.B.d.43., III.7.B.d.47., and III.7.B.d.77.; and CWC Conditions: III.8.B.c.4., III.8.B.d.19., III.8.B.d.21., III.8.B.d.31., III.8.B.d.39., III.8.B.d.43, and III.8.B.d.73.) outlined by the Department of Ecology would exceed an annual cost of \$1,000,000."

Ecology's Response: The USDOE's mission for the Hanford Site is remediation and waste management. Waste management incurs operating costs. Because the Hanford Facility manages mixed (i.e., radioactive and dangerous) waste, in addition to dangerous waste, those operating costs are higher than might be incurred at a commercial TSD facility which manages dangerous waste only. Ecology will not shield the Hanford Facility from regulatory requirements and requirements that are necessary to protect human health and the environment because of cost. However, Ecology is open to discussions with the Permittees regarding procedures to increase cost-effectiveness.

Ecology is concerned that the Permittees estimate such a high cost to provide adequate descriptions of practices that are already conducted at the TSD units or to implement permit conditions that are, in most cases, already required by the Permit or the regulations. Ecology is especially concerned because these practices, although necessary for safe and compliant operation of the TSD unit, might be discontinued because of funding shortfalls at the Hanford Facility. Ecology is equally concerned that the Permittees estimate such a high cost to ensure the maintenance and integrity of the TSD unit operating records because the retention of complete records is a regulatory requirement and is important to the final closure of the TSD units and the Hanford Facility. Regarding the Toxic Characteristic Leaching Procedure (TCLP), the permit conditions should result in a significant reduction in cost to the TSD units because the analytical methods for total metals and organic compounds are less time- and chemist-intensive than the TCLP and, therefore, less expensive to perform. (Note, however, that both conditions regarding TCLP have been deleted.) Because the Permittees' comment regarding cost is unsupported by detail, Ecology is simply unable to provide any further response to comments regarding cost in this Responsiveness Summary. Regarding conditions for which omnibus is invoked, refer to Ecology's response to Comment P1.

The following table summarizes the subject conditions raised in the Permittees' comments:

Permit Conditions

WRAP	CWC	Brief Description of Condition	Condition Type	Permittees' Action
III.7.B.c.7.*	III.8.B.c.4.	Describe procedure for waste tracking.	Compliance schedule	Describe procedure required by General Permit Conditions II.I.1.j. and II.I.1.k. for Hanford Facility and by WAC 173-303-300(6)(a) for off-site facilities.
III.7.B.d.19.	III.8.B.d.15.*	Describe procedure for choosing containers for physical and chemical screening.	Compliance schedule	Describe existing practice or, if not unbiased, develop new procedure.
III.7.B.d.23.	III.8.B.d.19.	Provides procedure for receipt inspection prior to waste acceptance.	Text insertion	Expand existing practice to include documentation of actions; schedule for completion; and requirements of WAC 173-303-370(4).
III.7.B.d.25.	III.8.B.d.21.	Provides procedure for physical screening by visual inspection at remote locations with use of custody seals for security.	Text insertion	Describe existing practice with addition of custody seals for security.
III.7.B.d.35.#	III.8.B.d.31.#	Requirement to perform all chemical screening parameters or provide written justification for omission of parameter.	Text insertion	Expand existing practice to perform screening and/or provide complete documentation.
III.7.B.d.43.	III.8.B.d.39.	Requirement for standard operating procedures to govern confirmation; traceable, defensible confirmation records; protection of records from damage or tampering.	Text insertion	Describe existing practice or, if not implemented, develop new procedures; ensure protection/integrity of TSD unit operating record.
III.7.B.d.47.	III.8.B.d.43.	Requirements for chemical screening quality control.	Text insertion	Expand existing practice to include appropriate quality control practices and documentation.
III.7.B.d.77.	III.8.B.d.73.	Describes use of total analysis in lieu of Toxic Characteristic Leaching Procedure and how to evaluate resulting data.	Statement of requirement	Allows reduced use of time- and chemist-intensive extraction procedure in favor of less expensive total analysis.

* This condition corresponds to the condition identified in the comment.

This condition has been deleted by Ecology.

COMMENT P14 (PAGE 6, "COST ESTIMATE IMPACTS OF IMPLEMENTING DRAFT PERMIT CONDITIONS," LINES 5 THROUGH 6):

“The Permittees believe that the Draft Permit conditions identified in this Comment Package for deletion or modification add little or no protection to human health and/or the environment.”

Ecology’s Response: Ecology disagrees with this opinion. Ecology also notes that the Permittees provide no basis for their opinion in Comment P14. See response to Comment P1.

Comments on the Fact Sheet

In general, Ecology does not agree with the Condition Impact Statements, Requested Actions, and Comment Justifications expressed below in the Permittees’ comments on the Fact Sheet. The response by Ecology to each comment is given in the table below under the heading “Ecology’s Response.” In some cases, the Permittees “quote” from the Fact Sheet text or permit condition number is inaccurate; however, Ecology has neither identified, nor corrected the erroneous text.

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1. **General Comment** **Key Comment:** reflects approach inconsistent with regulatory requirements

Condition Impact Statement: The Fact Sheet does not contain adequate supporting information and or references to support some of the Draft Permit conditions proposed by the Department of Ecology.

Requested Action: The Department of Ecology should provide in the Fact Sheet a brief summary of the basis for the Draft Permit conditions including supporting references [WAC 173-303-840(2)(f)(iii)(C)]

Ecology’s Response: Ecology disagrees with the comment.

The regulation cited in the comment states that “The fact sheet will include, when applicable: (C) A brief summary of the basis for the draft permit conditions, including supporting references.” Ecology believes that the Fact Sheet provided was sufficiently detailed pursuant to that regulation and included appropriate supporting references.

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2. **Page 2, paragraph 6** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit Fact Sheet statement provided by the Department of Ecology: Such facilities must submit a detailed permit application for a final permit [WAC 173-303-806(2)]. The permit application must provide facility-specific design and operational information to demonstrate regulatory requirements can be met [WAC 173-303-806(4)]. If Ecology determines that the application is sufficiently complete, Ecology is authorized to prepare a Draft Permit for public notice [WAC 173-303-840(2)]. The Draft Permit incorporates enforceable portions of the permit application.

Condition Impact Statement: These Fact Sheet statements correctly indicate that the Department of Ecology is authorized to prepare a Draft Permit, once an application is determined to be sufficiently complete.

Requested Action: Conditions specific to TSD units should be incorporated into the Permit in accordance with the provisions of WAC 173-303-840. Such conditions must be based on complete

information and incorporated into a Draft Permit containing the information of WAC 173-303-840(2)(d). If the Department of Ecology believes that this application as submitted by the Permittees is incomplete, the Permittees should be informed and issuance of the Draft Permit would be premature. If the Department of Ecology believes that a complete application has been submitted, conditions should be modified to eliminate the additional information requests.

Comment Justification: *The preparation of a Draft Permit must be based on the receipt of a complete application in accordance with WAC 173-303-840(2)(b). In the Draft Permit, the Department of Ecology has made several requests for additional information. While it is understood that requests for additional information are sometimes appropriate for the purpose of developing a Draft Permit pursuant to WAC 173-303-840(1)(b), the Permittees believe that it is inappropriate to request additional information as permit conditions. Permits issued by the Department of Ecology must contain the conditions outlined in WAC 173-303-840(2)(d) based on complete information. The Permittees submitted updates to the WRAP and CWC permit applications on June 28, 1999. WAC 173-303-840(1)(b) indicates that, "Upon completing the review, the Department will notify the applicant in writing whether or not the application is complete." The Permittees did not receive a notification in writing by the Department of Ecology after submitting the permit application update. However, the Department of Ecology has proceeded with the issuance of a Draft Permit, which cannot be done without a complete application.*

Of the nearly 290 draft conditions, there are 18 draft conditions for CWC and WRAP requiring the submittal of additional information. The Permittees believe that any necessary requests for additional information should have been pursued through the Notice of Deficiency process in accordance with WAC 173-303-840(1)(b). WAC 173-303-840(1)(b) states that "After the application is completed, the department may request additional information from an applicant but only when necessary to clarify, modify, or supplement previously submitted material". The Department of Ecology did not request additional information from the Permittees before preparing the Draft Permit modification package. There is no regulatory basis for the Department of Ecology to deem the application incomplete, yet issue a Draft Permit based on a stated need to protect human health and the environment.

Ecology's Response: *Ecology disagrees with the Requested Action. In addition, Ecology generally disagrees with the statements and conclusions in the Comment Justification.*

Ecology requested additional information and revised text for the WRAP Facility and the CWC draft permit applications during comment resolution workshops in 1998. Ecology made additional requests for information and revised text after the submission of the certified permit application in 1998, but prior to the initial issuance of the draft permit conditions for public review. The Permittees honored some of Ecology's requests in a timely manner, but not others. As a result, as allowed by WAC 173-303-815(3), Ecology wrote draft conditions to establish compliance schedules for submission of this requested information and revised text. Ecology has used this approach previously in the Hanford Facility Permit.

Permittees made the original submissions of certified permit applications to attain final status for WRAP and CWC in 1998. Ecology wrote to the Permittees (L.J. Cusack to Rasmussen and Adair, dated July 17, 1998), indicating that Ecology had accepted the certified permit applications and would proceed with permitting. The Permittees submitted updates to the WRAP and CWC permit applications on June 28, 1999. These revisions to the certified permit applications did not address the areas that Ecology had identified, in the draft permit conditions issued for public comment in

1998, as needing additional information. Therefore, Ecology decided that an additional letter was unnecessary because the Permittees were already aware that Ecology was processing their application.

The Fact Sheet states that Ecology found portions of the initial (1998) certified permit applications to be lacking in sufficient detail. WAC 173-303-840(1)(b) clearly allows for Ecology to request additional information from the Permittees at that point: "... After the application is completed, the department may request additional information from an applicant but only when necessary to clarify, modify, or supplement previously submitted material. Requests for such additional information will not render an application incomplete." Ecology did request additional information in 1998 and received several submissions from the Permittees via electronic mail.

Ecology did not pursue the additional information through the Notice of Deficiency (NOD) process described in WAC 173-303-840(1)(b) after the revised certified Part B applications for CWC and WRAP were submitted on June 28, 2000. It has been the practice for USDOE to issue a draft permit application, a "working draft." Ecology then issues NODs in response to the working draft, and participates in a series of workshops with USDOE to attempt to resolve the NODs associated with the working draft. Thus, the NOD cycles are completed prior to USDOE submitting the certified Part B application. This is done, in part, as a way to streamline the permitting process (i.e., resolve NODs prior to final certification of the application). If NODs are not resolved, Ecology writes conditions to the permit application, as needed. In addition, the NOD cycles are conducted prior to the formal permit modification cycle to support the established agency-initiated permit modification process (i.e., it is Ecology, not USDOE, that initiates the permit modification). It would make no sense for Ecology to write NODs against its own proposed permit modifications. The Tri-Party Agreement, WAC 173-303 regulations, the Hanford Permit General Information Portion (RL-91-28), and the Community Relations Plan comprise the authorities regarding how the permitting process is implemented at Hanford. Ecology does agree that improvements are needed to accurately document the processes for permitting and public involvement with regard to the Hanford Sitewide Permit.

For WRAP, records clearly show that the second round of NODs were received by the Permittees on March 10, 1993, and the Permittees response table was sent to Ecology on June 10, 1993. After at least two requests from the Permittees to delay submission of a revised draft permit application, the Permittees submitted the revised draft permit application to Ecology on December 30, 1994, and included text revisions from the second NOD response table. Informal comment resolution meetings were requested by the Permittees. The informal comment resolution meetings were initiated on February 6, 1996. A revised draft permit application was submitted on a chapter-by-chapter basis in early 1998. After review of those submissions, the informal review process continued until approximately one month before the Permittees submitted the certified permit application. CWC was subject to a similar schedule of NODs and comment resolution workshops.

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3. **Page 6, paragraph 4** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit Fact Sheet statement provided by the Department of Ecology: When the initial certified permit applications were received from the Permittees in 1998 for WRAP and CWC, Ecology found portions of the applications to be lacking sufficient detail. Rather than consider the applications incomplete, Ecology decided that it was in the best interest of human health and the environment to pursue final status for those TSD units by including them in the Permit. Where the permit applications were lacking detail, Ecology either wrote stand alone conditions or conditions to insert language describing the requirements. In many cases, the appropriate information or

activity was known to be in existence on the Hanford Facility, but was not described in sufficient detail. In some cases, the Permittees were requested to submit suggested language to Ecology for consideration in drafting these Permit conditions. That suggested language might have been used verbatim or modified slightly. Note that, in 1999, the Permittees submitted certified page changes to the initial applications.

Condition Impact Statement: These Fact Sheet statements appear to imply that there is a lack of information available to issue the Permit, yet implies a need to nevertheless quickly issue the Permit to protect human health and the environment.

Requested Action: For any application(s) determined to be incomplete by the Department of Ecology, the subject unit(s) should not be incorporated into the Permit until the application requirements of WAC 173-303-806 have been met.

Comment Justification: There is no basis for assuming that this Permit should be issued with an incomplete application for the purpose of protecting human health and the environment. Interim status operations at CWC and WRAP have been protective of human health and the environment. The Department of Ecology retains its enforcement authority for protecting human health and the environment while TSD units are under interim status. There is no benefit in issuing this Permit if the Department of Ecology does not deem information complete. Throughout this permitting cycle, the Permittees have taken best efforts to provide all information required by WAC 173-303-806. In addition, the Permittees repeatedly have attempted to clarify details of the application and provide additional information to the satisfaction of representatives from the Department of Ecology. The Permittees have provided this information in a timely manner and have offered suggested language to the Department of Ecology that is believed to be consistent with regulatory intent. There is no basis for issuance of a permit if the application is determined to be incomplete.

Ecology's Response: Ecology disagrees with the Requested Action. Ecology notes that the Requested Action refers to the subject permit applications as "incomplete." Ecology did not identify those permit applications as incomplete, but did identify portions of the permit applications as "lacking sufficient detail." For more information, see the response to Comment 2 on the Fact Sheet, above. Ecology may appropriately issue the permit in these circumstances.

4. **Page 7, paragraph 2** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues

Draft Permit Fact Sheet statement provided by the Department of Ecology: Neither the State nor federal regulations envisioned or were written to accommodate a RCRA facility the size and complexity of the Hanford Facility with hundreds of onsite waste streams and multiple onsite waste generating locations and contractors. Because of this, in most cases, Ecology has applied the regulations of the "facility" to the individual RCRA TSD unit. Consistent with that approach, Ecology has included language in the Permit to establish certain controls on onsite waste. In addition, considering the Hanford compliance history, Ecology believes that it is protective of human health and the environment to provide conditions for the management of onsite waste through Permit conditions. Furthermore, because WRAP and CWC are mixed waste TSD units and both the dangerous and radioactive components of the waste impact the safe operation of the TSD units, Ecology believes that it is appropriate to require all operational constraints to be identified.

Condition Impact Statement: The approach discussed here in the Fact Sheet by the Department of Ecology is not only inconsistent with regulatory provisions, but also contradicts the understanding by the Permittees of the position taken by the Department of Ecology during the original issuance of the Permit with respect to the unique aspects of the Hanford Facility. In addition, the approach as discussed implies that the Department of Ecology has basis and regulatory authority over the source, special nuclear, and byproduct component of mixed waste without first seeking to establish requirements through statutory and rulemaking process required by the Administrative Procedures Act.

Requested Action: Revise Draft Permit conditions written for CWC and WRAP to be consistent with Conditions II.P and II.Q of the Permit.

Comment Justification: WAC 173-303-040 provides accurate information on how to understand the regulatory meaning of the terms "facility" and "unit". As defined in WAC 173-303-040, a "facility" is "all contiguous land, and structures . . . for . . . dangerous waste." A facility could consist of several treatment, storage, or disposal operational units. By definition, a facility consists of individual units. The terms are not intended to be used interchangeably. There is no basis for the Department of Ecology to apply facility requirements at the unit level. The size and complexity of the Hanford Facility was contemplated during the initial issuance of the Permit. At that time, there was no intent to interpret units as facilities. Such an approach is inconsistent with the original Permitting approach. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolve difficulties, redundancies, and inefficiencies in this approach. As a result, the Department of Ecology made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994) and has refined additional conditions from the second Draft Permit in writing the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility wide approach, but still provide facility wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department of Ecology can make further changes through the Permit modification process to continue creating a meaningful Permit." The initial final Permit addressed issues attributed by the Department of Ecology to the size and complexity of the Hanford Facility through Conditions II.P and II.Q. It is inappropriate and not cost-effective to impose conditions such as these on a unit-by-unit basis because the initial Permit was developed in contemplation of these matters in Part II of the Permit.

This condition would regulate waste acceptance criteria related to the radioactive component of mixed waste. The U.S. Department of Energy has jurisdiction over the source, special nuclear, and byproduct material components of mixed waste in accordance with the Atomic Energy Act.

It is inappropriate for a state to unilaterally assert authority over radioactive materials. As stated previously, source, special nuclear, and byproduct materials specifically are excluded from the definition of solid waste set forth at RCRA 42 U.S.C. § 6903(27); also refer to 42 U.S.C. § 6905(a). The Atomic Energy Act; U.S. Department of Energy's Byproduct Rule (10 CFR 962); the U.S. Environmental Protection Agency Notice Regarding State Authorization [(51 Fed. Reg. 24504 (July 3, 1986)); U.S. Environmental Protection Agency Notice on Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste [(53 Fed. Reg. 37045 (September 23, 1988))]; the State's recognition of possible preemption in its Hazardous Waste Management Act, Revised Code of Washington 70.105.109; the limitations of the waiver of sovereign immunity in Section 6001 of the RCRA to materials within the RCRA

definition of solid waste (thereby excluding source, special nuclear, and byproduct materials); and the Tri-Party Agreement.

Further, based on the statements in the Fact Sheet, it appears the Department of Ecology is singling out the Hanford Facility for special treatment. To the extent that this special treatment results – as it appears – in the Hanford Facility receiving more stringent, onerous, or different permitting or regulatory requirements than the Department of Ecology imposes on nongovernmental entities, any such requirements would exceed RCRA's waiver of sovereign immunity found at 42 U.S.C. § 6961(a) which states, in pertinent part, as follows: "Each department . . . of the Federal Government . . . shall be subject to, and comply with, all Federal, State, interstate, and local requirements . . . in the same manner, and to the same extent, as any person is subject to such requirements" Because the definition of person in RCRA includes both public and private entities, a State is not authorized to apply different standards to the Federal Government that do not apply to the entire regulated community. Applying different regulatory requirements to a specific Federal facility that are not applied to the balance of the regulated community would have the same unlawful effect as a State's attempt to regulate areas beyond the scope of its delegated authority, e.g., source, special nuclear, and byproduct materials excluded from the RCRA definition of solid waste.

Ecology's Response: Ecology believes that the permit conditions for WRAP and CWC, as written, are already consistent with Conditions II.P and II.Q of the Permit. However, these conditions address only the Manifest System and On-Site Transportation, respectively, and do not address waste approval and waste receipt that are the subject of the TSD unit-specific WAPs. At the Permittees request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address that subject on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303 in each TSD unit's WAP. Waste analysis and waste tracking are necessary to protect human health and the environment because, in the case of a release, emergency personnel must know what wastes and volumes are present so that appropriate protective actions can be taken.

Ecology believes that the approach taken for Modification E of the Permit is consistent with the approach for the original issuance of the Permit in 1994. Various provisions of the original Permit issued in 1994 apply what are essentially "facility" requirements to each TSD unit. That is, each TSD unit is required to have a Training Plan (Condition II.C.3), a Contingency Plan (Condition II.B.1), an Inspection Plan (II.O.1), an Operating Record (Condition II.I.1), a WAP (Condition II.D.1), and a Closure Plan (Condition II.J.2). Nonetheless, at the time of the original Permit issuance, with the unavailability of specific operational information for each TSD unit that would ultimately attain final operating status, the impact and conditions needed to implement the permitting approach at each TSD unit were not fully understood. Ecology believes that the same quotation from the second Responsiveness Summary (i.e., ". . . further implementation problems may be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit") supports the approach and conditions of this permit modification. Ecology recognized, at the time of the original Permit issuance, that given the size and complexity of the Hanford Facility, there could be additional areas in which the TSD units may need to meet "facility" conditions and, as those areas were identified, future permit modifications would address them.

Contrary to the Permittees' contention that the Permit attempts to regulate "source, special nuclear, and byproduct material components of mixed waste," Ecology does not intend to regulate those components by conditions in this permit modification. However, Ecology does recognize that the

dangerous component of mixed waste is intimately associated with the radioactive portion.

Regarding the statement that "Ecology is singling [sic] out the Hanford Facility for special treatment" which exceeds the waiver of sovereign immunity in 42 U.S.C. § 6961(a), Ecology disagrees. Ecology has not treated the Hanford Facility differently than it would a commercial facility of like complexity and with a similar compliance history. Nonetheless, both the state and federal regulations allow the regulator to impose conditions as are necessary, on a case-by-case basis, to protect human health and the environment. Ecology believes the conditions written for this permit modification are necessary to protect human health and the environment. In some cases, the conditions are needed because the regulations apply to the facility. Because Ecology and the Permittees have agreed to permit the Hanford Facility on a piecemeal basis (i.e., addressing each TSD unit with its own application and its own chapter in the Permit), Ecology must translate the "facility" requirements into requirements for each TSD unit. The result is that the facility, as an aggregate of TSD units, will then meet regulatory requirements. One example is the requirement for waste tracking (which will identify what waste constituents and volumes are present in a TSD unit), so that in case of disaster such as a fire or explosion, emergency personnel, or cleanup personnel, can identify what may have been released to the environment or what hazards personnel need to be protected against. In other cases, the conditions are necessary because past compliance history has shown that certain management practices need to be explicitly required so that human health and the environment are protected (e.g., management of drummed waste in covered structures to prevent exposure of drums to extremes of climate which results in loss of container integrity and subsequent release, or potential release, of waste to the environment). See also Ecology's responses to the Permittees' Preamble Comments 1 and 9, item 2.

Finally, as provided in the statement from the second Responsiveness Summary quoted by the Permittees (on page 33 of 189, not page 32), Ecology has chosen at this time to "make further changes through the Permit modification process to continue creating a meaningful Permit." Ecology believes that the controls achieved through these additional permit requirements result in decreased risk to human health and the environment in the management of dangerous and mixed waste in these TSD units.

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5. **Page 8, paragraph 1** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit Fact Sheet statement provided by the Department of Ecology: As submitted, the text of the Part B permit application is ambiguous and does not provide Ecology with any guarantee of notification if overweight containers are to be processed at WRAP. Oversize containers would require special handling procedures beyond the standard procedures described in the Permit; therefore, Ecology needs to be informed what specific procedures will be used each time overweight containers are received. The potential exists for workers, the public, and/or the environment to be endangered if improper container handling occurs due to receipt of overweight boxes or drums.

Condition Impact Statement: The Fact Sheet appears to imply that the Department of Ecology believes there are container management issues that adequately are not provided for in the permit application requirements.

Requested Action: Delete aspects of Permit conditions that are not based on the requirements of

WAC 173-303.

Comment Justification: While it is recognized by the Permittees that specific procedures for handling containers must be written to ensure that containers are "not opened, handled, or stored in a manner which may rupture the container or cause it to leak", it is also understood that it is the Permittees' burden to meet the container standards of WAC 173-303-630. There is no regulatory requirement to provide the enforcement agency with a guarantee of notification regarding containers that are assumed to be overweight. Instead, the Permittees believe that containers and secondary containment must be managed in compliance with standards and any noncompliance with such standards would be reported to the Department of Ecology.

The reporting mechanisms provided for in Permit Condition I.E.15. and I.E.16. satisfy reporting requirements to the Department of Ecology. Additional reporting through unit-specific conditions is not necessary.

The Fact Sheet also seems to imply that permit conditions should address worker safety. Although the Permittees agree that worker safety is important, it is inappropriate to expand the charter of WAC 173-303 without using the promulgation process of the Administrative Procedures Act. WAC 173-303-010 states that "The purposes of this regulation are to: (1) Designate those solid waste which are dangerous or extremely hazardous to the public health and environment . . .". The Washington State Register (WSR 92-15-036) filed July 8, 1992 states " . . . the Department of Ecology has decided to return to the rule language in effect from 1986 to April 1991. " This language required reporting of spills and discharges to the environment that impact public health and the environment. The Department of Ecology's authority under WAC 173-303 is limited to protection of the public health and the environment.

Ecology's Response: This portion of the Fact Sheet addresses several conditions related to operational constraints of the TSD units, specifically, for WRAP: III.7.B.b.2., III.7.B.b.5., III.7.B.c.3., III.7.B.c.6., III.7.B.d.11., and III.7.B.d.13.; for CWC: III.8.B.d. 7., III.8.B.d.9., and III.7.B.b.2.

III.7.B.b.2.: This condition is in response to a statement in the Permit Application regarding maximum weight of containers received at WRAP. The Permittees submitted, in the Permit Application, a description of container load limits as part of the description of container management practices at WRAP in accordance with WAC 173-303-806(4)(b), WAC 173-303-630(7), and WAC 173-303-395(4). A description of container management practices must include information on the limits of operation in order to satisfy these regulations. The statement provided by the Permittees did not adequately address how they would safely manage containers heavier than the maximum load limits stated in the text of the Permit Application, other than to say such loads could be received on a case-by-case basis. To describe receipt of containers heavier than the maximum weight limit as being on a " . . . case by case basis . . ." without requiring documentation (as part of the WRAP Operating Record) of how that could be safely accomplished would not satisfy the intent of the regulations cited above. Because Ecology and the Permittees have agreed to permit the Hanford Facility on a piecemeal basis (i.e., addressing each TSD unit with its own application and its own chapter in the Permit), Ecology must translate the "facility" requirements into requirements for each TSD unit. The result is that the facility, as an aggregate of TSD units, will then meet regulatory requirements.

III.7.B.b.5.: This condition has been reworded to clarify that if waste is received at WRAP for chemical and/or physical screening, the waste is considered to be undergoing verification for

acceptance and management at WRAP. Therefore, the waste profile must appear in the WRAP Operating Record. See Condition II.I.1.j.

III.7.B.c.3.: This condition has been modified according to alternate text provided in the Permittees' comments.

III.7.B.c.6.: This condition has been deleted in response to the Permittees' comments.

III.7.B.d.11. and III.8.B.d.7.: These conditions require the Permittees to submit additional text describing all constraints which apply to the acceptance of waste at these TSD units. These conditions are consistent with the EPA guidance document (Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes: A Guidance Manual, U.S. EPA, OSWER 9938.4-03, April 1994) which states on page 2-7, "The final component of the facility description portion of the WAP should include a description of each hazardous waste management unit at the facility. As a supplement to generic facility process and activity discussions, these descriptions should provide more detailed information regarding the specific operating conditions and process constraints for each hazardous waste management unit." Continuing on page 2-8 of the EPA guidance, "In your WAP, the description of the hazardous waste management units at your facility should be provided in narrative and schematic form. The narrative description should include the following: [bullet 3] Process/design considerations necessary to ensure that waste management units are operating in a safe manner and are meeting applicable permit-established performance standards. The information should define specific physical and chemical operating constraints that must be observed to ensure process integrity."

III.7.B.d.13. and III.8.B.d.9.: These conditions clarify the capability of the two TSD units. Neither TSD unit manages bulk solids in trucks or roll-off boxes, and neither is constructed to allow for receipt inspection and/or sampling of bulk solids. This was affirmed by the Permittees in the Project Managers' meetings for these TSD units in July 2000, as is documented in the meeting minutes in the Administrative Record.

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6. **Page 10, paragraph 3** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit Fact Sheet statement provided by the Department of Ecology: Ecology believes that controls are needed for movement and management of onsite waste at the Hanford Facility. Neither the State nor federal regulations envisioned or were written to accommodate a RCRA facility the size and complexity of the Hanford Facility with hundreds of onsite waste streams and multiple onsite waste generators and contractors. Because of this, in most cases, Ecology has applied the regulations of the "facility" to the individual RCRA TSD unit. Consistent with that approach, Ecology has included language in the Permit to establish certain controls on onsite waste. In this case, Ecology has required that WAC 173-303-300(6)(a) be met for both TSD unit WAPs. In addition, considering the Hanford compliance history, Ecology believes that it is protective of human health and the environment to provide conditions for the management of onsite waste through Permit conditions.

Condition Impact Statement: These statements would change the basis for which treatment, storage, and/or disposal activities are conducted on the Hanford Facility. This permitting approach is inconsistent with the original issuance of the Permit and the Tri-Party Agreement.

Requested Action: Revise Draft Permit conditions written for CWC and WRAP to be consistent

with Permit Conditions II.D, II.P, and II.Q.

Comment Justification: Waste analysis plan requirements based on the requirements in WAC 173-303-300 on the Hanford Facility were established through the original issuance of the Permit. Conditions within II.D were established to govern waste analysis activities on the Hanford Facility. When the Department of Ecology proposed conditions relating to the onsite management of waste in the second draft of the Permit in 1994, the Permittees and the Department of Ecology agreed on the language in Conditions II.D, II.P, and II.Q. In the second responsiveness summary to the Permit on page 86 of 189, the Department of Ecology stated "The Condition [relating to WAC 173-303-300(6)] is referenced by the phrase 'for offsite facilities' which makes it clear that this Condition is only applicable to waste from offsite sources." On page 87 of 189, the Department of Ecology discussed applicability of Permit Condition II.D.4 by stating, "Two examples where waste analysis might be required outside of a TSD would be a release from a TSD that migrated outside the TSD boundary or an orphan drum found outside of a TSD during an inspection required by Condition II.O." These statements reflect the approach taken in the initial issuance of the Permit. The approach implied by this Fact Sheet is inconsistent with the record established during the initial issuance of the Permit. Furthermore, the Department of Ecology has not attempted to demonstrate that Hanford Facility circumstances would justify a change to the permitting approach that circumvents regulatory requirements and contradicts the approach established in the initial issuance of the Permit.

Ecology's Response: This portion of the Fact Sheet addresses two conditions related to waste tracking for WRAP and CWC: III.7.B.c.7. and III.8.B.c.4.

Ecology disagrees that Permit Conditions II.D, II.P, and II.Q, identified in the Requested Action, limit the ability to require waste tracking to be addressed in the TSD unit-specific chapters.

Both CWC and WRAP manage, or have applied to manage, waste from offsite generators, thereby qualifying both TSD units as off-site TSD units and qualifying the Hanford Facility as an off-site facility. WAC 173-303-300(6) states that "the waste analysis plan . . . must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe: (a) The procedures which will be used to determine the identity of each movement of waste managed at the facility . . ."

Ecology believes that Permit Conditions II.I.1.j. and II.I.1.k. describe requirements for the Facility Operating Record that are essentially the facility-level components of waste tracking. The TSD unit-specific condition for each TSD unit is to provide a description of this waste tracking procedure in the WAP. The certified permit applications already identify portions of the process, for example, container receipt inspection (under a heading in Section 2 of the WAP). Ecology believes that it is necessary for protection of human health and the environment to provide a comprehensive description of waste tracking, either to show that the same procedures will be used for all waste managed by the respective TSD unit, or to describe how the procedures will differ for waste from offsite generators as compared to onsite generators. Provisions of the Permit, such as verification rate, apply different requirements to waste from offsite and onsite generators, as well as to different generators or different waste streams from a single generator. Therefore, it is necessary that waste containers have unique identities and be able to be tracked through the respective TSD unit and that the procedure for this tracking be described in the WAP. Also, because only the receiving TSD unit is required to retain documentation (e.g., waste profile sheets)

for waste shipped to or from any TSD unit of the Hanford Facility, it is necessary to have a procedure for tracking waste throughout the Hanford Facility. As the waste moves from TSD unit to unit for treatment, storage, or disposal, in order to protect human health and the environment in the case of a release, Ecology and the Permittees must know what the risks are from the waste constituents and volumes at any particular location.

7. **Page 11, paragraph 4** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit Fact Sheet statement provided by the Department of Ecology: This condition is intended to exceed the regulations (WAC 173-303-370), essentially to make the manifest requirements applicable to onsite shipments as well as to offsite shipments. Ecology believes that controls are needed for movement and management of onsite waste at the Hanford Facility. Neither the State nor federal regulations envisioned or were written to accommodate a RCRA facility the size and complexity of the Hanford Facility with hundreds of onsite waste streams and multiple onsite waste generators and contractors. Because of this, in most cases, Ecology has applied the regulations of the "facility" to the individual RCRA TSD unit. Consistent with that approach, Ecology has included language in the Permit to establish certain controls on onsite waste. In this case, Ecology has imposed a requirement to correct and resolve paperwork inconsistencies. In addition, considering the Hanford compliance history, Ecology believes that it is protective of human health and the environment to provide conditions for the management of onsite waste through Permit conditions.

Condition Impact Statement: These statements would change the basis for which treatment, storage, and/or disposal activities are conducted on the Hanford Facility. This permitting approach is inconsistent with the original issuance of the Permit and the Tri-Party Agreement.

Requested Action: Revise Draft Permit conditions written for CWC and WRAP to be consistent with Conditions II.P and II.Q of the Permit.

Comment Justification: The size and complexity of the Hanford Facility was considered during the original issuance of the Permit. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology stated: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolved difficulties, redundancies, and inefficiencies in this approach. As a result, the Department of Ecology made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility wide approach, but still provide facility wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department of Ecology can make further changes through the Permit modification process to continue creating a meaningful Permit." The Permittees believe that there is no basis for establishing more controls in this area. Furthermore, implementation in this area has gone well since 1994. The Permittees believe that it is inappropriate to interpret individual units as facilities in a manner that is inconsistent with regulations and the existing final Permit.

Ecology's Response: This portion of the Fact Sheet addresses conditions related to resolution of paperwork inconsistencies prior to acceptance of waste at WRAP and CWC: III.7.B.d.9. and III.8.B.d.5.

Ecology disagrees that the permitting approach in this modification is inconsistent with that of the original Permit issuance. The quote from the second Responsiveness Summary indicates that "... further implementation problems could be discovered at a later time. If so, the Department of Ecology can make further changes through the Permit modification process to continue creating a meaningful Permit." Conditions II.P and II.Q address only the Manifest System and On-Site Transportation, respectively, and do not address waste approval and waste receipt that are the subject of the TSD unit-specific WAPs. At the Permittees' request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address that subject on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303 in each TSD unit's WAP. This approach was established by Permit Condition II.D and the contents of each TSD unit WAP was outlined in Condition II.D.3. In addition, the original Permit also identified the need to address quality assurance and quality control as stated in Condition II.E.

In previous negotiations, Ecology and the Permittees have distinguished between receiving waste and accepting waste. The permit applications also make this distinction. In addition, the Permittees have described procedures in their applications that indicate receipt inspection and acceptance of a waste shipment cannot be accomplished unless all shipments are accompanied by a manifest or shipping papers. Ecology believes that the TSD unit, in accepting waste, becomes liable for costs associated with the management of the waste even if the waste is not as described on the shipping papers or manifest. This condition was revised during meetings with the Permittees so that it applies only to paperwork, including the approval file and the shipping papers/manifest. This condition does not limit the ability of WRAP to correct deficiencies that require non-destructive testing, removal of non-conforming items, sampling of waste, treatment, or repackaging.

Ecology believes that this condition is consistent with WAC 173-303-370, in that it does not deny the TSD unit the opportunity to resolve paperwork inconsistencies associated with onsite waste transfers or offsite waste shipments. The condition specifies that the waste may not be accepted, that is, the waste is still in "receiving" status, until the paperwork inconsistencies, or improperly completed and/or incorrect information, are corrected and resolved. Ecology has purposely applied this requirement to wastes from onsite generating units, as well as to wastes from offsite generators (see Ecology's responses to Preamble Comments 1, 3, and 9.). Ecology believes that it is necessary to protect human health and the environment by ensuring that the TSD unit personnel know, and can document, exactly what waste is being managed. Considering the various generating units onsite and the various degrees of completeness in documentation and process knowledge for waste designation, this condition is necessary to protect human health and the environment from possible releases from mismanagement of unknown or reactive wastes.

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8. **Page 13, paragraph 3** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit Fact Sheet statement provided by the Department of Ecology: Ecology believes that the requirements for offsite facilities are appropriate for all waste movement occurring on the Hanford Facility. Neither the State nor federal regulations envisioned or were written to accommodate a RCRA facility the size and complexity of the Hanford Facility with hundreds of onsite waste streams and multiple onsite waste generators and contractors. Because of this, Ecology has applied the regulations of the "facility" to the individual RCRA TSD unit.

Condition Impact Statement: These statements would change the basis for which treatment, storage, and/or disposal activities are conducted on the Hanford Facility. This permitting approach is inconsistent with the original issuance of the Permit and the Tri-Party Agreement.

Requested Action: Revise Draft Permit conditions written for CWC and WRAP to be consistent with Conditions II.P and II.Q of the Permit.

Comment Justification: The size and complexity of the Hanford Facility was considered during the original issuance of the Permit. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology stated: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolved difficulties, redundancies, and inefficiencies in this approach. As a result, the Department of Ecology made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility wide approach, but still provide facility wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit." The Permittees believe that there is no basis for establishing more controls in this area. Furthermore, implementation in this area has gone well since 1994. The Permittees believe that it is inappropriate to interpret individual units as facilities in a manner that is inconsistent with regulations and the existing final Permit.

Ecology's Response: This portion of the Fact Sheet addresses conditions related to inspection of containers when they are received at each TSD unit: III.7.B.d.23. and III.8.B.d.19.

Ecology disagrees that the permitting approach in this modification is inconsistent with that of the original Permit issuance. (See also Ecology's Response to the specific Permit Conditions III.7.B.d.23 and III.8.B.d.19.) The quote from the second Responsiveness Summary indicates that, "... further implementation problems could be discovered at a later time. If so, the Department of Ecology can make further changes through the Permit modification process to continue creating a meaningful Permit." The permit conditions for WRAP and CWC as written are already consistent with Conditions II.P and II.Q of the Permit. These general conditions address only the Manifest System and On-Site Transportation, respectively, and do not address topics that are the subject of the TSD unit-specific WAPs. At the Permittees request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address receipt inspections on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303 in each TSD unit's WAP. Thereby, the aggregate of the TSD unit-specific chapters fulfills the regulatory requirements.

The permit applications describe aspects of receipt inspection; however, Ecology expects a more thorough description of what occurs during receipt inspection and provides additional text in this condition. Ecology believes that the TSD unit-specific chapters need to provide adequate descriptions of procedures to address how the work is performed and the requirements applicable to the work. These conditions are necessary to protect human health and the environment because the conditions will: (1) cause container damage and leaks to be identified after containers have been moved, possibly over extensive distances on the Hanford Site; (2) prevent the unauthorized addition of materials, which could be reactive or prohibited, to containers whose contents have already been screened at another location for acceptance at WRAP or CWC; (3) ensure that the

TSD unit is managing waste that is acceptable and compatible with the TSD unit equipment, construction, configuration, and procedures; and (4) ensure that no orphaned drums are left behind at pickup points, or storage locations, or are lost along site roadways. Any of these situations could result in releases of dangerous/mixed waste or waste constituents that could damage human health and the environment.

9. **Page 14, paragraph 3** **Key Comment:** exceeds delegated regulatory authority

Draft Permit Fact Sheet statement provided by the Department of Ecology: Neither the State nor federal regulations envisioned or were written to accommodate a RCRA facility the size and complexity of the Hanford Facility with hundreds of onsite waste streams and multiple onsite waste generators and contractors. The regulations also did not envision the need for special consideration for a federal RCRA facility that frequently has inadequate budget for environmental compliance. Because of this and because of the nature of the waste, Ecology believes that it is reasonable to set constraints that would not be considered if the waste had no radioactive component.

Condition Impact Statement: These statements would change the basis for which treatment, storage, and/or disposal activities are conducted on the Hanford Facility. This permitting approach is inconsistent with the original issuance of the Permit and the Tri-Party Agreement, and would establish conditions based on the radioactive properties of the waste.

Requested Action: The Department of Ecology needs to propose Draft Permit conditions for CWC and WRAP that would not regulate waste for its radionuclide properties.

Comment Justification: This condition would regulate waste acceptance criteria related to the radioactive component of mixed waste. The U.S. Department of Energy must retain jurisdiction over the source, special nuclear, and byproduct material components of mixed waste in accordance with the Atomic Energy Act.

It is inappropriate for a state to unilaterally assert authority over radioactive materials. As stated previously, source, special nuclear, and byproduct materials specifically are excluded from the definition of solid waste set forth at RCRA 42 U.S.C. § 6903(27); also refer to 42 U.S.C. § 6905(a). The Atomic Energy Act: U.S. Department of Energy's Byproduct Rule (10 CFR 962); the U.S. Environmental Protection Agency Notice Regarding State Authorization [(51 Fed. Reg. 24504 (July 3, 1986))]; U.S. Environmental Protection Agency Notice on Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste [(53 Fed. Reg. 37045 (September 23, 1988))]; the State's recognition of possible preemption in its Hazardous Waste Management Act, Revised Code of Washington 70.105.109; the limitations of the waiver of sovereign immunity in Section 6001 of the RCRA to materials within the RCRA definition of solid waste (thereby excluding source, special nuclear, and byproduct materials); and the Tri-Party Agreement.

Ecology's Response: This portion of the Fact Sheet addresses conditions related to correction of waste discrepancies and problems at each TSD unit: III.7.B.d.24. and III.8.B.d.20. These conditions require correction of discrepancies within two months, which Ecology feels is more than adequate, or Ecology must be notified, after which time, a compliance schedule will be established.

Ecology disagrees that the permitting approach in this modification is inconsistent with that of the original Permit issuance or with the TPA (to the limited extent that the TPA affects this Permit). The quote from the second Responsiveness Summary indicates that "... further implementation

problems could be discovered at a later time. If so, Ecology can make further changes through the permit modification process to continue creating a meaningful Permit." Ecology believes that this condition is necessary to protect human health and the environment from potential releases due to management of liquids and/or incompatibles in containers for long periods of time. Ecology believes that long-term storage of non-compliant waste in containers at the Hanford Facility poses an unacceptable risk to human health and the environment. Past inspections by the Permittees, and by Ecology have identified problems such as bulging drums and damage to drum integrity, thereby creating the potential for releases. This type of problem increases when containers are stored for long periods of time. Even though the Permittees' comment, "The Permittees are committed to resolving significant discrepancies as required by WAC 173-303-370(4)" indicates a willingness to comply with the regulations, the fact remains that the Hanford Facility is often without funding for compliance with those regulations. During meetings with the Permittees in 1998, a USDOE Program Manager stated that additional time would be necessary for resolving significant discrepancies involving problems such as liquids or non-compliant items, because USDOE would have to pursue and obtain funding, perhaps by budget requests, for which the funding will be obtained in one or more years. Ecology believes that this condition is necessary to ensure that the Permittees have a compliance schedule to justify budget requests and to ensure that the Hanford Facility has a driver for attaining compliance. The Backlog Waste Drums, that are still in storage from the 1991-92 era, are an example of such a long-term problem. Ecology desires to be able to establish a compliance schedule within the Permit, because milestones established in the TPA for such situations would not apply to the co-operators of the Hanford Facility. (See Ecology's response to Preamble Comment 1.) In considering the various generating units onsite, the various degrees of completeness in documentation depending upon the generating unit, and the various levels of process knowledge for waste designation, these conditions are necessary to protect human health and the environment from possible mismanagement and releases of unknown or reactive wastes.

Contrary to the Permittees' contention that the Permit attempts to regulate "source, special nuclear, and byproduct material components of mixed waste," Ecology does not regulate those components by conditions in this permit modification. However, Ecology does recognize that the dangerous component of mixed waste is intimately associated with the radioactive portion. These conditions apply to both dangerous and mixed waste.

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10. **Page 15, paragraph 2** **Key Comment:** exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit Fact Sheet statement provided by the Department of Ecology: Ecology believes that the regulations do not allow for physical screening to be performed at another location because it is an aspect related to the TSD unit's determination that the generator shipped the waste described by the waste profile and shipping papers/manifest [refer to WAC 173-303-300(3)]. In short, Ecology believes that the certified application included an activity that is inconsistent with the regulations. However, given that the TSD unit is receiving mixed waste and worker exposure to the radioactive component could be an issue, Ecology agrees that it is desirable to minimize opportunities for exposure to radiation (to protect human health and the environment). Therefore, this condition was written to specify the requirements that must be met for the Permittees to conduct the activity under this Permit, even though it is not allowed by the regulations. The condition includes a requirement to ensure the integrity of the waste after the physical screening has been conducted. It also includes requirements to ensure that the physical screening is performed to the same standards whether it is done at a remote location or at the TSD unit. This Permit condition must be in place in entirety or Ecology will not allow physical screening to occur

before the receipt of waste at the TSD unit.

Condition Impact Statement: This information reflects a belief by the Department of Ecology that flexibility is limited by regulatory requirements. The Permittees believe that flexibility in this area is provided for in the regulations because the waste is managed on the contiguous Hanford Facility.

Requested Action: Prepare conditions that use the flexibility for onsite management of waste to expedite clean up of the Hanford Facility.

Comment Justification: The Department of Ecology appears to believe that the Permit cannot provide the requested flexibility because of the regulations. This statement is without basis. The Permittees assume from the context of this paragraph that the Department of Ecology is referring to where the Permittees believe onsite waste verification activities can occur. The Permittees believe that the regulations allow for onsite waste verification activities to occur at any location on the contiguous property. There are no provisions in the regulations that would limit waste verification activities to within a given TSD unit boundary on the Hanford Facility.

Ecology's Response: This portion of the Fact Sheet addresses conditions related to physical screening at locations other than the TSD units: III.7.B.d.25. and III. 8.B.d.21.

Ecology writes permit conditions that reflect the Dangerous Waste Regulations, WAC 173-303, and, by invoking the omnibus authority (WAC 173-303-808(8) and 173-303-815(a)(a)(ii)), writes permit conditions that describe practices that are necessary to protect human health and the environment.

Contrary to the Comment Justification, Ecology does believe the Permit can allow physical screening to be performed at a location remote from the TSD unit, as long as certain requirements are met, including standards of performance, defensibility, and traceability. These conditions are necessary to protect human health and the environment because the likelihood of worker exposure to radiation from mixed waste during physical inspection is high. This risk to workers is unnecessary if the physical inspection can be performed as the container is packaged, or may be lessened if the physical inspection is performed at a remote location.

Also, contrary to the Condition Impact Statement, these conditions allow remote visual inspection at any generator's location and is not limited to the Hanford Facility. However, the alternative to conducting the visual inspection of the waste at the TSD unit is only allowed if all requirements of the conditions are met.

The Permittees' comment regarding "flexibility" shows a lack of understanding regarding Ecology's authority. Ecology has the authority to write appropriate permit conditions to reflect the intent of the regulations as they apply to a TSD facility and/or units, as well as to write permit conditions that are necessary to protect human health and the environment.

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11. **Page 20, paragraph 4** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit Fact Sheet statement provided by the Department of Ecology:

Quality Assurance Considerations in Selecting an Analytical Laboratory: Ecology informed the Permittees that Section 5.0 of the WAP was inadequate and that an attachment would be

provided to address the quality assurance associated with selecting an analytical laboratory, laboratory testing, and analytical methods. In response, the Permittees provided the basic text. However, rather than write Permit conditions on text that was not certified as complete, true, and accurate, Ecology has modified the provided text slightly to produce Attachment 45 (Condition III.7.B.c. 75. and III.8.B.c.74.).

Condition Impact Statement: The concept described would impose controls regarding selection of laboratory and analytical methods that exceeds the regulatory requirements of WAC 173-303-300.

Requested Action: Delete Attachment 45.

Comment Justification: The Department of Ecology's actions in this case constitute an inappropriate attempt to conduct rulemaking during the permitting process and further illustrates that the Department of Ecology is imposing special conditions on the Hanford Facility that are not supported by its own regulations. This also covered constitute a violation of RCRA's waiver of sovereign immunity as an attempt to apply conditions strictly to the Hanford Facility that are not applied to the balance of the regulated community. If the Department of Ecology believes that its regulations are inadequate its remedy lies in the rule promulgation process – not by inserting unauthorized Permit conditions directed at a single TSD unit. Refer to previous Comment Number 3 to the Comments on the Fact Sheet. Also refer to comments provided on Chapter 5.0 of the WRAP and CWC WAPs concerning Attachment 45 (Conditions III.7.B.d.75. and III.8.B.d.71.).

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45.

General Condition II.E of the Hanford Permit specifies that "All WAPs . . . required by this Permit shall include a quality assurance/quality control (QA/QC) plan, or equivalent . . ." The condition also specifies the content of that plan or equivalent. The Permittees have not submitted such a plan and have not included equivalent information in the certified permit applications. Requiring the Permittees to adhere to the requirements of their permit is not rulemaking.

The topics included in the subject attachment are consistent with various guidance documents published by EPA (e.g., OSWER Directive #9938.4-03, April 1994). The bulk of the text of the attachment was provided by the Permittees. Ecology made several modifications to the text, most notably stating that formal data validation is not required for data produced for operating TSD units.

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12. **Page 22, paragraph 2** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit Fact Sheet statement provided by the Department of Ecology: Ecology has identified the 2336-W Building walls and roof as part of the containment system required by WAC 173-303-630 for container storage areas. WAC 173-303-630(7)(d) allows Ecology to "require generators to protect their containers from the elements by means of a building or other protective covering if the department determines that such protection is necessary to prevent a release of waste or waste constituents due to the nature or design of the container." In addition, WAC 173-303-695 incorporates the Code of Federal Regulations (CFR) 264 Subpart DD that also has

requirements for containment buildings; specifically in CFR 264.1101. Under the requirements of CFR 264.1101, Design and Operating Standards, Section (a)(1) requires the building to "be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g., precipitation, wind, run-on) and to assure containment of managed wastes. In addition, CFR 264.1101(c)(3) states, throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, . . . must repair the condition promptly . . . "

Condition Impact Statement: This condition does not properly represent application of regulations to a container management unit (i.e., WRAP).

Requested Action: Delete conditions relating to buildings for a container management unit.

Comment Justification: The Permittees are not seeking to permit this unit as a containment building. The Department of Ecology improperly has applied (1) WAC 173-303-630(7)(d) and (2) waste management unit requirements by drawing on containment building requirements for a container management unit. Although the Department of Ecology properly has quoted the regulations contained in WAC 173-303-630(7)(d), the application of this requirement is inconsistent with the "Responsiveness Summary Amendments to the Dangerous Waste Regulations Chapter 173-303-WAC", Publication #95-423, dated October 1995. In this document, the Department of Ecology responds to Comment Number 211 by stating "Ecology recognizes that providing covered storage for a large number of containers is an expensive undertaking. The language allows discretion, but it clearly indicates that the purpose of protective covering is to prevent the release of waste based on the nature of the waste or the design of the container. Under foreseeable circumstances, well managed and maintained steel, or polyethylene drums would not need protective covering. Fiber drums or "super sacks" may need covering depending on site-specific conditions such as duration of storage, climate, and waste type. This requirement allow facilities the greatest flexibility to address the issues of maintaining legible labels and container integrity." The Permittees submit that the TSD unit activities at WRAP, the containers used, the climate on the Hanford Facility, and the types of waste do not lead to a conclusion a protective covering is necessary.

There is no authority for the Department of Ecology to apply requirements from containment buildings to container management. Waste management unit requirements have been promulgated based on the definition of the waste management unit. With the exception of miscellaneous units found in WAC 173-303-680, the Department of Ecology has overstepped its authority by drawing on containment building requirements for permitting the WRAP TSD unit.

Ecology's Response: This portion of the Fact Sheet addresses a condition related to the integrity of the building structure: Condition III.7.B.e.8.

Ecology believes that the Responsiveness Summary cited above in the Permittees' comment does not apply to the WRAP building because it does not address container storage in a mechanical unit such as the WRAP stacker-retriever. Furthermore, the Permittees' comment and the Responsiveness Summary cited do not address the situation in that WRAP also includes analytical instrumentation [Non-destructive Examination(NDE), Non-destructive Assay(NDA)], as well as a treatment area.

Specifically related to drum storage, previous experience on the Hanford Site has shown that the intense sun and heat has caused drums to bulge and the drum walls to pit. Contrary to the

Permittees' assertion (i.e., "The Permittees submit that the TSD unit activities at WRAP, the containers used, the climate on the Hanford Facility, and the types of waste do not lead to a conclusion a protective covering is necessary."), records show that these conditions of packaging, climate, and types of waste did result in container failure and potential environmental releases. Critique Report Number WHC-C-90-50-SWM-03 issued by Westinghouse Hanford Company stated that, "evidence of visual corrosion is limited to black drums which are being stored outside in direct sunlight." A team was formed "to review the information and determine root cause(s) and to identify corrective action(s) to prevent reoccurrence." After visual inspection of newly generated waste drums and waste at the point of generation and a visual inspection of all waste drums stored at CWC, the team held a roundtable discussion "to develop a list of potential causes. After listing all causes, they were narrowed down to those that directly related to the problem encountered. The initial causes originally identified were summarized in three reasons that the team believe were direct contributors to the incident.

1. Inner polyethylene barriers may have been damaged during packaging or may not be installed correctly.
2. Unprotected storage, excessive solar heating, reduced packaging barriers and the combination of moisture and corrosive chemicals in the waste caused package degradation.
3. The package requirements for the waste material being generated from this specific waste stream were less stringent than the original packaging requirements. Original packaging required the materials be placed in a 90 mil rigid polyethylene liner inside a galvanized steel drum manufactured to DOT specification because the waste was expected to be stored outdoors in unprotected areas for an unspecified time period. Once construction of the Central Waste Complex began the newly generated waste was expected to be received directly into protected storage. The packaging requirements were changed to permit the waste to be packaged in two 10 mil non-rigid poly liners placed inside a steel drum with a paint coated exterior surface. The number of waste drums received in the first two years of operations exceeded protective storage capacity and waste was stored outside in direct sunlight."

Therefore, this condition is necessary to protect human health and the environment because the types of waste, containers used, and climate on the Hanford Site interact to provide for potential releases to the environment and risk to human health.

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13. **Page 23, paragraphs 2 through 3** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit Fact Sheet statement provided by the Department of Ecology:

Contingency Plan and Emergency Requirements: Ecology has drafted conditions (III.7.B.f.2 and III.8.B.e.1.) to require contingency reporting requirements for damaged or unacceptable dangerous/mixed waste shipments at the TSD units to apply for all wastes received, whether from offsite (i.e., manifested) or from onsite (i.e., under shipping papers) generators or other TSD units/facilities. These conditions are intended to exceed the regulation [WAC 173-303-350(3)], essentially to make manifest and related contingency plan requirements applicable to onsite shipments as well as to offsite shipments."

Ecology believes that controls are needed for movement and management of onsite waste at the Hanford Facility and that the controls applied to offsite shipments are appropriate to onsite shipments, as well. Neither the State or federal regulations envisioned or were written to accommodate a RCRA facility the size and complexity of the Hanford Facility with hundreds of

onsite waste streams and multiple onsite waste generators and contractors. Because of this, in most cases, Ecology has applied the regulations of the "facility" to the individual TSD unit. Consistent with that approach, Ecology has included language in the Permit to establish certain controls on onsite waste, applying the regulations associated with manifested waste to dangerous and mixed waste transported on the Hanford Site under shipping papers. In this case, Ecology believes the additional risk to human health and the environment associated with onsite movements of dangerous and mixed waste justifies the need for these conditions.

Condition Impact Statement: These statements would change the basis for which treatment, storage, and/or disposal activities are conducted on the Hanford Facility. This permitting approach is inconsistent with the original issuance of the Permit and the Tri-Party Agreement.

Requested Action: Revise the Draft Permit conditions written for CWC and WRAP to be consistent with Conditions II.I.1.e, II.I.1.j, II.P, and II.Q of the Permit.

Comment Justification: WAC 173-303-040 provides accurate information on how to understand the regulatory meaning of the terms "facility" and "unit". As defined in WAC 173-303-040, a "facility" is "all contiguous land, and structures . . . for . . . dangerous waste." A facility could consist of several treatment, storage, or disposal operational units. By definition, a facility consists of the individual units. The terms are not intended to be used interchangeably. There is no basis applying facility requirements at the unit level. The size and complexity of the Hanford Facility was contemplated during the initial issuance of the Permit. At that time, there was no intent to interpret units as facilities. Such an approach is inconsistent with the original Permitting approach. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolved difficulties, redundancies, and inefficiencies in this approach. As a result, the Department made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility-wide approach, but still provide facility-wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit." The initial final Permit addressed issues attributed by the Department of Ecology to the size and complexity of the Hanford Facility through Permit Conditions II.P and II.Q. It is inappropriate and not cost effective to impose conditions such as these on a unit-by-unit basis because the initial final Permit has been developed in contemplation of these matters in Part II of the Permit.

This condition would regulate waste acceptance criteria related to the radioactive component of mixed waste. The U.S. Department of Energy must retain jurisdiction over the source, special nuclear, and byproduct material components of mixed waste in accordance with the Atomic Energy Act.

It is inappropriate for a state to unilaterally assert authority over radioactive materials. As stated previously, source, special nuclear, and byproduct materials specifically are excluded from the definition of solid waste set forth at RCRA 42 U.S.C. § 6903(27); also refer to 42 U.S.C. § 6905(a). The Atomic Energy Act; U.S. Department of Energy's Byproduct Rule (10 CFR 962); the U.S. Environmental Protection Agency Notice Regarding State Authorization [(51 Fed. Reg. 24504 (July 3, 1986))]; U.S. Environmental Protection Agency Notice on Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste

[(53 Fed. Reg. 37045 (September 23, 1988)); the State's recognition of possible preemption in its Hazardous Waste Management Act, Revised Code of Washington 70.105.109; the limitations of the waiver of sovereign immunity in Section 6001 of the RCRA to materials within the RCRA definition of solid waste (thereby excluding source, special nuclear, and byproduct materials); and the Tri-Party Agreement.

Ecology's Response: This portion of the Fact Sheet addresses a condition related to the Contingency Plan and Emergency Requirements: Conditions III.7.B.g.1. and III.8.B.f.1.

Ecology believes that the Permit Conditions for WRAP and CWC, as written, are already consistent with Conditions II.I.1.e., II.I.1.j., II.P, and II.Q of the Permit. Ecology believes that the approach taken for Modification E of the Permit is consistent with the approach for the original issuance of the Permit in 1994. Various provisions of the original Permit issued in 1994 apply what are essentially "facility" requirements to each TSD unit. That is, each TSD unit is required to have a Training Plan (Condition II.C.3), a Contingency Plan (Condition II.B.1), an Inspection Plan (II.O.1), an Operating Record (Condition II.I.1), a WAP (Condition II.D.1), and a Closure Plan (Condition II.J.2). Nonetheless, at the time of the original Permit issuance, with the unavailability of specific operational information for each TSD unit that would ultimately attain final operating status, the impact and conditions needed to implement the permitting approach at each TSD unit were not fully understood. Ecology believes that the same quotation from the second Responsiveness Summary (i.e., ". . . further implementation problems may be discovered at a later time. If so, the Department can make further changes through the permit modification process to continue creating a meaningful Permit") supports the approach and conditions of this Permit modification. Ecology recognized, at the time of the original permit issuance, that given the size and complexity of the Hanford Facility, there could be additional areas in which the TSD units may need to meet "facility" conditions and, as those areas were identified, future permit modifications would address them. These conditions were written because Ecology believes that the TSD unit-specific contingency plans must include the actions necessary to protect human health and the environment in case an on-site shipment of dangerous or mixed waste becomes damaged, or otherwise presents a hazard.

Contrary to the Permittees' contention that the Permit attempts to regulate "source, special nuclear, and byproduct material components of mixed waste," Ecology does not intend to regulate those components by conditions in this permit modification. However, Ecology does recognize that the dangerous component of mixed waste is intimately associated with the radioactive portion.

Comments on the Proposed Modifications to the Introduction

1. **Paragraph on Part III, lines 11-12** **Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: The Department of Ecology added the following sentence to the end of the paragraph: "Additional requirements may also be added when an operating unit ceases operations and undergoes closure".

Condition Impact Statement: Adding this sentence would undermine the agreement reached between the Department of Ecology and the Permittees on the permitting approach for addressing closure activities that occur within the boundary of an operating TSD unit. The Permittees and the Department of Ecology would needlessly expend substantial resources on the permitting structure

resolved previously.

Requested Action: Add text to the end of the sentence to read: "Additional requirements could also be added when an operating unit ceases operations and undergoes closure, or when portions of the operating unit cease operations and undergo closure".

Comment Justification: The philosophy to maintain operating unit closure activities within Part III of the Permit began with the 222-S Laboratory Complex closure activities for the Partial Closure Plan for the 222-S Dangerous and Mixed Waste Storage Area Storage Structures. The Department of Ecology approved the closure plan based on a presumption that the approved closure plan would be contained in the Hanford Facility Dangerous Waste Permit Application, 222-S Laboratory Complex, as part of the closure plan for the 222-S Laboratory Complex. The Permittees letter dated December 18, 1997, from James E. Rasmussen to Moses N. Jaraysi stated "Final owner and operator certification of this closure action will occur as part of the Part B Permit Application". The Department of Ecology's response letter dated March 12, 1998, from Alisa D. Huckaby, stated: "This letter represents Ecology's approval of the closure plan which describes closure specifications for the two Dangerous and Mixed Waste Storage Area Structures located . . . ". It is clear that public comment on the closure activities would be conducted during public comment for the final status permitting action of the 222-S Laboratory Complex. After receiving the March 12, 1998 letter, the Permittees provided a professional engineer certification of the closure activities to the 'approved closure' plan in accordance with WAC 173-303-610(6). Furthermore, the philosophy to keep operating TSD unit closure activities within Part III of the Permit was upheld when the Department of Ecology agreed to the permitting structure for 616 NRDWSF closure leading to the modification of the language proposed in the Permit's introduction.

The Permittees understand that the extent of closure activities between the 222-S Laboratory Complex storage structures and the CWC 2401-W Waste Storage Building are different. However, the extent of closure activities should not drive the decision on whether to locate closure activities in Part III or Part V of the Permit. This decision should be based on whether the closure activities are taking place within an operating TSD unit boundary. Closure activities taking place within an operating TSD unit boundary should be captured in Part III of the Permit and integrated with the closure plan for the given operating TSD unit. This is the important similarity between the 222-S Laboratory Complex storage structures and the CWC 2401-W Waste Storage Building. The Requested Action to add text to the sentence being added to the Part III introduction paragraph will preserve this permitting philosophy and ensure permitting actions are understood in the future.

Ecology Response: Ecology disagrees with the Requested Action. However, further discussion is needed between Ecology and USDOE to address partial closures of operating units.

Ecology agrees that since 2401-W does not have its own Part A, Form 3, it may by definition be excluded from Part V (Unit Specific Conditions for Units Undergoing Closure) of the Sitewide Permit. Closure of 2401-W, however, is being handled separately from closure of the rest of CWC, making it unique with respect to how permitting is currently handled under the Sitewide Permit. Ecology feels that Part V is a better "regulatory fit" because in this case the Permittees' objective is to administratively separate 2401-W from CWC. Part III of the Permit is for final status operating TSDs and not non-permitted storage buildings. Partial closure of CWC was never taken into consideration when the Permit was originally adopted; therefore, discussion of how to handle this scenario more efficiently can be addressed in future modifications to the Permit.

Both similarities and differences can be identified regarding the 222-S closure scenario. For instance, the 222-S Closure Plan did not go out for public comment; it was to be submitted as part of the 222-S Part B Permit Application (i.e., there was no urgent need to complete the permitting process). The 222-S Dangerous and Mixed Waste Storage Area Storage Structures were basically replaced with upgraded structures and the old structures were moved aside and clean closed. The footprint of the 222-S TSD did not change. This is not the same for 2401-W. The USDOE approached Ecology in the Summer of 1999 stating their urgent need to complete the permitting process for the 2401-W Closure Plan (i.e., go out for public comment on the closure plan so that the unit could be certified as "clean closed" and used for other, non-permitted-related purposes). The 2401-W would be administratively disassociated from the CWC Complex. The footprint of the CWC would change; the CWC Part A would need to be revised to exclude 2401-W, and 2401-W would exit RCRA. This is the first time such a scenario has been presented at Hanford.

Ecology acknowledges that there is a need to further address the permitting philosophy with regard to incorporating partial closure of TSD units into the Sitewide Permit and, as noted above, is willing to discuss how to handle such scenarios efficiently in future modifications to the Permit.

Comments on the Proposed Modification to Attachment 3, Permit Applicability Matrix

1. **Each Page: Part I through Part VI Footnotes** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: The Department of Ecology omitted footnotes from all pages of the Permit Applicability Matrix. The Department of Ecology also added a superscript to Part II.A through VI.

Condition Impact Statement: Removing the footnotes provides the public with incomplete information on the categories that the Permit applies. Adding the superscript to Part II.A through VI incorrectly represents the Permit Applicability Matrix because the superscript 'footnotes' only apply to Part I Permit Conditions.

Requested Action: Remove superscripts from Part II.A through Part VI, and restore the footnotes to each page as in previous revisions for the Hanford Facility RCRA Permit as follows:

Part I requires footnote:

CATEGORIES ARE DEFINED AS FOLLOWS:

- | | |
|---|--|
| A. Leased Land | E. TSD Unit Closures (in Part V) |
| B. North Slope and ALE | F. TSD Operating Units (in Part III) |
| C. Interim Status TSD Units | G. TSD Units in Post closure/Modified Closure (in Part VI) |
| D. Areas Between TSDs (excluding A and B) | |

* Condition applies to this category, as modified by applicable footnotes and qualifiers

¹ – For Category B, Part I Conditions only apply if future TSD activities are begun on the North Slope or ALE.

² – For Category C, all Part I Conditions apply to activities subject to Conditions II.U. and II.V.

³ – For Category D, Part I Conditions only apply to activities subject to Conditions II.A., II.C., II.D.4., II.G., II.I., II.L.3., II.O., II.Q., II.S., II.T., and II.X.

Part II through VI footnote:

CATEGORIES ARE DEFINED AS FOLLOWS:

- | | |
|---|--|
| A. Leased Land | E. TSD Unit Closures (in Part V) |
| B. North Slope and ALE | F. TSD Operating Units (in Part III) |
| C. Interim Status TSD Units | G. TSD Units in Post closure/Modified Closure (in Part VI) |
| D. Areas Between TSDs (excluding A and B) | |

* Condition applies to this category, as modified by applicable footnotes and qualifiers

Comment Justification: The superscripts and footnotes were omitted in error. The superscripts only apply to Part I; and do not apply to Parts II through VI. The footnote information on the Categories is needed to define applicability of the Permit to Hanford Facility activities.

Ecology Response: Ecology agrees with the Requested Action. The superscripts and footnotes in the Applicability Matrix are revised as requested. Also, for Category D, Part 1 conditions apply to activities subject to Condition II.Y.

2. **Page 10, Part III.8.A** **Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Central Waste Complex (CWC) Facility Compliance with Approved Permit Application.

Condition Impact Statement: An incorrect TSD unit title will lead to confusion regarding applicability of the Permit.

Requested Action: Change title of TSD unit to "Central Waste Complex".

Comment Justification: The Department of Ecology has added a line item to the table with a title for the Central Waste Complex TSD unit inconsistent with Part III and Attachment 27.

Ecology Response: Ecology agrees with the Requested Action. The title of the Central Waste Complex in the Applicability Matrix is revised as requested.

3. **Page 11, Part IV** **Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: A (*) denoting applicability that this Condition applies to interim status TSD units has been added to the table.

Condition Impact Statement: This change would assign applicability of final status corrective actions to interim status TSD units.

Requested Action: Remove designation (*) for category "C".

Comment Justification: Final status standards are not applicable to interim status TSD units in accordance with WAC 173-303-400. Corrective Action considerations will be addressed for these TSD units in Parts III, V, or VI.

Ecology Response: Ecology disagrees with the Requested Action. Dangerous waste TSD units, whether operating under interim status, operating under a permit, closed or closing, are solid waste management units and are subject to corrective action. While the specific operating (or closure or post-closure care) conditions for these units may be specified in Parts III, V, or VI of the Permit,

Ecology continues to believe that it is appropriate to establish the general conditions governing corrective action now and to immediately apply the general conditions to all ongoing corrective action work (i.e., to apply them to corrective action work that has been included in the Permit and to corrective action work that is occurring at units that have not yet been incorporated into the Permit and continue to operate under interim status). This is analogous to the approach Ecology adheres to when establishing closure and post-closure requirements.

4. **Page 11, Part V.21** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: 2401-W Waste Storage Building Compliance with Approved Modified Closure Plan

Condition Impact Statement: This condition would establish confusion regarding the type of closure plan contained in the Permit.

Requested Action: Delete line item Part V.21 in Applicability Matrix based on Comment Number 1 in Comments on the Proposed Modifications to Part V, Chapter 21, 2401-W Waste Storage Building regarding the inappropriate incorporation of this closure plan into Part V of the Permit.

Comment Justification: Based on Comment Number 1 in Comments on the Proposed Modifications to Part V, Chapter 21, 2401-W Waste Storage Building, it is inappropriate to locate the 2401-W Waste Storage Building Closure Plan in Part V of the Permit.

In addition, the 2401-W Waste Storage Building is not a Modified Closure Plan. A Modified Closure Plan is a plan developed to meet modified closure provisions in Permit Condition II.K, Dangerous Waste Portion. The 2401-W Waste Storage Building Closure Plan indicates clean closure of the 2401-W Waste Storage Building. It is inaccurate to reference this closure plan as a Modified Closure Plan.

Ecology Response: Ecology agrees that it is inaccurate to reference this closure plan as a Modified Closure Plan. The Applicability Matrix is revised to read "2401-W Waste Storage Building Compliance with Approved Closure Plan."

Ecology cannot support deletion of Part V.21 in the Applicability Matrix. As noted in Ecology's response to Comment Number 1 in Comments on the Proposed Modifications to Part V, Chapter 21, 2401-W Waste Storage Building regarding the inappropriate incorporation of this closure plan into Part V of the Permit, Ecology cannot support deletion of Part V, Chapter 21, and the 2401-W Waste Storage Building Closure Plan from the Permit because closure of 2401-W is being performed prior to closure of CWC.

Ecology agrees that since 2401-W does not have its own Part A, Form 3, it may by definition be excluded from Part V (Unit Specific Conditions for Units Undergoing Closure) of the Sitewide Permit. Closure of 2401-W, however, is being handled separately from closure of the rest of CWC, making it unique with respect to how permitting is currently handled under the Sitewide Permit. Ecology feels that Part V is a better "regulatory fit" because, in this case, the Permittees' objective is to administratively separate 2401-W from CWC. Part III of the Permit is for final status operating TSDs and not non-permitted storage buildings. Partial closure of CWC was never taken into consideration when the Permit was originally adopted; therefore, discussion of how to handle this scenario efficiently can be addressed in future modifications to the Permit.

Comments on the Proposed Modifications to Attachment 27, Permit Modification Schedule

1. **1995 Mod. A** **Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: The Year and Mod. listed as "1995 Mod. A"

Condition Impact Statement: Refers to incorrect Modification.

Requested Action: Change the Year and Mod. from "1995 Mod. A" to "1995 Mod A"

Comment Justification: There were two Permit modifications in 1995. The first modification was identified as Mod. A and the second one identified as Mod. A.

Ecology Response: Ecology agrees with the Requested Action. The title of the second 1995 Mod A is revised as requested.

2. **1995 Mod. A, 105-DR** **Key Comment: N/A**
Large Sodium Fire
Facility

Draft Permit conditions as proposed by the Department of Ecology: Type of Permit, CC.

Condition Impact Statement: The proposed language inaccurately would reflect the closure status of this TSD unit.

Requested Action: Change Type of Permit to PCC for Partial Clean Closure.

Comment Justification: The 105-DR Large Sodium Fire Facility was partially clean closed. The type of Permit is listed as CC for Clean Closed. This promotes confusion because the 105-DR Large Sodium Fire Facility was partially cleaned closed. The closure plan was completed and left final closure of the TSD unit deferred to a later date.

Ecology Response: Ecology agrees that clarification is needed. Ecology has revised Attachment 27 so that the column formerly titled "Type of Permit" (Part B Application, Closure/Post-Closure, or Clean-Closed) now reads "Part" (Part III for Operating Units, Part IV for Corrective Action Units, Part V for Closures, and Part VI for Post-Closures). This revision will clearly relate the desired information (i.e., the current permitted status of the units). Therefore, the 105-DR is identified in Part V as a unit undergoing closure.

3. **1996 Mod. B, 300 Area** **Key Comment: N/A**
Process Trenches

Draft Permit conditions as proposed by the Department of Ecology: Type of Permit, C.

Condition Impact Statement: The proposed language inaccurately would reflect the closure status of this TSD unit.

Requested Action: Change Type of Permit to PC for Postclosure.

Comment Justification: The 300 Area Process Trenches TSD unit is included in Part VI of the Permit.

Ecology Response: Ecology agrees that clarification is needed. Ecology has revised Attachment 27 so that the column formerly titled "Type of Permit" (Part B Application, Closure/Post-Closure, or Clean Closed) now reads "Part" (Part III for Operating Units, Part IV for Corrective Action Units, Part V for Closures, and Part VI for Post-Closures). This revision will clearly relate the desired information (i.e., the current permitted status of the units). Therefore, the 300 Area Process Trenches is identified in Part VI as a unit in post-closure.

4. **1996 Mod. B, 3718-F** **Key Comment: N/A**
Alkali Metal Treatment

Draft Permit conditions as proposed by the Department of Ecology: Type of Permit, C.

Condition Impact Statement: The proposed language inaccurately would reflect the closure status of this TSD unit.

Requested Action: Change Type of Permit to CC for Clean Closed.

Comment Justification: The 3718-F Alkali Metal Treatment was clean closed on August 4, 1998. This condition is incorrect. The Type of Permit is listed as C for Closure/Postclosure Plan and the 3718-F Alkali Metal Treatment should be CC for Clean Closed.

Ecology Response: Ecology agrees that clarification is needed. Ecology has revised Attachment 27 so that the column formerly titled "Type of Permit" (Part B Application, Closure/Post-Closure, or Clean Closed) now reads "Part" (Part III for Operating Units, Part IV for Corrective Action Units, Part V for Closures, and Part VI for Post-Closures). This revision will clearly relate the desired information (i.e., the current permitted status of the units). Therefore, the 3718-F Alkali Metal Treatment unit is identified in Part V as a closure.

5. **1999 Mod. E,** **Key Comment: N/A**
Waste Receiving and
Processing

Draft Permit conditions as proposed by the Department of Ecology: The TSD unit name is listed as the "Waste Receiving and Processing".

Condition Impact Statement: The draft condition would not reflect the TSD unit name in the Hanford Facility Dangerous Waste Part A Permit Application.

Requested Action: Change TSD unit name to "Waste Receiving and Processing Facility".

Comment Justification: The change makes the TSD unit name correct.

Ecology Response: Ecology agrees with the Requested Action. The title of the Waste Receiving and Processing Facility is revised as requested.

6. **1999 Mod. E, Transuranic** **Key Comment: N/A**
Storage and Assay
Facility

Draft Permit conditions as proposed by the Department of Ecology: Type of Permit "C"

Condition Impact Statement: Editorial error.

Requested Action: Delete the "C"

Comment Justification: Editorial error.

Ecology Response: Ecology and the Permittee have agreed to leave TRUSAF in Attachment 27 until a transition negotiation schedule has been developed and approved by Ecology. As noted in Attachment 27, the Permittee will develop and submit, for Ecology approval, a transition negotiation schedule for TRUSAF by December 31, 2001.

7. **1999 Mod E, Key Comment: N/A**
2401-W Waste Storage Building

Draft Permit conditions as proposed by the Department of Ecology: "2401-W Waste Storage Building" added to Modification E.

Condition Impact Statement: This action would incorporate a building on the Hanford Facility when Part V Chapters of the Permit are reserved for TSD units.

Requested Action: Delete incorporation of the 2401-W Waste Storage Building.

Comment Justification: Refer to comment justifications in Comment Number 1, Comments on the Proposed Modifications to Part V, Chapter 21, 2401-W Waste Storage Building; Comment Number 4, Comment on the Proposed Modification to Attachment 3, Permit Applicability Matrix; and Comment Number 1, Comments on the Proposed Modification to the Introduction .

Ecology Response: Ecology disagrees with the Requested Action. Ecology cannot support deletion of 2401-W in the Permit Modification Schedule. As noted in Ecology's response to Comment Number 1 in Comments on the Proposed Modifications to Part V, Chapter 21, 2401-W Waste Storage Building regarding the inappropriate incorporation of this closure plan into Part V of the Permit, Ecology cannot support deletion of Part V, Chapter 21, and the 2401-W Waste Storage Building Closure Plan from the Permit because closure of 2401-W is being performed prior to closure of CWC.

Ecology agrees that since 2401-W does not have its own Part A, Form 3, it may by definition be excluded from Part V (Unit Specific Conditions for Units Undergoing Closure) of the Sitewide Permit. Closure of 2401-W, however, is being handled separately from closure of the rest of CWC, making it unique with respect to how permitting is currently handled under the Sitewide Permit. Ecology feels that Part V is a better "regulatory fit" because, in this case, the Permittees' objective is to administratively separate 2401-W from CWC. Part III of the Permit is for final status operating TSDs and not non-permitted storage buildings. Partial closure of CWC was never taken into consideration when the Permit was originally adopted; therefore, discussion of how to handle this scenario more efficiently can be addressed in future modifications to the Permit.

8. **2000 Mod. F, Key Comment: N/A**
222-S Laboratories

Draft Permit conditions as proposed by the Department of Ecology: The TSD unit name is listed at the "222-S Laboratories".

Condition Impact Statement: The draft condition would not reflect the TSD unit name in the Hanford Facility Dangerous Waste Part A Permit Application.

Requested Action: Change TSD unit name to "222-S Laboratory Complex".

Comment Justification: The change makes the TSD unit name correct.

Ecology Response: Ecology agrees with the Requested Action. The title of the 222-S Laboratory Complex is revised as requested.

9. 2000 Mod. F **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Type of Permit "C"

Condition Impact Statement: Editorial error.

Requested Action: Delete the Type of Permit "C".

Comment Justification: Editorial error, the "C" was not deleted when the TSD unit was deleted.

Ecology Response: Ecology agrees with the Requested Action. The Type of Permit for deleted units in 2000 Mod F is revised as requested. Also, see Ecology's response to comment #2 above.

10. 2002 Mod. H,
Low-Level Burial
Grounds **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The TSD unit name is listed as the "Low-Level Burial Grounds".

Condition Impact Statement: The condition would not reflect the name change of this TSD unit.

Requested Action: Change TSD unit to "Mixed Waste Disposal Units".

Comment Justification: On June 1, 1999, the Department of Ecology's Waste Management Project Manager requested that the Low-Level Burial Ground TSD unit name be changed. In September 1999, the Permittees informed the Department of Ecology of the TSD unit name change when notification was provided that disposal operations began in one of the trenches. The new TSD unit name is the Mixed Waste Disposal Units.

Ecology Response: Ecology disagrees with the Requested Action. The name of the "Low-Level Burial Grounds" will be changed to "Mixed Waste Disposal Units" in the Permit once the Part A, Form 3, for the unit has been officially submitted and approved by Ecology.

11. Legend **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Legend: * Type of Permit

"C Closure/Post Closure".

Condition Impact Statement: With TSD unit being incorporated into Part VI of the Permit, this legend promotes confusion.

Requested Action: Modify C - Closure/Postclosure to read "UC – Undergoing Closure" and create a new legend item "PC – Postclosure". Use the "UC" designate for any TSD unit in Part V that is undergoing closure.

Comment Justification: Provide clarification between TSD units undergoing closure in Part V and Postclosure TSD units in Part VI. .

Ecology Response: Ecology agrees that clarification is needed. Ecology has revised Attachment 27 so that the column formerly titled "Type of Permit" (Part B Application, Closure/Post-Closure, or Clean-Closed) now reads "Part" (Part III for Operating Units, Part IV for Corrective Action Units, Part V for Closures, and Part VI for Post-Closures). This revision will clearly relate the desired information (i.e., the current permitted status of the units).

Comments on the Proposed Modifications to Attachment 45, Selecting a Laboratory and Quality Assurance/Control

1. **Attachment 45** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: The Department of Ecology has proposed to add Attachment 45, "5.0 Selecting a Laboratory and Quality Assurance/Quality Control" to the Permit.

Condition Impact Statement: This condition would impose a level of control regarding selection of laboratory and analytical methods that exceeds the regulatory requirements of WAC 173-303-300.

Requested Action: Delete Attachment 45.

Comment Justification: WAC 173-303-300 provides adequate requirements for waste analysis. The text suggested by the Permittees in Draft Permit Condition III.8.B.d.71 for CWC and Draft Permit Condition III.7.B.d.75 for WRAP contains a level of detail appropriate for inclusion as a waste analysis plan and accurately reflects the Permittees' approach to selecting a laboratory, performance of laboratory testing, and use of analytical methods. This condition would impose overly prescriptive requirements by incorporating a detailed document (Attachment 45) into the waste analysis plan. The Permittees insist that the suggested text is more appropriate. The Permittees recommend incorporation of the suggested text per WRAP III.7.B.d.75 and CWC III.8.d.71 to replace the information originally provided in Section 5.0 of the waste analysis plan. The suggested text ensures an appropriate level of precision and accuracy for data obtained from waste in accordance with the waste analysis program, and for selection of laboratory testing and use of analytical methods. The Permittees have offered an alternative approach for meeting quality assurance/quality control requirements for waste analysis requirements in the comments on Draft Permit Conditions III.7.B.d. for WRAP and III.8.B.d. for CWC.

If this Requested Action is not accepted, the text offered by the Permittees in Draft Permit Condition III.8.B.d.71 for CWC and Draft Permit Condition III.7.B.d.75 for WRAP contains a level of detail consistent with that contained in the U.S. Environmental Protection Agency, Region 10, Arlington, Oregon, RCRA permit.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45.

Condition II.E of the Permit specifies that "All WAPs . . . required by this Permit shall include a quality assurance/quality control (QA/QC) plan, or equivalent . . ." The condition also specifies the content of that plan or equivalent. The Permittees have not submitted such a plan and have not included equivalent information in the certified permit applications, of which the WAPs are a part. The topics included in this attachment are consistent with various guidance documents published by EPA. In addition, Ecology's expectations were discussed in workshops held with the Permittees in late 1996 and early 1997.

In response to draft text supplied by Ecology to the Permittees for review in 1998, the Permittees supplied the text that now comprises most of Attachment 45. Rather than write permit conditions on text that was not certified as true, accurate, and complete, Ecology modified the provided text slightly to produce Attachment 45. A similar approach has been taken for other permits. A recent example is the permit for the Waste Isolation Pilot Plant (WIPP). The New Mexico Environment Department used an electronic file of the WAP in the certified permit application as the base document and modified the text to create the WAP that is now part of the WIPP Permit. For Attachment 45 to the Hanford Permit, Ecology made several modifications to the text, most notably stating that formal data validation is not required for data produced for operating TSD units.

Finally, the Permittees contend that the level of detail contained in the RCRA Permit for the Arlington, Oregon, TSD facility is appropriate for Hanford Facility TSD units. Ecology believes that a comparison to the WAP and QA/QC plan for a facility managing mixed waste or a waste of similar potential danger to human health and the environment would be a better example for level of detail (e.g., the permits for Allied Technology Group, Inc., Richland, Washington; Umatilla Chemical Agent Disposal Facility, Umatilla, Oregon; Waste Isolation Pilot Project, Carlsbad, New Mexico). Ecology has referred to those examples in preparing this modification of the Permit.

2. **Attachment 45** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Throughout Attachment 45, the Department of Ecology refers to the "TSD unit operating organization".

Condition Impact Statement: This language would allow Attachment 45 to apply to Hanford Facility TSD units other than CWC and WRAP.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, replace "TSD unit operating organization" with "CWC/WRAP operating organization" throughout Attachment 45.

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The Department of Ecology proposed in Modification D a similar attachment with the phrase "CWC/WRAP operating organization". Because the Department of Ecology stated in the October 1999 Permit Steering Committee meeting that the intent of this attachment is to be used for CWC/WRAP, there is no need to generically refer to TSD units in Attachment 45.

The Permittees also understand that use of the phrase "CWC/WRAP operating organization" does not mean TSD unit personnel must perform the task. Based on the definition of this phrase in the CWC and WRAP waste analysis plans, the phrase also means that centralized Hanford Facility organizations could perform the task as the representative organization for CWC or WRAP.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or change the text as requested. The Permittees are correct that the definition of "operating organization" in the WAP applies to this attachment.

The Comment Justification inaccurately states Ecology's position. The draft meeting minutes of the October 12, 1999, Permit Steering Group captured the information that Ecology provided to Mr. Harold Tilden of Pacific Northwest National Laboratories (PNNL) (the information was apparently transcribed from a voice mail message from Ms. Joan Bartz, Ecology): "Attachment 45 is intended to affect only the units being incorporated . . . The issue being addressed is that the Permit requires a QA/QC plan and data management plan to be attached, and it was not provided . . . as to applying to other units, four units are intended to operate interchangeably (WRAP, T-Plant, CWC, and LLBG). Ecology expects the WAPs for those four units to look similar, so Attachment 45 is likely to get applied to those other two units. It would also be advantageous if certain requirements of the WAPs were identical for all units in the Hanford Permit, but that does not affect 325 at this time . . ."

Ecology will consider replacing this attachment with a revised QA/QC plan for the reissuance of the Permit in 2004, if the Permittees supply adequate text. The attachment will not be applied to other TSD units attaining final status if the WAPs in those certified permit applications contain adequate descriptions of procedures and adequate information regarding QA/QC.

3. **Attachment 45** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Throughout Attachment 45, the Department of Ecology refers to the "TSD unit".

Condition Impact Statement: This language would allow Attachment 45 to apply to Hanford Facility TSD units other than CWC and WRAP.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, replace "TSD unit" with "CWC/WRAP" throughout Attachment 45.

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to

Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The Department of Ecology proposed in Modification D a similar attachment with the phrase "CWC/WRAP". Because the Department of Ecology stated in the October 1999 Permit Steering Committee meeting that the intent of this attachment is to be used for CWC/WRAP, there is no need to generically refer to TSD units in Attachment 45.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or change the text as requested.

See Ecology's response to Comment 2 on Attachment 45 regarding the applicability of Attachment 45 to other TSD units in the Permit.

4. **Section 5.0, page 1, lines 27 through 41** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Before commencement of analytical work, the laboratory staff will submit the QA plan for review by the TSD unit operating organization. At a minimum, the QA plan shall address the following:

- sample custody and management practices (see also Section 4.2 of this WAP)
- sample preservation protocols
- sample preparation and analytical procedure requirements
- instrument maintenance and calibration requirements
- internal QC measures, e.g., method blanks, spikes
- analytical capabilities.

Condition Impact Statement: This condition would identify an element (analytical capabilities) generally not part of a laboratory QA plan.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, delete the bullet on page 1, line 41, "analytical capabilities".

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The Permit should not impose requirements on a laboratory's QA plan that are inconsistent with the general content of a QA plan.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45. However, Ecology agrees to delete the phrase "analytical capabilities."

The requirement to include quality assurance and quality control is found in General Permit Condition II.E. Note that the QA/QC is not limited to laboratory activities.

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5. **Section 5.1, page 2, lines 4 through 39** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology:

5.1 OBJECTIVES FOR TSD UNIT

The primary purpose of waste testing is to ensure that the waste is properly characterized, when process knowledge is insufficient, in compliance with RCRA requirements for general waste analysis [WAC 173-303-300(2); 40 CFR 264.13]. Waste also is tested to ensure that stored waste is safely managed, residuals from spills that might occur are properly disposed of, and the process of accepting waste for storage is controlled. The specific objectives of the waste-sampling and analysis program at TSD unit are as follows:

- ◆ Identify whether waste is compatible with waste currently stored.
- ◆ Provide a detailed chemical and physical analysis of a representative sample of the waste before the waste is accepted at or transferred from a TSD unit to an offsite TSD unit to ensure proper management and disposal.
- ◆ Provide an analysis that is accurate and up-to-date to ensure that waste is properly treated.
- ◆ Ensure safe management of waste at the TSD unit.
- ◆ Ensure proper disposal of residuals.
- ◆ Ensure compliance with Land Disposal Restriction (LDR) requirements.
- ◆ Identify waste that does not meet TSD unit acceptance requirements (e.g., incomplete information).
- ◆ Identify waste that does not meet TSD unit specifications (e.g., Part A, Form 3 Permit Application, restricted from management at TSD unit).
- ◆ Determine if waste samples are representative of the contents of the containers at the time the samples were taken.
- ◆ Determine if waste accepted for management meets the requirements of TSD unit waste acceptance criteria.
- ◆ Determine if waste accepted for management meets the information provided by the generator.

Condition Impact Statement: This condition on page 2, lines 35 through 36 would duplicate the condition found on page 2, lines 26 through 27.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, delete the bullet on page 2, lines 35 through 36, "Determine if waste accepted for management meets the requirements of TSD unit waste acceptance criteria."

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is

acceptable. The bullet on page 2, lines 35 through 36 needs to be deleted to avoid duplication of requirements.

Ecology's Response: Ecology disagrees with the Requested Action to delete Attachment 45; however, the text specifically identified in the comment will be deleted because it is redundant.

6. **Section 5.2, page 2, lines 42 through 46** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology:

5.2 DATA QUALITY REQUIREMENTS

The overriding goal of this program is to adequately designate or certify waste, through either acceptable knowledge or analytical testing, such that it can be appropriately managed or dispositioned. The clear objective in such a case is to accurately designate/certify any waste.

Condition Impact Statement: This condition on page 2, line 46 would duplicate the condition found on page 2, lines 44 through 46.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, delete the sentence on page 2, line 46, "The clear objective in such a case is to accurately designate/certify any waste."

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The sentence needs to be deleted to avoid duplication of requirements.

Ecology's Response: Ecology disagrees with the Requested Action to delete Attachment 45; however, Ecology agrees to delete the identified text because it is redundant.

7. **Section 5.2, page 3, lines 1 through 7** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The first objective is to control and characterize any errors associated with the data produced in the laboratory. Laboratory QC activities are directed at identifying any potential errors introduced during the preparative, analytical, and/or reporting phases of work. Other oversight QA activities, such as planning the field and laboratory QC program requirements, auditing ongoing and completed activities, and evaluation of certifications obtained by the laboratory, ensure that the specified procedures are followed and that the QA information needed for characterizing error, to permit adequate decision-making, is obtained.

Condition Impact Statement: Without additional clarification, the sentence "The first objective is to control and characterize any errors associated with the data produced in the laboratory." might be applied to situations other than analytical testing.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, add to the beginning of the paragraph "When analytical testing is required . . . ".

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The added text clarifies the sentence applicability.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or modify the text as requested.

Ecology believes the text of Attachment 45 is appropriate. There are activities related to the TSD unit, other than analytical testing, to which QA/QC apply. The text in Attachment 45 describes some of these activities.

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8. **Section 5.2.1, page 3, lines 29 through 35** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: 5.2.1 Data Assessment
The acquired data need to be scientifically sound, of known quality, and thoroughly documented. Data validation is not required; however, the TSD unit operating organization is responsible to ensure that data assessment or evaluation is completed. Data are assessed to determine compliance with quality standards established by the Washington State Department of Ecology (Ecology) and this Permit, which are as follows:

Condition Impact Statement: This condition would not provide necessary clarification on elements of the laboratory quality assurance plan.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, delete the phrase on page 3, lines 34 through 35, "quality standards established by the Washington State Department of Ecology (Ecology) and this Permit, which are as follows:" and replace with "the laboratory's QA plan for precision, accuracy, completeness, and comparability. Representativeness assessment is a function of sample acquisition."
The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. Representativeness is not an attribute that the laboratory can evaluate. It is necessary to clarify which attributes the laboratory can perform.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or the identified text.

The QA/QC plan is intended to apply to the TSD unit, not be limited to laboratory activities only. In addition, there are aspects of representativeness that are within control of the laboratory (e.g., splitting samples or removing test portions of material from the sample). Ecology agrees that the aspects of QA/QA attributable to sampling, sample management, and laboratory analysis could be better addressed. The Permittees are invited to submit an adequate QA/QC plan, including, at a minimum, the requirements identified in the Permit Condition II.E. This submission would be evaluated as a possible replacement for Attachment 45 when the Permit is reissued in 2004. Such a submission needs to address requirements of the regulations, this Permit, and the sampling and analytical methods used by the Permittees.

9. **Section 5.3, page 4, lines 21 through 27** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology:

5.3 LABORATORY QUALITY ASSURANCE/QUALITY CONTROL

All analytical work shall be defined and controlled by a Statement of Work, work order, or other documentation prepared in accordance with this section. Samples will be handled according to management approved laboratory procedures, according to any conditions of this Permit. The accuracy, precision, and any limitations of analytical data generated in the laboratory will be determined by QC performance.

Condition Impact Statement: This condition would subject laboratory procedures to Permit Conditions contrary to a mutually agreed on permitting approach.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, delete the phrase on page 4, lines 24 through 25, "according to any conditions of this Permit". The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comment, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The statement "management approved laboratory procedures" correctly states that procedures are approved outside of the Permit by laboratory management. Based on this, Permit conditions cannot apply to the approval of laboratory procedures. The Permittees and the Department of Ecology have agreed from the initial issuance of the Permit to keep written procedures used on the Hanford Facility out of permitting documentation.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or the identified text.

Ecology agrees that the laboratory procedures are approved by management; however, those procedures must fulfill (i.e., not contradict) requirements of this Permit or the regulations. Therefore, the text will not be modified.

The Hanford Facility is required to provide adequate descriptions of procedures in the certified permit applications, including the WAPs. A description of a procedure is not the step-by-step detail used by the sampler or the analyst; therefore, Ecology believes this is not contrary to any previous

agreement. In addition, when the regulations require certain procedures, such procedures must be specified in the Permit or Ecology may specify the procedures in conditions.

10. **Section 5.3.1, page 5, Key Comment:** imposes potential for unnecessary compliance issues lines 2 through 16

Draft Permit conditions as proposed by the Department of Ecology: For parameters or methods not otherwise specified in the Permit, the following are acceptable sources of testing methods (standard methods). These are listed in order of preference.

- ♦ Analytical methods cited in WAC 173-303
- ♦ The most recently promulgated version of Test Method for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, U.S. Environmental Protection Agency, Office of Solid Waste.
- ♦ Other current U.S. EPA methods, as applicable to the matrix under evaluation.
- ♦ Standard Methods for the Examination of Water and Wastewater, American Public Health Association (APHA), American Water Works Association, Water Environment Federation.
- ♦ Annual Book of ASTM Standards, American Society for Testing and Materials.
- ♦ AOAC Official Methods of Analysis, AOAC (Association of Official Analytical Chemists), International.
- ♦ Other widely accepted analytical methods, proprietary methods, and non-standard methods. These may be needed in special cases, e.g., to develop operational and safety related information.

Condition Impact Statement: This condition would not allow use of the most current version of the methods, but the methods current on the effective date of the Permit condition.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, add the phrase "most current version" to the end of the three bullets on page 5, lines 9 through 13. The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comments, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The Permittees need to be able to use the most current version of available methods. Making this change will clarify that this is the case.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or modify the text as requested.

There is a difference between EPA's issuance of a new method and the promulgation of a new method in the regulations. In most cases, a new method is issued for comment and testing, but is not promulgated until, for example, information has been collected on its actual performance on the matrices of interest and its ruggedness in common laboratory use has been established.

In addition, sources of standard methods such as the AOAC, International, publish new methods to give users an opportunity to review and test the methods in their laboratories. Occasionally, the most current version of a method specifies instrumentation that is not readily available or does not

yield acceptable data. AOAC, International, collaboratively studied methods are required to be published for at least three (3) years before they are adopted as official standard methods. Also, some organizations surplus or remove methods from a new methods manual, but that does not necessarily mean that the "old" methods are no longer acceptable for use. Often, methods are removed because more sensitive methods have been developed. However, if greater sensitivity is not required by the user and the "old" method performs satisfactorily, then the "old" method is acceptable for use. Sometimes a method is removed from a methods compendium because it requires instrumentation that is no longer available commercially; but, that does not prevent a user who still maintains the instrumentation from using that "old" method.

This Permit does not limit the Permittees to methods that are current as of the effective date of the permit condition. The Permit lists sources of methods in order of preference and allows the Permittees to choose an appropriate method and establish its usability in their laboratory(ies) (i.e., Attachment 45, Section 5.3.1).

11. **Section 5.3.1, page 5, lines 18 through 21** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: For all methods, the method must be shown to be suitable for the matrix being tested and must be demonstrated to have specificity for the parameter or analyte in that matrix. Quality control parameters, including method detection limit, precision, and accuracy, must be measured and monitored in real-time to ensure that acceptable data are produced.

Condition Impact Statement: This condition would be too restrictive on the type of materials that could be tested.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, delete page 5, lines 18 through 21, and replace it with "For all methods, the method must be suitable for the matrix being tested and for the specific parameter or analyte in that matrix. Quality control parameters, including method detection limits, precision, and accuracy, must be measured and monitored to ensure that acceptable data are produced".

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comments, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. This suggested change will address the appropriate type of controls on the types of materials to be tested.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or modify the identified text.

The Permittees have not clarified how the condition is "too restrictive on the type of materials that could be tested." Before an analytical method or technique is used in a laboratory, it is reasonable to have the Permittee demonstrate that the method or technique is suitable for the matrix and is able to discern the parameter or analyte of interest. Real-time measurement and monitoring of quality control parameters will ensure that only acceptable data are reported for management of waste.

Ecology believes that the existing text describes appropriate controls for the analysis of waste.

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12. **Section 5.3.2, page 5, lines 23 through 33** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: 5.3.2 Quality Control Requirements: Quality control principles of SW-846 Method 8000B, Section 8.7 will be incorporated into laboratory procedures, including standard methods and modified methods. Additionally, modified methods will be qualified by a regulatory level detection study. This study is based on 40 CFR 136 method detection limit criteria and is run on seven (7) samples at the regulatory limit. The regulatory level detection study produces enough data for interim QC limits until the Method 8000B Section 8.7 required 20 samples are finished. At that point a modified method is then on the same QC schedule as a standard method. Although SW-846 Method 8000B Section 8.7 applies to organic analyses, this same approach to method QC will be applied to those inorganic parameters identified in Appendix A of this WAP.

Condition Impact Statement: This condition would not allow the Permittees to perform alternate detection studies.

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, on page 5, line 33, add the following sentence to the end of the paragraph "Alternate detection studies could be proposed by the performing laboratory pending review and acceptance by the CWC/WRAP operating organization".

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comments, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The Department of Ecology is silent on the ability to perform alternate detection studies. This suggested change will address the appropriate use of alternate detection studies.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45. However, Ecology agrees to modify the language of Attachment 45 to allow alternate detection studies pending approval by Ecology.

The language in Attachment 45 was provided by the Permittees. In the absence of descriptions of the alternative detection studies and when those alternative studies would be applicable, Ecology will allow alternative detection studies, but only if approved by Ecology. The following sentence will be added to the text at the end of the paragraph: "Alternative detection studies may be performed by the performing laboratory pending review and approval by the Washington State Department of Ecology."

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13. **Section 5.3.2, page 6, lines 3 through 30** **Key Comment:** exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Matrix Spike – An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs at the time of

sample preparation. (Note: When the TCLP is conducted, spiking occurs after leaching at the time of digestion or extraction). Matrix spikes shall be performed on 5% of the samples (1 in 20) or one per batch of samples. The Matrix Spike gives an indication of any limitations of the preparative process employed for the matrix tested. Wherever possible and practical, the sample should be spiked at a level which is at or near the regulatory decision limit. Generally, a matrix spike and matrix spike duplicate are prepared and analyzed in an organic analysis; inorganics include a sample, duplicate, and matrix spike. Accuracy limits for Matrix Spikes are specified in SW-846 Method 8000B, Section 8.7.1. Failure to achieve these limits for any analyte of interest warrants corrective action with the following exceptions: (1) the analyte of interest in the sample is so low in relation to the spike recovery that it would not exceed the regulatory decision limit or (2) the analyte of interest in the sample exceeds the regulatory decision limit. Appropriate corrective action is specified in SW-846 Method 8000B, Section 8.7. Laboratory performance-based limits may be used in lieu of those presented in SW-846 Method 8000B Section 8.7 if negotiated with Ecology.

Laboratory Duplicate Samples – Laboratory duplicates are obtained by removing two test portions from one field sample and analyzing each test portion as an independent sample. The analyses of laboratory duplicates monitor the precision of the preparative and analytical method for the sample matrix. Laboratory duplicates shall be performed on 5% of the samples (1 in 20) or one per batch of samples. In the case of testing for organic constituents, a matrix spike and matrix-spike duplicate are typically analyzed. Precision limits are established per SW-846 Method 8000B, Section 8.7. If the precision value exceeds the control limit, then corrective action is required with the following exceptions: (1) the sample results, regardless of precision, would not exceed the regulatory decision limit or (2) the sample results clearly exceed the regulatory decision limit, regardless of precision. Appropriate corrective action is established in SW-846 Method 8000B, Section 8.7. Laboratory performance-based limits may be used in lieu of those presented in SW-846 Method 8000B, Section 8.7 if negotiated with Ecology.

Condition Impact Statement: This condition "Appropriate corrective action is specified in SW-846 Method 8000B, Section 8.7. Laboratory performance-based limits may be used in lieu of those presented in SW-846 Method 8000B Section 8.7 if negotiated with Ecology." would impose an inappropriate level of involvement with Ecology on analytical matters establishing laboratory performance-based limits that must be "negotiated with Ecology".

Requested Action: Delete Attachment 45 in accordance with Comments on the Proposed Modifications to Attachment 45, Comment Number 1. If Comment Number 1 is not accepted, on page 6, lines 17 and 30, delete "with Ecology" and replace with "before starting work with the client".

The Permittees are providing comments on the content of Attachment 45 in addition to the request that Attachment 45 be deleted.

Comment Justification: The Permittees general comment is to delete Attachment 45, refer to Comment Number 1 of this section. The Permittees offer the following comments, which should not be construed to imply that the Permittees believe incorporation of Attachment 45 into the Permit is acceptable. The Department of Ecology is over-asserting its authority in areas that are handled between the laboratory and client.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete Attachment 45 or modify the text as requested. In this case, Ecology as the regulatory agency is the "client"

who establishes the requirements (via the Permit) that must be met by the TSD unit (via the laboratory).

The Permittees are required to provide descriptions of procedures in the certified permit applications, including the WAPs. The Permittees have provided no criteria for establishing performance-based limits in their certified permit applications or in the alternate text which they provided for the original submission of Attachment 45. In the absence of criteria to modify the text through public comment, it is appropriate for Ecology to review and approve performance-based limits established by the Permittees. It should be noted that it is Ecology's responsibility to set the requirements via the Permit and then the Permittees can translate those requirements into statements of work, work orders, contracts, etc., for the TSD unit's support laboratory(ies). If the Permittees offer a permit modification with an adequate description of criteria for establishing performance-based limits, then the text including the requirement to obtain Ecology's approval may be modified.

Comments on the Proposed Modifications to Part III, Chapter 1, 616 Nonradioactive Dangerous Waste Storage Facility

1. **Condition III.1.A, Chapter 11.0** **Key Comment: N/A**

Closure and Post-Closure Requirements, from Revision 2A, May 1999

Condition Impact Statement: This condition would not be consistent with how modifications are referenced throughout the Permit.

Requested Action: Revise the text to read: "Closure and Postclosure Requirements, from Class 3 modification dated Revision 2A, May 1999"

Comment Justification: Provides configuration control by referencing Permit modifications and is consistent with other parts of the Permit..

Ecology Response: Ecology concurs with the Requested Action. The condition is revised to read, "Closure and Post-Closure Requirements, from Class 3 Modification for Revision 7"

2. **Condition III.1.A, Appendix 4B** **Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Drawing H-6-1553, Architectural Plan, Elevations and Sections, Rev. 4 and six (6) ECNs from Class 1 Modification dated July 1998.

Condition Impact Statement: This condition would refer to an incorrect number of ECNs for Drawing H-6-1553.

Requested Action: Revise the text to read: "Drawing H-6-1553, Architectural Plan, Elevations and Sections, Rev. 4 and 2 ECNs as amended in Class 1 modification dated July 1998".

Comment Justification: Corrects the number of outstanding ECNs.

Ecology Response: Ecology concurs with the Requested Action. The condition is revised as requested.

Comments on the Proposed Modifications to Part III, Chapter 7, Waste Receiving and Processing (WRAP) Facility

1. **Condition III.7.A.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology:

III.7.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION

The Permittees shall comply with all requirements set forth in the Waste Receiving and Processing Facility Permit Application, Rev. 1 and 1A, as found in Attachment 43, including the amendments specified in Condition III.7.B. Enforceable portions of the application are listed below. (All subsections, figures, and tables included in these portions also are enforceable unless stated otherwise.):

Part A, Form 3, Permit Application, Revision 3, June 28, 1999

Section 2.1	Description of Waste Receiving and Processing Facility
Chapter 3	Waste Analysis
Chapter 4	Process Information
Chapter 6	Procedures to Prevent Hazards
Chapter 7	Contingency Plan
Chapter 8	Personnel Training
Chapter 11	Closure and Financial Assurance
Chapter 12	Reporting and Recordkeeping
Appendix 2A	Topographic Map
Appendix 3A	Waste Analysis Plan
Appendix 4A	Engineering Drawings
Appendix 7A	Building Emergency Plan
Appendix 8A	Training Plan
Attachment 45	Selecting a Laboratory and Quality Assurance/Quality Control

Condition Impact Statement: This condition would make portions of the permit application enforceable that are not recognized in the Department of Ecology guidance documents.

Requested Action: Delete Section 2.4, Appendix 3A, and Attachment 45 as enforceable sections. Add "Section 2.2, Topographic Map" as an enforceable section.

Comment Justification: This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application

Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III, Chapters 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Refer to related comments in response to Draft Permit Condition III.7.B.d. Refer also to Comments on the Proposed Modifications to Attachment 45, Comment Number 1.

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the portion of the Requested Action deleting Section 2.1 and adding Section 2.2 as an enforceable section (the Requested Action lists the section to be deleted as 2.4; however, the correct section is 2.1). Ecology disagrees with the Requested Action to delete Appendix 3A and Attachment 45 as enforceable sections. See responses to comments P10, P11, and P12 in the Responsiveness Summary for the Hanford Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Revision 6, (Mod-E).

2. Condition III.7.B.a.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-1, Line 40, delete the number "14" and insert the number "35".

Condition Impact Statement: N/A

Requested Action: Accept.

Condition III.7.B.b. Chapter 2

3. Condition III.7.B.b.1. Key Comment: exceeds delegated regulatory authority, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 2-1, Line 16, delete the word "typically".

Condition Impact Statement: This condition unreasonably would limit operational flexibility, and adversely would impact the ability to reprocess waste unless a Permit modification was processed for each different type of container. This condition would unnecessarily require Permittees to manage acceptable but atypical waste containers at facilities having a lower level of protection of human health and the environment than provided by WRAP.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous

Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology agrees with the Requested Action. Ecology accepts the Requested Action as it relates to the enforceability of Section 2.1. In addition, the condition will be deleted as requested. The condition is deleted since the statement found in the Permit text that WRAP "... typically accepts ..." waste in specific sizes of containers does not negate the requirements set forth in following WRAP permit conditions to ensure the safe handling and processing of waste in containers that do not meet the design specifications of WRAP.

4. **Condition III.7.B.b.2.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 2-1, Line 22, at the end of the paragraph, after the word "... basis" add "provided that procedures are implemented resulting in the safe management of these boxes at WRAP. Prior to acceptance at WRAP, boxes weighing more than 3,175 kilograms will be evaluated to determine if appropriate restrictions and protective measures can be implemented to ensure that safe processing can occur at WRAP. Ecology's Project Manager will be verbally notified prior to receiving such boxes." Move this condition, as well as the sentence beginning with "The maximum ..." on Page 2-1, Lines 21 through 22 to Chapter 4, Section 4.1.2.

Condition Impact Statement: This condition would impose procedures, evaluations, and notifications on WRAP and has no regulatory basis.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition. Alternatively, delete all text following the first sentence and modify the text so that the condition reads: "Before receipt of boxes heavier than 3,175 kilograms and drums heavier than 455 kilograms, an evaluation will be performed and documented."

Comment Justification: WAC 173-303-806(4)(b) states that "owners or operators of facilities that store containers of dangerous waste must provide the following additional information: ... (i) a description of the containment system to demonstrate compliance with WAC 173-303-630(7). Show at least the following: (A) basic design parameters, dimensions, and materials of construction ..." There is nothing in WAC 173-303-630(7) or WAC 173-303-806(4)(b) that requires or implies that load limits should be imposed through permits.

WAC 173-303-395(4) requires treatment, storage, and/or disposal (TSD) loading and unloading areas to "be designed, constructed, operated and maintained to: (a) contain spills and leaks that might occur during loading or unloading; (b) prevent release of dangerous waste or dangerous waste constituents to ground or surface waters; (c) contain wash waters (if any) resulting from the cleaning of contaminated transport vehicles and load/unload equipment; and (d) allow for removal, as soon as possible, of collected wastes resulting from spills, leaks and equipment cleaning (if any) in a manner which assures compliance with (b) of this subsection". There are no requirements in WAC 173-303-395(4) regarding establishment of load limits for TSD loading and unloading areas. Owners/operators are required by WAC 173-303-810(6) to "at all times properly operate and

maintain all facilities and systems of treatment and control which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures". The Permittees also are required by Permit Condition II.L.1 to ensure that their facilities are capable of providing for proper management of waste. The regulatory burden is on the Permittees to ensure that physical design, construction, operation, and maintenance are such that spills are contained and releases to ground or surface waters are prevented.

This condition would impose unnecessary restrictions on receipt of containers at WRAP. It is the Permittees intent that all containerized waste will be managed properly in accordance with WAC 173-303-630 and the Permit.

The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the portion of the Requested Action as it relates to enforceability of Section 2.1. However, Ecology does not agree with the Permittees' Requested Action to delete the condition, or to use the Permittees' alternate language, although the condition will be revised to accommodate some of the Permittees' concerns.

Ecology has eliminated text in the condition requiring notification of the Ecology Project Manager. Ecology has also incorporated a portion of the alternative language found in the Permittees' Requested Action and modified the condition to read as follows:

"Page 2-1, Line 22 at the end of the paragraph, after the word "... basis ..." insert "provided that procedures are implemented resulting in the safe management of these boxes at WRAP. Prior to acceptance at WRAP, boxes weighing more than 3,175 kilograms will be evaluated to determine if appropriate restrictions and protective measures can be implemented to ensure that safe processing can occur at WRAP. Documentation of this evaluation will be retained as part of the operating record. Move this condition, as well as the sentence on Page 2-1, Lines 21 through 22, beginning with "The maximum ..." to Chapter 4, Section 4.1.2."

This condition is in response to a statement in the Permit Application provided by the Permittees regarding maximum weight of containers received at WRAP. The Permittees submitted, in the Permit Application, a description of their container load limits as part of their description of container management practices at WRAP in accordance with WAC 173-303-806(4)(b), WAC 173-303-630(7), and WAC 173-303-395(4). A description of container management practices must include information on the limits of operation in order to satisfy these regulations. The statement provided by the Permittees did not adequately address how they would safely manage

containers heavier than the maximum load limits stated in the text of the Permit Application, other than to say they could be received on a "case-by-case basis". To simply describe receipt of containers heavier than the maximum weight limit as being on a "case-by-case basis" without requiring documentation of how that could be safely accomplished (as part of the WRAP Operating Record) would be irresponsible container management and clearly would not satisfy the intent of the regulations. As stated in the condition, this information will be moved from the unenforceable section of the Permit into Section 4.1.2, an enforceable section describing container management practices.

5. **Condition III.7.B.b.3.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 2-1, Line 30, insert the word "mixed" before "... low level".

Condition Impact Statement: This condition unreasonably would limit operational flexibility. The condition implies that only the "mixed" portion of the low-level radioactive waste is transferred from WRAP to other TSD facilities.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

The indicated lines of text were provided as information only, and identify that the destination of the waste once it leaves WRAP is determined in part by the radionuclide content of the waste.

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the Requested Action as it relates to enforceability of Section 2.1. In addition, the condition will be deleted as requested. However, Ecology wants to ensure that no one is misled by the text of the Permit Application in that, under most circumstances, it is not possible to transfer only the "low-level portion" of a mixed waste to a TSD unit or facility. The term "mixed" is frequently misused in regard to waste and seems to be misused in the above comment. A mixed waste is both dangerous and radioactive. Mixed wastes to be managed in WRAP include those with a "low-level" radioactive component and a "transuranic" radioactive component. Ecology agrees that the radioactive component of the mixed waste will be very important in determining the destination of the waste after it leaves WRAP for further management.

6. **Condition III.7.B.b.4.** **Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-1, Lines 33 and

34, insert the word "mixed" before " . . . transuranic".

Condition Impact Statement: This condition would imply that only the "mixed" portion of the transuranic waste is transferred from WRAP to other appropriate TSD facilities.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

The indicated lines of text were provided as information only, and identify that the destination of the waste once it leaves WRAP is determined in part by the radionuclide content of the waste.

Ecology Response: Ecology agrees with the Requested Action. Ecology accepts the Requested Action as it relates to enforceability of Section 2.1. In addition, the condition will be deleted as requested. However, Ecology wants to ensure that no one is misled by the text of the Permit Application in that, under most circumstances, it is not possible to transfer only the "transuranic portion" of a mixed waste to a TSD unit or facility. The term "mixed" is frequently misused in regard to waste and seems to be misused in the above comment. A mixed waste is both dangerous and radioactive. Mixed wastes to be managed in WRAP include those with a "low-level" radioactive component and a "transuranic" radioactive component. Ecology agrees that the radioactive component of the mixed waste will be very important in determining the destination of the waste after it leaves WRAP for further management.

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7. **Condition III.7.B.b.5.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 2-1, Line 35, add the following text: "Physical and chemical screening may be performed at WRAP for other onsite TSD units provided that the waste number for the waste being screened is identified on the WRAP Part A, Form 3, and the waste can be safely and properly managed at WRAP. In addition, if WRAP is performing physical and chemical screening activities for another onsite TSD, only those containers which are being screened will be received at WRAP."

Condition Impact Statement: This condition would unnecessarily restrict WRAP from receiving waste that could be managed in accordance with applicable standards of WAC 173-303-300. This condition unnecessarily restricts management of waste containers at WRAP.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on

the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete the last sentence of this condition.

Comment Justification: It is the Permittees' intent that only containerized waste that can be managed appropriately will be received at WRAP. Flexibility to receive waste at WRAP that can be managed safely should not be denied because it could be necessary to accommodate circumstances that cannot be predicted. WRAP was designed to accommodate such situations; therefore, WRAP should not be restricted from receiving waste for which sufficient information exists to facilitate proper management of that waste.

The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the Requested Action as it relates to enforceability of Section 2.1. In addition, the condition will be revised and stated so that it is no longer an insertion into the text of the Permit Application. Ecology has reworded the second sentence to remove the receipt limitation and to reflect that, if waste is received at WRAP for chemical and/or physical screening, the waste is considered to be undergoing verification for acceptance and management at WRAP. Therefore, the waste profile must appear in the WRAP Operating Record.

The condition is reworded as follows:

"Physical and chemical screening may be performed at WRAP for other onsite TSD units, provided that the waste number for the waste being screened is identified on the WRAP Part A, Form 3, and the waste can be safely and properly managed at WRAP. In addition, if WRAP is performing physical and chemical screening activities for another onsite TSD unit, that waste shall be considered to be undergoing verification for acceptance at WRAP."

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8. **Condition III.7.B.b.6.** **Key Comment:** imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-2, Line 24, delete the phrase "throughout the various" and replace with "in the Process, NDE/NDA, and Shipping and Receiving."

Condition Impact Statement: This condition unreasonably limits the ability to decontaminate fixed equipment that has the potential to become contaminated. This condition would prohibit decontamination of the ventilation ducts and other fixed equipment that exists outside of areas where waste normally is processed.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on

the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the Requested Action as it relates to enforceability of Section 2.1. However, Ecology does not agree with the Permittees' Requested Action to delete the condition; although, Ecology will modify the condition to accommodate some of the Permittees' concerns.

The original Permit Application text regarding decontamination, as found on Page 2-2, Lines 23 through 25, lacks sufficient detail and implies that decontamination of waste containers or waste items from the containers could occur throughout WRAP. This would allow decontamination of containers to occur in areas of WRAP not designed for decontamination and not evaluated by Ecology for permitting such activities. The Permittees have not provided a description of areas beyond those described in the condition that are designed for decontamination of waste containers and/or waste process equipment. Ecology acknowledges the Permittees' concerns about the ability to decontaminate equipment at WRAP not directly associated with the processing of waste and waste containers, such as the air emissions control system, that are located outside of the areas designed for processing waste containers. As a result, Ecology has modified the condition to accommodate these concerns. Note that Ecology is concerned about the possibility of releases, both to the air and to areas without secondary containment, as well as detrimental human health effects because of such decontamination activities.

The condition has been revised to read as follows:

"Page 2-2, Line 24 through 25, delete the following text: "... equipment and waste containers is performed throughout the various areas when necessary." and replace with the following text: "... waste containers and waste process equipment may be performed in the Process, NDE/NDA, and Shipping and Receiving areas. In addition, fixed equipment, such as the air emissions control system, may be decontaminated in situ, when necessary. Decontamination practices must be managed to prevent releases to the environment and must be compliant with all applicable regulations."

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9. **Condition III.7.B.b.7.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 2-2, Line 46, add the following text as an additional bulleted item: "Retrieved waste with the potential to be incompatible with other waste stored at WRAP shall be managed in accordance with the special

requirements of WAC 173-303-630(9) for incompatible waste. Retrieved waste that is sufficiently characterized to ensure compatibility with other waste is not subject to this requirement. Move this Condition, as well as Page 2-2, Lines 32 through 49 to Page 4-2, Line 34, of the section "Container Management Practices" (Section 4.1.2) in Chapter 4.

Condition Impact Statement: This condition arbitrarily would restrict WRAP in management of all retrieved waste, irrespective of available knowledge regarding retrieved waste characteristics.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition. Alternatively, modify the condition to read as follows: "Page 2-2, delete lines 35 through 39".

Comment Justification: WAC 173-303-630(9) states that "a storage container holding a dangerous waste that is incompatible with any waste or other materials stored nearby in other containers . . . must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device. Containment systems for incompatible wastes must be separate." WAC 173-303-395(1)(b) places limitations on "the mixing or commingling of incompatible wastes, or incompatible wastes and materials". WAC 173-303-630(9) and WAC 173-303-395(1)(b) requirements are by necessity based on knowledge concerning a waste and its compatibility with other waste or materials so that incompatibility hazards can be avoided. This condition would result in the application of an arbitrary measure for ensuring waste is stored safely. The Permittees will have some level of knowledge regarding compatibility of most retrieved waste and with other waste stored at WRAP. The Permit should allow the flexibility to manage waste based on the degree of characterization available. In many cases, adequate knowledge will be available that would allow for safe management without considering the waste as incompatible with everything at WRAP.

The first three bulleted items in this section identify potential waste segregation categories for information only, based on original operational considerations. Based on operations at the WRAP, these potential waste segregation categories are unnecessary. Because some of the waste in these categories are compatible, there is no regulatory requirement to segregate the waste containers. Making these segregation categories enforceable unnecessarily restricts that ability of WRAP to economically manage compatible waste.

The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the Requested Action as it relates to enforceability of Section 2.1. Ecology does not agree with the Permittees' alternative language or the request to delete the condition. However, the condition is

modified to accommodate the Permittees' concerns about moving text describing materials/containers not regulated under WAC 173-303 into an enforceable part of the Permit. In addition, the text, including that provided by the condition, will remain in Chapter 2 for information purposes, and a portion of Section 2.1.1 will be copied (not moved) to Chapter 4.

The text for this condition (not including the part about moving the condition to Chapter 4) was previously provided to Ecology in writing by the Permittees as an alternative to an earlier draft permit condition. As stated in the condition, a portion of the Permit Application text in Chapter 2, as well as the additional text provided in the condition, will be moved into Section 4.1.2 of Chapter 4, which will make the condition enforceable. This condition provides minimum requirements for safe storage of incompatible or potentially incompatible waste at WRAP. WAC 173-303-630(9) is clear on this issue. If containers of waste are not compatible or the compatibility of containers of waste to be stored is not known, then WRAP must manage that waste according to the requirements stated in WAC 173-303-630(9). This condition and the regulation are designed to restrict WRAP in the management of waste for the purpose of protecting human health and the environment.

The condition is modified to read as follows: "Page 2-2, Line 46, add the following text as an additional bulleted item: "Retrieved waste with the potential to be incompatible with other waste stored at WRAP shall be managed in accordance with the special requirements of WAC 173-303-630(9) for incompatible waste. Retrieved waste that is sufficiently characterized to ensure compatibility with other waste is not subject to this requirement." Copy this condition, as well as Page 2-2, Lines 32 through 49 to Page 4-2, Line 34, of the section "Container Management Practices" (Section 4.1.2) in Chapter 4."

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10. **Condition III.7.B.b.8.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 2-3, Line 5, delete the word "stored" and replace with "managed."

Condition Impact Statement: N/A

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, accept this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology accepts the Requested Action as it relates to enforceability of Section

2.1; however, the intent of the Permittee upon acceptance of Comment 1 by Ecology is not clear. The condition will remain as written to correct incomplete text in the Permit Application.

11. **Condition III.7.B.b.9.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 2-3, Line 5, after ". . . throughout WRAP" insert the phrase "(e.g., shipping, receiving, stacker retriever, NDE, NDA, process gloveboxes)."

Condition Impact Statement: N/A

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, accept this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology accepts the Requested Action as it relates to enforceability of Section 2.1; however, the intent of the Permittee upon acceptance of Comment 1 by Ecology is not clear. The condition will remain as written to correct incomplete text in the Permit Application.

12. **Condition III.7.B.b.10.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 2-3, line 12, delete the word "most." Also, delete the word "transuranic" and replace with "dangerous."

Condition Impact Statement: N/A.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that

the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the Requested Action as it relates to enforceability of Section 2.1. The original text in the Permit Application implied that, after processing, not all waste would be transported to a permitted TSD unit. In order to comply with applicable regulations, all waste must eventually be transported to a permitted unit or facility; therefore, the word "most" must be deleted from the text. Waste coming from WRAP and destined for future management in a TSD unit or facility may be dangerous waste, mixed (low-level) waste, mixed (transuranic) waste, or radioactive waste (i.e., either low-level or transuranic only). Ecology notes that the line number needs to be corrected to read 10 instead of 12.

To correct incomplete text in the Permit Application, the condition is revised to read as follows: "Replace the text on Page 2-3, Lines 10 and 11 with the following: "After processing at WRAP, dangerous waste, mixed (low-level) waste, mixed (transuranic) waste, or radioactive waste (i.e., either low-level or transuranic only) ready for treatment, storage, or disposal will be transported to a permitted unit or facility."

13. **Condition III.7.B.b.11. Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-3, Footnote 3, delete the phrase "and does not refer to noncompliance with WAC 173-303" and replace with "and/or waste that is not compliant with WAC 173-303." (sic)

Condition Impact Statement: This draft condition would impact present operations at WRAP and would require retraining of personnel, development of additional terminology, and revision of operational procedures.

Requested Action: Delete Section 2.1 as an enforceable section in accordance with Comments on the proposed modifications to Chapter 7, WRAP, Comment Number 1. If Comment Number 1 is not accepted, delete this condition.

Comment Justification: The Permittees general comment on the enforceability of Chapter 2.0 of the WRAP permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

This condition implies that NDE (applies to the x-ray of the container) can be used to determine compliance with WAC 173-303. There is no such reference in WAC 173-303. NDE is used to identify materials that are noncompliant with TSD unit acceptance criteria. The NDE system, however, cannot be used to determine compliance with WAC 173-303 because the chemical nature

of the waste cannot be identified by NDE.

Ecology Response: Ecology agrees, in part, with the Requested Action. Ecology accepts the Requested Action as it relates to enforceability of Section 2.1. However, Ecology does not agree with the Permittees' Requested Action to delete the condition. The condition remains unchanged. NDE is the visual inspection required when waste is accepted at WRAP. All drums (100%) must receive a visual inspection either by observing the contents as each drum is packed, by opening the drum, or by NDE. NDE is part of the WAP requirement and; therefore, a requirement under WAC 173-303-300. See permit conditions III.7.B.d.25., III.7.B.d.45., and III.7.B.d.54..

14. **Condition III.7.B.b.12. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Line 39, delete "Drawing H-3-000003" and replace with "Drawing H-3-000002."

Condition Impact Statement: The drawing number on line 39 of page 2-6 is H-13-000003. The correct drawing number is H-13-000002. With the correct drawing number, this condition would fix an error in the original permit application.

Requested Action: Modify the condition to reflect the actual drawing number H-13-000002.

Comment Justification: Corrects errors or omission.

Ecology Response: Ecology accepts the Requested Action. The condition is modified as follows: "Page 2-6, Line 39, delete "Drawing H-13-000003" and replace with "Drawing H-13-000002."

III.7.B.c. Chapter 3

15. **Condition III.7.B.c.1. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 5, delete the word "stored" and replace with "managed."

Condition Impact Statement: N/A

Requested Action: Accept.

16. **Condition III.7.B.c.2. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 5, delete the word "storage" and replace with "management."

Condition Impact Statement: N/A

Requested Action: Accept.

17. **Condition III.7.B.c.3. Key Comment: exceeds delegated regulatory authority, hinders cost effectiveness without added protection**

Draft Permit conditions as proposed by the Department of Ecology: WRAP is permitted for the treatment of waste that meets the WRAP acceptance criteria and for the storage of waste that

meets one of the following conditions: (1) scheduled for nondestructive testing; (2) will be, or has been, treated in WRAP; (3) was generated in WRAP; or (4) retrieved waste. WRAP is not permitted for storage of waste that does not meet this description.

Condition Impact Statement: This condition would limit the ability to effectively manage waste by:

- Prohibiting the receipt of waste for storage at WRAP unless such waste also is treated at WRAP
- Denying the acceptance of waste that WRAP is capable of managing safely and compliantly in accordance with applicable WAC 173-303 standards.

Requested Action: Delete this condition. Alternatively, replace this condition with the following text:

"Dangerous and/or mixed waste with waste numbers not identified on the WRAP Part A, Form 3, will not be managed at WRAP.

Comment Justification: WAC 173-303-300 provides the analysis requirements for ensuring that waste is managed properly. The Permittees have provided the Department of Ecology with the required descriptions of methods used to comply with WAC 173-303-300(1) through (3) for confirmation. WAC 173-303-630 provides standards for treatment and storage in containers. WRAP acceptance criteria include internal restrictions that are not required by regulation. This condition improperly would expand the scope of the waste analysis plan by including text regarding waste acceptance parameters that include all constraints on waste receipt for any purpose. Many constraints on waste acceptance are unrelated to results of waste analysis and therefore are beyond the scope of a waste analysis plan (e.g., constraints associated with WRAP acceptance of mixed waste based on the radioactive component).

There is no regulatory basis for incorporating internal constraints into a plan that is, by regulation, intended for identification of parameters, methods, and frequency of analysis for the purpose of ensuring proper management of dangerous and/or mixed waste. WRAP operations must retain flexibility to establish and modify, as appropriate, waste acceptance criteria as allowed by regulation, without unnecessary time and cost impacts associated with excessive Permit conditions.

This condition also would prohibit the storage of waste at WRAP that meets the acceptance criteria, but ultimately might not be treated at WRAP. WAC 173-303-630 contains standards for management of waste in containers, regardless of whether the containers are used for treatment or just storage. There is no basis for requiring waste to be treated in a given unit just because waste has been stored there. In fact, WRAP might not be capable of treating some retrieved waste. The Permittees require flexibility to treat waste at the most appropriate compliant locations on the Hanford Facility, without requiring all waste stored at WRAP also to be treated at WRAP.

This condition would regulate waste acceptance criteria related to the radioactive component of mixed waste. The U.S. Department of Energy must retain jurisdiction over the source, special nuclear, and byproduct material components of mixed waste in accordance with the Atomic Energy Act.

It is inappropriate for a state to unilaterally assert authority over radioactive materials. As stated previously, source, special nuclear, and byproduct materials specifically are excluded from the

definition of solid waste set forth at RCRA 42 U.S.C. § 6903(27); also refer to 42 U.S.C. § 6905(a). The Atomic Energy Act; U.S. Department of Energy's Byproduct Rule (10 CFR 962); the U.S. Environmental Protection Agency Notice Regarding State Authorization [(51 Fed. Reg. 24504 (July 3, 1986))]; U.S. Environmental Protection Agency Notice on Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste [(53 Fed. Reg. 37045 (September 23, 1988))]; the State's recognition of possible preemption in its Hazardous Waste Management Act, Revised Code of Washington 70.105.109; the limitations of the waiver of sovereign immunity in Section 6001 of the RCRA to materials within the RCRA definition of solid waste (thereby excluding source, special nuclear, and byproduct materials); and the Tri-Party Agreement.

WAC 173-303-040 provides accurate information on how to understand the regulatory meaning of the terms "facility" and "unit". As defined in WAC 173-303-040, a "facility" is "all contiguous land, and structures. . . for . . . dangerous waste". As facility could consist of several treatment, storage, and/or disposal operational units. By definition, a facility consists of individual units.

The terms are not intended to be used interchangeably. There is no basis for the Department of Ecology to apply facility requirements at the unit level. The size and complexity of the Hanford Facility was contemplated during the initial issuance of the Permit. At that time, there was no intent to interpret units as facilities. Such an approach is inconsistent with the original Permitting approach. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolve difficulties, redundancies, and inefficiencies in this approach. As a result, the Department made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility wide approach, but still provide facility wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit." The initial Permit addressed issues attributed by the Department of Ecology to the size and complexity of the Hanford Facility through Conditions II.P and II.Q. It is inappropriate and not cost-effective to impose conditions such as these on a unit-by-unit basis because the initial Permit has been developed in contemplation of these matters in Part II of the Permit.

Ecology's Response: Ecology accepts the alternate Requested Action to replace the draft condition with the provided alternate text. However, in general, Ecology disagrees with most of the Comment Justification, as follows:

A synthesis of the various source information regarding WAPs, including state and federal guidance, results in the understanding that the content of WAPs is not limited to descriptions of laboratory testing. The term "analysis" in the title is best understood as the engineering-type evaluation of the requirements for management of waste. Also, contrary to the comment, the Permittees did not provided adequate descriptions of procedures to comply with WAC 173-303-300(1) through -(3) which required Ecology to draft a number of permit conditions.

Ecology believes that all operational constraints of the TSD unit need to be provided, as well as identification and description of any parameters or analytes that are necessary to ensure safe management of waste in the TSD unit, including but not limited to: (1) weight limits for TSD unit systems (e.g., stacker/retriever, conveyor lines, forklifts, non-destructive examination equipment,

non-destructive assay equipment, drum handling systems in the gloveboxes; (2) compatibility of wastes with other wastes; and (3) compatibility of wastes with equipment (e.g., secondary containment, gloveboxes, ventilation and filtration systems) [see WAC 173-303-806(4), WAC 173-303-630(7), and WAC 173-303-395(4)]. These constraints have not been presented elsewhere in the permit application and, as identified in EPA guidance (Waste Analysis At Facilities That Generate, Treat, Store, And Dispose Of Hazardous Wastes, OSWER 9938.4-03, April 1994), should be provided in the facility (or, in this case, TSD unit) description portion of the WAP. In addition, if information on the radioactive content of the waste is important to safe management within this TSD unit, then such information needs to be provided in the WAP. It should be noted that the Permittees have refused to provide any such information in the certified permit application or as supplemental information.

Regarding the statement "WRAP operations must retain flexibility to establish and modify, as appropriate, waste acceptance criteria as allowed by regulation, without unnecessary time and cost impacts associated with excessive Permit conditions," Ecology believes that establishment and modification of waste acceptance criteria must occur within the constraints of the Permit as described by WAC 173-303-830. If requested modifications meet the requirements of WAC 173-303-830(4)(e)(iii)(B), a temporary authorization will be issued for up to 180 days and can be extended for up to 180 days if the Permittees have requested the permit modification for the activity in the temporary authorization. Ecology has the authority and responsibility to regulate the activities which the Permittees want to change at will.

Permit Condition III.7.B.c.3. will be revised to read as follows: "Dangerous and/or mixed waste with waste numbers not identified on the WRAP Part A, Form 3, will not be managed at WRAP."

18. **Condition III.7.B.c.4. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 13, delete the word "normally".

Condition Impact Statement: N/A

Requested Action: Accept.

19. **Condition III.7.B.c.5. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 15, delete the word "manufactures" and replace with "manufacturers".

Condition Impact Statement: N/A

Requested Action: Accept.

20. **Condition III.7.B.c.6. Key Comment: exceeds delegated regulatory authority, hinders cost effectiveness without added protection**

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Lines 24 and 25, delete the following text: "and standard waste boxes. Waste also could be received in other U.S. Department of Transportation-approved containers." These containers shall be permitted and this text restored to Chapter 3 only when the Permittees submit appropriate text to be included in Section 1.1.3 of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1

permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification.

Condition Impact Statement: This condition would restrict WRAP from receiving waste that has been packaged in containers as allowed by WAC 173-303-190 and transported as allowed by WAC 173-303-240. This condition would require WRAP to repackage waste into acceptable containers or not use WRAP for its intended purpose. This condition would result in the unnecessary generation of waste, because empty burial boxes would require disposal.

Requested Action: Delete this condition.

Comment Justification: The language found on lines 24 and 25, page 3-1 of the WRAP permit application is accurate, provides necessary operational flexibility, and should not be arbitrarily changed or deleted. This condition would limit the ability of WRAP to receive waste contained in standard waste boxes and other approved containers and has no regulatory basis. This condition would deny management of waste that is appropriate for treatment and/or storage at WRAP.

WAC 173-303-190(1) states that "the generator must package all dangerous waste for transport in accordance with U.S. DOT regulations on packaging, 49 CFR Parts 173, 178, and 179". WAC 173-303-240 (2) states that "any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when such dangerous waste is required to be manifested by WAC 173-303-180". WAC 173-303-240(4) states that "these requirements do not apply to onsite (as defined in WAC 173-303-040) transportation of dangerous waste by generators, or by owners/operators of permitted TSD facilities". These regulations allow for use of waste containers for offsite shipments if the containers meet U.S. Department of Transportation regulations and exempt transportation in containers from regulatory control if the containers are transported onsite.

The rationale provided by the Department of Ecology is inadequate for prohibiting waste in standard waste boxes and other approved containers from management at WRAP. The Department of Ecology plans to disallow receipt of waste in such containers because the containers are not discussed in Section 1.1.3 on page 1-6 of the waste analysis plan. The permit application discussion concerning these containers pertains to the process area and is for informational purposes and should not be included as an enforceable waste analysis plan condition. Furthermore, the Permittees believe the language in Section 1.1.3 has been taken out of context by the Department of Ecology. The intent of the text is to restrict container types taken into the process area, not the entire WRAP.

Ecology's Response: Ecology will take the Requested Action and delete this condition, because the intent of this condition is addressed by Condition III.7.B.d.11.

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21. **Condition III.7.B.c.7.** **Key Comment:** exceeds delegated regulatory authority, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: The Permittees shall prepare an attachment to the WAP which describes the waste tracking procedures specified in lines 33 and 34 on page 3-1. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will be added to the text of Section 1.1.1 of the Waste Analysis Plan

(WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification.

Condition Impact Statement: This condition would incorporate waste tracking descriptions into the waste analysis plan instead of into Chapter 3.0 of the WRAP permit application.

Requested Action: Rewrite this condition and relocate to Chapter 3.0 to read as follows:

On page 3-2, line 8, insert the following text: "Information for all containers received at and shipped from WRAP will be maintained consistent with WAC 173-303-380(1)(a) and (b) and Permit Conditions II.P and II.Q."

Comment Justification: Waste tracking requirements of WAC 173-303-380(1)(a) and (b) can be met by incorporating suggested text from the Requested Action for this condition. WAC 173-303-040 provides accurate information on how to understand the regulatory meaning of the terms "facility" and "unit". As defined in WAC 173-303-040, a "facility" is "all contiguous land, and structures . . . for . . . dangerous waste". A facility could consist of several treatment, storage, and disposal units.

By definition, a facility consists of the individual units. The terms are not intended to be used interchangeably. There is no basis for applying facility requirements at the unit level. The size and complexity of the Hanford Facility was contemplated during the initial issuance of the Permit. At that time, there was no intent to interpret units as facilities. Such an approach is inconsistent with the original Permitting approach. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolved difficulties, redundancies, and inefficiencies in this approach. As a result, the Department made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing of the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility-wide approach, but still provide facility-wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit." The initial Permit addressed issues attributed by the Department of Ecology to the size and complexity of the Hanford Facility through Conditions II.P and II.Q. It is inappropriate and not cost-effective to impose conditions such as these on a unit-by-unit basis because the initial final Permit has been developed in contemplation of these matters in Part II of the Permit.

Furthermore, the Tri-Party Agreement articulates the difference between facility and units. The Tri-Party Agreement, Section 6.2. states: "The Hanford Site has been assigned a single identification number for use in State Dangerous Waste program/RCRA permitting activity. Accordingly, the Hanford Site is considered to be a single RCRA facility, although there are numerous unrelated units spread over large geographic areas on the Site".

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology disagrees that Permit Conditions (II.D, II.P, and II.Q), identified in the Requested Action, limit the ability to require waste tracking to be addressed in the TSD unit-specific chapters for the reasons that follow:

Both CWC and WRAP manage, or have applied to manage, waste from offsite generators, thereby qualifying both TSD units as off-site TSD units and qualifying the Hanford Facility as an off-site facility. The regulation [WAC 173-303-300(6)] states that "the waste analysis plan . . . must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe: (a) The procedures which will be used to determine the identity of each movement of waste managed at the facility . . ." The regulations limited the requirement to off-site facilities, because onsite facilities that manage their own waste usually manage a limited number of waste streams; nothing like the scope of waste streams and generating locations that are managed by the TSD units of the Hanford Facility. At the Permittees' request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address waste tracking on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303-300(6) in each TSD unit's WAP. This approach was established by Permit Condition II.D and the contents of each TSD unit WAP was outlined in Condition II.D.3. Ecology has chosen to address the requirement for waste tracking on a TSD unit-specific basis rather than for the entire facility to allow for those TSD units that do not accept off-site waste [see Conditions II.D.3.vii.(1) and II.D.3.ix.(1)].

Ecology believes that Permit Conditions II.I.1.j. and II.I.1.k. describe requirements for the Facility Operating Record that are essentially the facility-level components of waste tracking. The TSD unit-specific condition for each TSD unit is to provide a description of this waste tracking procedure in the WAP. The certified permit applications already identify portions of the process, for example, container receipt inspection (under a heading in Section 2 of the WAP). Ecology believes that it is necessary for protection of human health and the environment to provide a comprehensive description of waste tracking, either to show that the same procedures will be used for all waste managed by the respective TSD unit, or to describe how the procedures will differ for waste from offsite generators as compared to onsite generators. Provisions of the Permit, such as verification rate, apply different requirements to waste from offsite and onsite generators, as well as to different generators or different waste streams from a single generator. Therefore, it is necessary that waste containers have unique identities and be able to be tracked through the respective TSD unit and that the procedure for this tracking be described in the WAP. Also, because only the receiving TSD unit is required to retain documentation (e.g., waste profile sheets) for waste shipped to or from any TSD unit of the Hanford Facility, it is necessary to have a procedure for tracking waste throughout the Hanford Facility. As the waste moves from TSD unit to unit for treatment, storage, or disposal, in order to protect human health and the environment in the case of a release due to an emergency or catastrophic event such as a fire, Ecology and the Permittees must know what the risks are from the waste constituents and volumes at any particular location. A documented waste tracking procedure for all waste managed at the affected TSD unit will ensure that the necessary information is available for emergency response and, therefore, to protect human health and the environment.

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22. **Condition III.7.B.c.8.** **Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Waste transfers between Solid Waste Project TSD units (i.e., WRAP, T Plant, Central Waste Complex, and the Mixed Waste Disposal Unit) do not require the development of a new waste profile because the waste has already been accepted at one of the TSD units under the original waste profile and is being transferred for waste management purposes.

Condition Impact Statement: This condition would require reprofiling waste coming from the LLBG.

Requested Action: Delete this condition and replace with: "Waste previously accepted by the Hanford Facility is not required to be reprofiled".

Comment Justification: The Permittees and the Department of Ecology have agreed to rename the LLBG to the Mixed Waste Disposal Units. Waste retrieved from Hanford Facility TSD units and the LLBG already has been accepted.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that "Waste previously accepted by the Hanford Facility" cannot be given a blanket waiver from establishing a new waste profile because waste retrieved from the Low Level Burial Ground (LLBG) needs to be re-profiled and reevaluated in light of the waste acceptance criteria established by this Permit. Criteria in use at the Hanford Facility in prior years is not necessarily adequate to allow management in this TSD unit under this Permit. Treatment may render a profile obsolete, in which case, reprofiling may be necessary. In addition, because the Permittees have not modified the Part A, Form 3, for the LLBG as instructed by Ecology in July 1999, or in other meetings since that time, this condition needs to be modified to delete mention of the Mixed Waste Disposal Unit.

Permit Condition III.7.B.c.8. is revised to read as follows: "Waste transfers between WRAP, T Plant, and Central Waste Complex do not require the development of a new waste profile because the waste has already been accepted at one of these TSD units under the original waste profile and is being transferred for waste management purposes. However, reprofiling may be necessary if treatment renders the original profile obsolete."

III.7.B.d. Appendix 3A

23. **Appendix 3A comments:** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Condition Impact Statement: Draft Permit Conditions III.7.B.d.1 through III.7.B.d.90. would impose an excessive level of control and limit flexibility allowed by the regulations.

Requested Action: Delete Draft Permit Conditions III.7.B.d.1 through II.7.B.d.85., and replace with the following text:

III.7.B.d. WASTE ANALYSIS

- III.7.B.d.1. Conditions III.8.B.d.2. through II.8.B.d.9. supercede Permit Conditions II.D and II.E.
- III.7.B.d.2. All waste analyses required by this Permit shall be conducted in accordance with a written waste analysis plan (WAP), or sampling and analysis plan (SAP) developed in accordance with WAC 173-303-300. The WAP shall be submitted with the Part B permit application documentation for each individual TSD Unit. Closing TSD

- units, and units in post-closure, should have a SAP and, if necessary, a WAP.
- III.7.B.d.3. Until a WAP is implemented in accordance with Condition III.8.B.d.2., any unit(s) identified in Parts III, V, and/or VI of this Permit, without a unit-specific WAP, shall not treat, store, and/or dispose of dangerous waste.
- III.7.B.d.4. Each TSD unit WAP shall include:
- (a) The parameters for which each dangerous waste will be analyzed, and the rationale for selecting these parameters [i.e., how analysis for these parameters will provide sufficient information on the waste properties to comply with WAC 173-303-300(1), (2), (3), and (4)];
 - (b) The methods of obtaining or testing for these parameters;
 - (c) The methods for obtaining representative samples of wastes for analysis [representative sampling methods are discussed in WAC 173-303-110(2)];
 - (d) The frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current;
 - (e) The waste analyses that generators have agreed to supply;
 - (f) Where applicable, the methods for meeting the additional waste analysis requirements for specific waste management methods, as specified in WAC 173-303-140(4)(b), 173-303-395(1), 173-303-630 through 173-303-670, and 40 CFR 264.1034, 264.1063, 268.4(a), and 268.7, for final status facilities;
 - (g) For offsite facilities, the waste analysis that dangerous waste generators have agreed to supply;
 - (h) For surface impoundments exempted from Land Disposal Restrictions (LDR) under 40 CFR 268.4(a), incorporated by reference in WAC 173-303-140(2), the procedures and schedules for:
 - (i) The sampling of impoundment contents;
 - (j) The analysis of test data; and
 - (k) The annual removal of residues that are not delisted under 40 CFR 260.22, or which exhibit a characteristic of hazardous waste and either:
 - 1. Do not meet applicable treatment standards of 40 CFR Part 268, Subpart D; or
 - 2. Where no treatment standards have been established:
 - a. Such residues are prohibited from land disposal under 40 CFR 268.32, or RCRA section 3004(d); or
 - b. Such residues are prohibited from land disposal under 40 CFR 268.33(f).
 - (l) Must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:
 - 1. The procedures which will be used to determine the identity of each movement of waste managed at the facility;
 - 2. The sampling method which will be used to obtain a representative sample

of the waste to be identified, if the identification method includes sampling;
and

3. The procedures that the owner or operator of an offsite landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.
- III.7.B.d.5. The Permittees shall confirm their knowledge concerning a dangerous waste before storing, treating, or disposing of the waste. The purpose for the analysis is to ensure that a dangerous waste is managed properly.
- III.7.B.d.6. The Permittees must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste, or nondangerous waste if applicable under WAC 173-303-610(4)(d), before storing, treating, or disposing of the waste. This analysis must contain the information necessary to manage the waste in accordance with the requirements of Chapter 173-303 WAC. The analysis could include or consist of existing published or documented data on the dangerous waste, or on waste generated from similar processes or data obtained by testing if necessary.
- III.7.B.d.7. The offsite generator must confirm, by analysis if necessary, that each dangerous waste shipped to the TSD unit matches the identity of the waste specified on the accompanying manifest.
- III.7.B.d.8. The Permittees shall develop Quality Assurance and Quality Control measures necessary to obtain samples from waste in accordance with WAC 173-303-110(2). The methods and equipment used for obtaining representative samples of a waste will vary with the type and form of the waste. The Department will consider samples collected using the following sampling methods or the most recent version of such methods for wastes with properties similar to the indicated materials, to be representative samples of the waste:
- (a) Crushed or powdered materials – ASTM Standard D346-75;
 - (b) Extremely viscous material – ASTM Standard D140-70;
 - (c) Fly ash-like material – ASTM Standard D2234-86
 - (d) Soil-like material – ASTM Standard D1452-80 (reapproved 1990);
 - (e) Soil or rock-like material – ASTM Standard D420-93;
 - (f) Containerized liquid wastes – “COLIWASA” described in SW-846, as incorporated by reference at WAC 173-303-110(3)(a), or the equivalent sampling method AC & D Liquid Sampler, as demonstrated pursuant to WAC 173-303-910(2); and
 - (g) Liquid waste in pits, ponds, lagoons, and similar reservoirs – “Pond Sampler” described in SW-846, as incorporated by reference at WAC 173-303-110(3)(a)
- III.7.B.d.9. The Permittees shall develop Quality Assurance and Quality Control measures based on test methods found in WAC 173-303-110(3) and other widely accepted analytical methods, proprietary methods, and non-standard methods including:
- (a) Analytical methods cited in WAC 173-303;
 - (b) The most recently promulgated version of Test Method for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, U.S. Environmental Protection Agency, Office of Solid Waste.
 - (c) Other current U.S. EPA methods, as applicable to the matrix under evaluation.
 - (d) Standard Methods for the Examination of Water and Wastewater, American Public Health Association (APHA), American Water Works Association, Water Environment Federation.
 - (e) Annual Book of ASTM Standards, American Society for Testing and

Materials.

- (f) AOAC Official Methods of Analysis, AOAC (Association of Official Analytical Chemists), International.
- (g) Other widely accepted analytical methods, proprietary methods, and non-standard methods. These may be needed in special cases, e.g., to develop operational and safety related information.

III.7.B.d.10 Documentation developed to meet Quality Assurance and Quality Control requirements shall be retained in the unit-specific operating record.

If this comment is not accepted, the comments for Draft Permit Conditions III.7.B.d.1. through II.7.B.d.90. apply.

Comment Justification: The Permit should reflect a consistent approach for incorporation of waste analysis and quality assurance/quality control requirements. As currently structured, the Permit provides very little detail on the requirements for waste analysis plans (Permit Condition II.D.) and an extraordinary amount of detail on quality assurance/quality control (Permit Condition II.E.). It is the Permittees' experience that these two requirements inconsistently are applied to individual units incorporated into the Permit and, in many cases, lead to the imposition of requirements on individual units that exceed the requirements of the Dangerous Waste Regulations.

In the present case, the waste analysis and quality assurance/quality control requirements imposed by Permit conditions are very detailed and far exceed the requirements for such plans provided in the Dangerous Waste Regulations and corresponding Permit Conditions in Parts I and II applicable to all units. The Department of Ecology has provided insufficient justification for exceeding regulatory requirements. The Permittees would like to see the Permit modified to avoid the application of excessively detailed requirements to individual units generally, and to the units in this modification specifically.

The Permittees request that an alternative permitting approach be used for units within the Permit. This alternative approach would require modifications to Permit Conditions II.D. and II.E. The Permittees recognize that these conditions are not open for public comment or modification as the modification is currently proposed. As an alternative approach, the Permittees request that unit-specific conditions for WRAP and CWC be removed or significantly reworded to reduce the amount of Department of Ecology control to a reasonable level. The acceptable level should be provided in Part II Permit requirements to ensure consistent implementation among all permitted units. Because Permit Conditions II.D. and II.E. are not proposed for modification, comments to modify these Permit conditions are not being provided at this time. The Permittees will propose the comments as a Class 3 modification to the Part II Permit Conditions. However, to implement this approach at CWC and WRAP, the Permittees propose those similar Permit conditions be incorporated into Part III during this Permit modification. This will allow WRAP and CWC to implement this approach while the Class 3 modification Permit modification process is completed.

This approach requires revising Permit Conditions III.7.B.d. to closely parallel the regulatory requirements for waste analysis plans and quality assurance/quality control requirements. These Permit Conditions would allow the Department of Ecology to establish baseline requirements for WRAP. These requirements would result in the maintenance of up-to-date waste analysis plans and quality assurance/quality control plans at WRAP without the necessity of incorporating these plans into the Permit.

Permit incorporation of plans and other documents submitted during the permitting process triggers a detailed permit modification process described in WAC 173-303-830 each time that a modification is made to such documents. Conversion of these Permit Conditions to requirements documentation will allow the Department of Ecology to ensure that all relevant requirements are met without triggering permit modifications each time a document is changed. This also will allow the Department of Ecology, on a real-time basis, to verify that relevant requirements are being met during unit operations.

Ecology's Response: Ecology disagrees with the Requested Action.

This issue is presented by the Permittees in their Preamble. See Ecology's Responses to the Permittees' Preamble Comments P10, P11, and P12.

24. **Condition III.7.B.d.1. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The enclosures in the process area for opening and sorting the waste in containers and for performing limited treatment as identified on page 1-1, lines 17 and 23 of Appendix 3A, Attachment 43, are containment enclosures commonly called gloveboxes. These are the same gloveboxes as mentioned on page 1-1, lines 35 and 36.

Condition Impact Statement: N/A

Requested Action: Accept.

25. **Condition III.7.B.d.2. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-1, Line 33, replace the phrase "could be" with the word "is" to read as follows: "Waste . . . is examined by NDA or NDE or sent directly to the process area . . ."

Condition Impact Statement: N/A

Requested Action: Accept.

26. **Condition III.7.B.d.3. Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 1-1, delete Footnotes 1, 2, and 3.

Condition Impact Statement: N/A

Requested Action: Delete this condition. Alternatively, leave the condition as is, provided that the condition is not intended to countermand the information provided in the footnotes.

Comment Justification: The Permittees believe that removal of the text cannot be used to imply that the text is irrelevant or erroneous. The Permittees question the Department of Ecology's intent by removing the text, as it appears that such action will not constitute an enforceable condition because its removal does not impose any requirements or restrictions on the Permittees.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the footnotes are incorrect and misleading. For example, the definition of "newly generated waste" in two of the footnotes is incorrect. The action of retrieval or moving the waste is what qualifies "retrieved waste" as newly generated waste. Also, although it is true that newly generated waste must be characterized and designated, it is not the actions of characterization and designation or being "certified as to content" that cause the waste to be "newly generated." Ecology's position is that the text of the permit application must be accurate, even if the text is perceived as not containing enforceable provisions. Because such text may provide a basis for interpretation of the Permit or the applicability of the regulations to the TSD unit or facility, it is important that the text be accurate.

27. **Condition III.7.B.d.4.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-2, Line 19, after the word "sections," insert the phrase "and the flowchart on Page F2-1" to read as follows: "The following sections and the flowchart on Page F2-1 describe the process for waste acceptance . . ."

Condition Impact Statement: N/A

Requested Action: Accept.

28. **Condition III.7.B.d.5.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-2, Line 35, delete the reference to Section 4.5 in the parenthetical phrase and revise the phrase to read as follows: "(Sections 2.1.3.2 and 7.4)."

Condition Impact Statement: N/A

Requested Action: Accept

29. **Condition III.7.B.d.6.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 1-3, Lines 9 through 13, delete the text and replace with the following: "Verification: Verification activities include container receipt inspection, physical screening, and chemical screening. All waste shipments and containers are subject to receipt inspection during the waste shipment acceptance process. In addition, a percentage of waste containers and shipments are selected for physical screening. Containers are opened and inspected visually or verified by NDE, NDA, or dose rate profile. Of those containers subjected to physical screening, a percentage are required to be sampled for field or laboratory analysis. All information and data are evaluated to confirm that the waste matches the waste profile and container data/information supplied by the generator. Any discrepancies between . . ."

Condition Impact Statement: This condition could be misinterpreted to require that all containers must be subjected to physical and chemical screening.

Requested Action: Modify this condition to clarify that not all waste shipments and containers are subject to physical and chemical screening. Suggest changing the first sentence of the condition to read as follows:

"Verification activities include container receipt inspection and also could include physical and chemical screening."

Comment Justification: The Permittees believe that not all shipments and containers should be subjected to physical and chemical screening and request that the Department of Ecology clarify its intent.

Ecology's Response: Ecology disagrees with a part of the Requested Action, but will modify the condition slightly. Ecology disagrees with the Comment Justification "that not all shipments and containers should be subjected to physical and chemical screening . . ."

All containers in all waste shipments are subject to receipt inspection, as described in Section 2 of WAP. Furthermore, as a component of verification, a percentage of all containers in each waste shipment is subject to physical screening. (The percentage is defined in the WAP.) And, considering only those containers subject to physical screening, a percentage is subject to chemical screening. Therefore, it is possible that no container in any given waste shipment will be identified for chemical screening. At commercial TSD facilities, permits generally require that all containers must be opened and visually inspected. Ecology believes that requiring only a percentage of containers from each shipment to undergo visual inspection is a major concession to the Permittees because most commercial RCRA facilities are required to perform 100% visual inspection. Note that this is an area in which a TSD unit of the Hanford Facility is allowed to exercise a lesser level of performance than a commercial TSD facility. See also Ecology's Responses to the Permittees' Preamble Comments P1, P4, and P9, item 2.

Permit Condition III.7.B.d.6. is revised to read as follows: "**Verification:** Verification activities include container receipt inspection, physical screening, and chemical screening. All waste shipments and containers are subject to receipt inspection during the waste shipment acceptance process. In addition, a percentage of waste containers in each shipment is selected for physical screening. Containers are opened and inspected visually or verified by NDE, NDA, or dose rate profile. A percentage of those containers subjected to physical screening is required to be sampled for field or laboratory analysis. All information and data are evaluated to confirm that the waste matches the waste profile and container data/information supplied by the generator. Any discrepancies between . . ."

30. **Condition III.7.B.d.7.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-4, Line 1, delete "A PES" and insert the following: "The Performance Evaluation System (PES)".

Condition Impact Statement: N/A

Requested Action: Accept.

31. **Condition III.7.B.d.8.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 1-4, Lines 37 through 40, delete the text beginning with "The WRAP . . ." and replace with the following: "Conformance reports are used to complete an evaluation of the generator and to adjust the physical screening rate as indicated. At a minimum, a quarterly evaluation according to the following criteria shall be performed and the indicated scores shall be assigned based upon severity

and justification:

1. Designation conformance issues
 - ◆ Regulatory violation, 7 – 10
 - ◆ Mismanagement of waste (conditions which would or did lead to placement of waste in the wrong storage location, the wrong treatment path, etc.), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3
2. Characterization conformance issues
 - ◆ Safety issue, 7 – 10
 - ◆ Mismanagement of waste (see above), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3
3. Paperwork inconsistencies
 - ◆ LDR form, 1 – 3
 - ◆ Shipping papers or waste tracking forms, 1 – 3
 - ◆ Waste profile discrepancies, 1 – 3
 - ◆ Incomplete shipment and/or transfer information, 1 – 3
4. Screening conformance issues
 - ◆ Regulatory violation and/or safety issue, 7 – 10
 - ◆ Mismanagement of waste (see above), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3
5. Receipt conformance issues
 - ◆ Regulatory violation and/or safety issue, 7 – 10
 - ◆ Mismanagement of waste (see above), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3

A generator receiving a score of 10 or greater has demonstrated less than satisfactory performance and must be evaluated for corrective action by the WRAP operating organization. The physical screening rate is increased for that generator based upon the following criteria:

- ◆ A score of 10 to 15 – the physical screening frequency is increased to a minimum of 15%.
- ◆ A score of 16 to 20 – the physical screening frequency is increased to a minimum of 50%.
- ◆ A score greater than 20 – the physical screening frequency is increased to 100%.

Condition Impact Statement: This condition would specify a level of detail for adjusting physical screening rates that is unnecessary and in excess of established regulatory requirements of WAC 173-303-300.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(6) requires owners/operators to "specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper". The condition would incorporate actual procedures used into the Permit instead of specifying such procedures as required by regulation.

The existing text provides for an appropriate level of control regarding conformance reports.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the original text of the WAP did not provide an adequate description of the procedure for adjusting the physical screening rate. Ecology's option was to disallow any adjustment of the physical screening rate, or to allow the Permittees to provide an adequate description of the procedure. Therefore, Ecology accepted this text from the Permittees after their submission of the certified permit application. See Ecology's Response to the Permittees' Preamble Comment P5 for further detail.

Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure. If an adequate description is not provided, the Permit Condition, as provided for public comment, will become enforceable.

Permit Condition III.7.B.d.8. is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for using conformance reports to evaluate the generator and to adjust the physical screening rate. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 1-4, Lines 37 through 40, beginning with "The WRAP . . ." of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition:

Page 1-4, Lines 37 through 40, delete the text beginning with "The WRAP . . ." and replace with the following: "Conformance reports are used to complete an evaluation of the generator and to adjust the physical screening rate as indicated. At a minimum, a quarterly evaluation according to the following criteria shall be performed and the indicated scores shall be assigned based upon severity and justification:

1. Designation conformance issues
 - ◆ Regulatory violation, 7 – 10
 - ◆ Mismanagement of waste (conditions which would or did lead to placement of waste in the wrong storage location, the wrong treatment path, etc.), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3
2. Characterization conformance issues
 - ◆ Safety issue, 7 – 10
 - ◆ Mismanagement of waste (see above), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3
3. Paperwork inconsistencies
 - ◆ LDR form, 1 – 3
 - ◆ Shipping papers or waste tracking forms, 1 – 3
 - ◆ Waste profile discrepancies, 1 – 3
 - ◆ Incomplete shipment and/or transfer information, 1 – 3
4. Screening conformance issues
 - ◆ Regulatory violation and/or safety issue, 7 – 10
 - ◆ Mismanagement of waste (see above), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3
5. Receipt conformance issues
 - ◆ Regulatory violation and/or safety issue, 7 – 10
 - ◆ Mismanagement of waste (see above), 4 – 6
 - ◆ No mismanagement of waste, 1 – 3

A generator receiving a score of 10 or greater has demonstrated less than satisfactory performance and must be evaluated for corrective action by the WRAP operating organization. The physical screening rate is increased for that generator based upon the following criteria:

- ♦ A score of 10 to 15 – the physical screening frequency is increased to a minimum of 15%.
- ♦ A score of 16 to 20 – the physical screening frequency is increased to a minimum of 50%.
- ♦ A score greater than 20 – the physical screening frequency is increased to 100%.”

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30. **Condition III.7.B.d.9.** **Key Comment:** exceeds delegated regulatory authority, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Paperwork inconsistencies or improperly completed and/or incorrect information must be corrected and resolved prior to acceptance of waste for management at this TSD unit.

Condition Impact Statement: This condition would require resolution of discrepancies to be handled in a manner that exceeds regulatory authority provided by WAC 173-303-370(4) and (5).

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-370 does not deny owners/operators the opportunity to resolve paperwork inconsistencies associated with waste transfers in a reasonable manner. WAC 173-303-370(4)(b) states that "upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter". WAC 173-303-370(4) only applies to manifested waste. WAC 173-303-370(5) provides reasons why owners/operators "may decide that a dangerous shipment should not be accepted by his facility." This condition would impose requirements intended for offsite shipments to onsite transfers without regulatory authority. This condition also would be inconsistent with WAC 173-303-370(4) and (5) for receipt of waste from offsite by denying the owner/operator the ability to decide whether or not a shipment should be accepted. The Permittees require flexibility intended by regulation to resolve paperwork discrepancies. In some situations, to deny acceptance of waste might present a hazard to human health and the environment.

This condition would not allow WRAP to correct deficiencies or be commissioned to complete characterization for which WRAP was built to do. The gloveboxes are designed to have containers opened to resolve possible deficiencies or to repackage waste.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete the condition.

In previous negotiations, Ecology and the Permittees have distinguished between receiving waste and accepting waste. In accepting waste, Ecology believes that the TSD unit becomes liable for costs associated with the management of the waste even if the waste is not as described on the shipping papers or manifest. This condition was revised during meetings with the Permittees so that it applies only to paperwork, including the approval file and the shipping papers/manifest.

This condition does not limit the ability of WRAP to correct deficiencies that require nondestructive testing, removal of nonconforming items, sampling of waste, treatment, or repackaging.

Ecology believes that this condition is consistent with WAC 173-303-370, in that it does not deny the TSD unit the opportunity to resolve paperwork inconsistencies associated with onsite waste transfers or offsite waste shipments. The condition specifies that the waste may not be accepted, that is, the waste is still in "receiving" status, until the paperwork inconsistencies or improperly completed and/or incorrect information are corrected and resolved. Ecology has purposely applied this requirement to wastes from onsite generating units, as well as to wastes from offsite generators; see Ecology's Responses to the Permittees Preamble Comments P1, P3, and P9, and to the Fact Sheet Comment 7. Ecology believes that it is necessary to protect human health and the environment by ensuring that the TSD unit knows, and can document, exactly what waste is being managed so that potential releases are minimized or, in the case of a release, the waste constituents are known, so that the personal protective equipment and procedures needed to manage any cleanup are protective of human health and the environment. In consideration of the various generating units onsite and the various degrees of completeness in documentation and process knowledge for waste designation, Ecology believes this condition is necessary to protect human health and the environment from possible releases from, and mismanagement of, unknown or reactive wastes.

Ecology is extremely concerned that the Permittees would accept, as they suggest in their comment, a waste that does not meet the TSD unit's waste acceptance requirements because "to deny acceptance of waste might present a hazard to human health and the environment." This condition does not prevent the TSD unit from providing emergency measures, such as overpacking a leaking drum. However, waste must not be accepted at the TSD unit until the paperwork inconsistencies or improperly completed and/or incorrect information has been corrected and resolved. Ecology understands that the resolution may be that WRAP is hired to treat and/or repack the waste.

Regarding the portion of the comment which states "This condition would not allow WRAP to correct deficiencies or be commissioned to complete characterization for which WRAP was built to do. The gloveboxes are designed to have containers opened to resolve possible deficiencies or to repack waste.", please refer to Permit Condition III.7.B.d.24.

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31. **Condition III.7.B.d.10.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Approved waste profiles and all supporting documentation from the initial submission through all re-evaluations must be retained in the TSD unit operating record as required by Condition II.I.1. for waste managed, i.e., stored and/or treated, at this TSD unit. This documentation also must be retained in the WRAP operating record on the same schedule for those containers submitted by other TSD units for chemical screening by nondestructive testing only. Supporting documentation includes, but is not limited to, process knowledge, records of telephone calls related to completing or correcting waste profile information, certification of representative sample, analytical laboratory results. Not all documentation will be obtained for each waste profile; however, all that is obtained must be retained.

Condition Impact Statement: This condition would cause WRAP to maintain an excessive level of records not otherwise required by regulation. This condition would necessitate retraining of personnel and procedure revision.

Requested Action: Delete this condition. Alternatively, modify the condition to read as follows: "Approved waste profiles will be retained in the Operating Record in accordance with Permit Condition II.I.1 and will be made available to the Department of Ecology on request".

Comment Justification: WAC 173-303-380(1)(c) requires retention of "records and results of waste analyses . . . required by WAC 173-303-300 . . . and by 40 CFR . . . 268.4(a), and 268.7". Permit, Condition II.I.1.b. requires retention of "records and results of waste analyses required by WAC 173-303-300". There are no requirements in WAC 173-303 or the Permit to retain "supporting documentation". The Permittees proposed text more accurately reflects the requirements of WAC 173-303 and the Permit. Additionally, the revised text describing "supporting documentation" contains recordkeeping requirements in excess of standard industry practices.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete or modify the condition.

Ecology believes that this condition, describing recordkeeping requirements for the TSD unit, is justified by the General Conditions (see below) which describe that information required in a TSD unit's operating record should be specified in the TSD unit-specific chapter. Because these records are related to waste analysis, process knowledge, and the evaluation of waste profiles for acceptance at the TSD unit, Ecology believes it is appropriate to address these requirements in the WAP. It should be noted that the term "analysis" as used in the title "Waste Analysis Plan" refers not only to laboratory analyses, but also to the "engineering" use of the word which includes evaluation of information, in this case for the approval of waste profiles and the acceptance of waste at the TSD unit.

Specifically, Permit Condition II.I.1 states ". . . A TSD unit-specific Operating Record shall be maintained for each TSD unit at a location identified in Parts, III, V, and VI of this Permit. Each TSD unit-specific Operating Record shall be included by reference in the Facility Operating Record. Information required in each TSD unit-specific Operating Record is identified on a unit-by-unit basis in Part II, V, or VI of this Permit. The Facility Operating Record shall include, but not be limited to, the following information: . . . II.I.1.b Records and results of waste analyses required by WAC 173-303-300; . . . II.I.1.j Documentation (e.g., waste profile sheets) of all dangerous waste transported to or from any TSD unit subject to this Permit. This documentation shall be maintained in the receiving unit's Operating Record from the time the waste is received."

These General Permit Conditions support this condition regarding the TSD unit-specific Operating Record. Clearly, the Permit may identify, in the TSD unit-specific chapter, records to be retained that are not identified in the General Conditions, because the information is not limited to the list given in Part II.

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32. **Condition III.7.B.d.11.** **Key Comment:** exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Within thirty (30) days of the effective date of this Permit, the Permittees are required to submit, to Ecology for review and

approval, text describing all constraints which apply to the acceptance of waste at this TSD unit for any purpose, including physical examination and temporary storage in any portion of the building or within the boundaries of the TSD unit. Subsequent to any revisions required by Ecology, the description will be added to the text of Section 1.1.3 of the WAP as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification.

Condition Impact Statement: This condition would place restrictions on waste acceptance at WRAP that exceed WAC 173-303-300 requirements by incorporating all internally-imposed restrictions (including restrictions associated with the radioactive component of mixed waste) into the waste analysis plan as enforceable requirements.

Requested Action: Delete this condition. Alternatively, replace this condition with the following text: "Dangerous and/or mixed waste with waste numbers not identified on the WRAP Part A, Form 3, will not be managed at WRAP".

Comment Justification: The requirements for waste analysis are provided in WAC 173-303-300. The written waste analysis plan must describe procedures used to comply with -300(1) through (3) that pertain to confirmation concerning waste through analysis. This condition would incorporate waste acceptance criteria related to the radioactive component of mixed waste into the Permit without regulatory authority. The U.S. Department of Energy must retain jurisdiction over the source, special nuclear, and byproduct material components of mixed waste in accordance with the Atomic Energy Act. This condition also would incorporate other internal waste acceptance criteria into the Permit without regulatory authority. In summary:

- This condition seeks to expand the scope of the waste analysis plan by including text regarding waste acceptance parameters, including all constraints on waste receipt for any purpose.
- Many constraints on waste acceptance are unrelated to results of waste analysis and therefore are beyond the scope of a waste analysis plan (e.g., constraints associated with WRAP acceptance of mixed waste based on the radioactive component).
- There is no regulatory basis for attempting to incorporate such internal constraints into a plan that is, by regulation, intended for identification of parameters, methods, and frequency of analysis for the purpose of ensuring proper management of dangerous and/or mixed waste.
- The Permittees need to retain flexibility that allows for safe and cost-effective modification of waste acceptance criteria as allowed by regulation, without unnecessary time and cost impacts associated with excessive Permit conditions or Permit modifications.

It is inappropriate for a state to unilaterally assert authority over radioactive materials. As stated previously, source, special nuclear, and byproduct materials specifically are excluded from the definition of solid waste set forth at RCRA 42 U.S.C. § 6903(27); also refer to 42 U.S.C. § 6905(a). The Atomic Energy Act; U.S. Department of Energy's Byproduct Rule (10 CFR 962); the U.S. Environmental Protection Agency Notice Regarding State Authorization [(51 Fed. Reg. 24504 (July 3, 1986))]; U.S. Environmental Protection Agency Notice on Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste [(53 Fed. Reg. 37045 (September 23, 1988))]; the State's recognition of possible preemption in its Hazardous Waste Management Act, Revised Code of Washington 70.105.109; the limitations of the waiver of sovereign immunity in Section 6001 of the RCRA to materials within the RCRA definition of solid waste (thereby excluding source, special nuclear, and byproduct materials); and the Tri-Party Agreement.

Refer to related comments in response to Draft Permit Condition III.7.B.c.3.

Ecology's Response: Ecology disagrees with the Requested Action.

A synthesis of the various source information regarding WAPs, including state and federal guidance, results in the understanding that the content of WAPs is not limited to descriptions of laboratory testing. The term "analysis" in the title is best understood as the engineering-type evaluation of the requirements for management of waste. Also, contrary to the comment, the Permittees did not provide adequate descriptions of procedures to comply with WAC 173-303-300(1) through -(3) which required Ecology to draft a number of permit conditions.

Ecology believes that all operational constraints of the TSD unit need to be provided, as well as identification and description of any parameters or analytes that are necessary to ensure safe management of waste in the TSD unit, including but not limited to: (1) weight limits for TSD unit systems (e.g., stacker/retriever, conveyor lines, forklifts, non-destructive examination equipment, non-destructive assay equipment, drum handling systems in the gloveboxes; (2) compatibility of wastes with other wastes; and (3) compatibility of wastes with equipment (e.g., secondary containment, gloveboxes, ventilation and filtration systems [see WAC 173-303-806(4), WAC 173-303-630(7), WAC 173-303-395(4)]). These constraints have not been presented elsewhere in the permit application and, as identified in EPA guidance (Waste Analysis At Facilities That Generate, Treat, Store, And Dispose Of Hazardous Wastes, OSWER 9938.4-03, April 1994), should be provided in the facility (or, in this case, TSD unit) description portion of the WAP. In addition, if information on the radioactive content of the waste is important to safe management within this TSD unit, then such information needs to be provided in the WAP. It should be noted that the Permittees have refused to provide any such information in the certified permit application or as supplemental information.

Regarding the statement "WRAP operations must retain flexibility to establish and modify, as appropriate, waste acceptance criteria as allowed by regulation, without unnecessary time and cost impacts associated with excessive Permit conditions," Ecology believes that establishment and modification of waste acceptance criteria must occur within the constraints of the Permit as described by WAC 173-303-830. If requested modifications meet the requirements of WAC 173-303-830(4)(e)(iii)(B), a temporary authorization will be issued for up to 180 days and can be extended for up to 180 days if the Permittees have requested the permit modification for the activity in the temporary authorization. Ecology has the authority and responsibility to regulate the activities which the Permittees want to change at will.

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33. **Condition III.7.B.d.12.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 1-5, Lines 27 through 46, delete the text and replace with the following: "After the initial screening frequency has been established for a generator or that frequency has been adjusted due to poor performance, the physical screening frequency can be reduced in accordance with the following:

- The physical screening frequency will be stepped down in three steps based upon the ability of the generator to implement the corrective action plan and/or demonstrate an ability to appropriately manage waste. At no time shall the physical screening frequency be reduced below 5% for onsite generators or below 10% for offsite generators.

Step 1) Reduce frequency by 66% the first month.

Step 2) Reduce frequency established in Step 1 by 50% or to the minimum allowable
whichever results in a greater frequency.

Step 3) Reduce frequency to the minimum allowable.

➤ The reduction will be determined during the periodic evaluation process; however, the following minimum criteria must be met prior to reduction of the frequency:

- (1) Five (5) containers from the waste stream in question (defined by a single waste profile) must pass verification, and
- (2) The TSD unit must document an acceptable evaluation of the corrective action plan or that the generator's new waste management program has been implemented and is effective.

If the screening frequency was increased based upon conformance issues at the time of waste receipt, the corrective action plan must be fully implemented before the generator may return to the minimum physical screening frequency. However, waste streams from the same generator, which did not have conformance issues upon receipt at this TSD unit, may return to the minimum verification frequency if the TSD unit operating organization determines that the specific conformance issue is unlikely to affect the generator's other waste streams."

Condition Impact Statement: This condition is difficult to understand and is ambiguous regarding key aspects of the methodology for reduction in screening frequency.

Requested Action: Delete this condition.

Comment Justification: The existing text of the permit application accurately reflects the verification program.

Ecology's Response: Ecology disagrees with the Requested Action, but will provide an opportunity for the Permittees to provide revised text for this condition.

Ecology believes the text in the permit application (WAP) is ambiguous, and needs to be revised to be understandable.

Permit Condition III.7.B.d.12. is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for reducing the physical screening frequency for acceptance of waste at this TSD unit. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 1-5, Lines 27 through 46, of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 Permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition:

"Page 1-5, Lines 27 through 46, delete the text and replace with the following: "After the initial screening frequency has been established for a generator or that frequency has been adjusted due to poor performance, the physical screening frequency can be reduced in accordance with the following:

- The physical screening frequency will be stepped down in three steps based

upon the ability of the generator to implement the corrective action plan and/or demonstrate an ability to appropriately manage waste. At no time shall the physical screening frequency be reduced below 5% for onsite generators or below 10% for offsite generators.

- Step 1) Reduce frequency by 66% the first month.
- Step 2) Reduce frequency established in Step 1 by 50% or to the minimum allowable whichever results in a greater frequency.
- Step 3) Reduce frequency to the minimum allowable.

➤ The reduction will be determined during the periodic evaluation process; however, the following minimum criteria must be met prior to reduction of the frequency:

- (1) Five (5) containers from the waste stream in question (defined by a single waste profile) must pass verification, and
- (3) The TSD unit must document an acceptable evaluation of the corrective action plan or that the generator's new waste management program has been implemented and is effective.

If the screening frequency was increased based upon conformance issues at the time of waste receipt, the corrective action plan must be fully implemented before the generator may return to the minimum physical screening frequency. However, waste streams from the same generator, which did not have conformance issues upon receipt at this TSD unit, may return to the minimum verification frequency if the TSD unit operating organization determines that the specific conformance issue is unlikely to affect the generator's other waste streams."

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34. **Condition III.7.B.d.13.** **Key Comment:** exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 1-6, Lines 24 through 28, add the following waste types to the list of wastes prohibited from management at this TSD unit:

- ♦ "Bulk solids in trucks or roll-off boxes."

Condition Impact Statement: This condition arbitrarily would limit methods of transporting or transferring waste to WRAP that could be transported safely in accordance with WAC 173-303-190 and -240 and managed properly in accordance with WAC 173-303-630.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-190(1) states that "the generator must package all dangerous waste for transport in accordance with U.S. DOT regulations on packaging, 49 CFR Parts 173, 178, and 179". WAC 173-303-240 (2) states that "any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when such dangerous waste is required to be manifested by WAC 173-303-180". WAC 173-303-240(4) states that "these requirements do not apply to onsite (as defined in WAC 173-303-040) transportation of dangerous waste by generators, or by owners/operators of permitted TSD facilities". These requirements allow for transport of offsite shipments if the shipments meet

U.S. Department of Transportation regulations. These requirements exempt onsite transport activities from regulatory control. WAC 173-303-630 does not impose any requirements regarding transport of waste to TSD facilities.

This condition would prohibit acceptance of bulk solids in trucks or roll-off boxes at WRAP and has no regulatory basis. Flexibility must be retained to allow WRAP to manage waste in a safe and cost-effective manner without unnecessary restrictions.

Ecology's Response: Ecology disagrees with the Requested Action.

According to discussion with the Permittees and as affirmed by the Permittees in the Project Managers' meeting in July 2000 (as documented in the meeting minutes in the Administrative Record), this TSD unit does not have the capability of managing bulk solids in trucks or roll-off boxes. In addition, the permit application does not address facilities for management of bulk solids in trucks or roll-off boxes (e.g., no truck or roll-off box sampling station). However, if such facilities and capabilities do exist, the Permittees need to provide a modification to the permit application, including the WAP, to address management of bulk solids in trucks and/or roll-off boxes.

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35. **Condition III.7.B.d.14.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 1-6, Line 24, replace the phrase "Bulk liquid waste" with the following: "Bulk liquid waste in tankers or drums."

Condition Impact Statement: This condition arbitrarily would limit methods of transporting or transferring waste to WRAP that could be transported safely in accordance with WAC 173-303-190 and -240 and managed properly in accordance with WAC 173-303-630.

Requested Action: Delete this condition. Alternatively, rewrite the condition as follows: Page 1-6, line 24, replace the phrase "Bulk liquid waste" with the following: "Bulk liquid waste in tankers".

Comment Justification: WAC 173-303-190(1) states that "the generator must package all dangerous waste for transport in accordance with U.S. DOT regulations on packaging, 49 CFR Parts 173, 178, and 179". WAC 173-303-240 (2) states that "any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when such dangerous waste is required to be manifested by WAC 173-303-180". WAC 173-303-240(4) states that "these requirements do not apply to onsite (as defined in WAC 173-303-040) transportation of dangerous waste by generators, or by owners/operators of permitted TSD facilities". These requirements allow for transport of offsite shipments if the shipments meet U.S. Department of Transportation regulations. These requirements exempt onsite transport activities from regulatory control. WAC 173-303-630 does not impose any requirements regarding transport of waste to TSD facilities.

This condition would establish a definition of bulk material inconsistent with the intent of the regulations and has no regulatory basis. Flexibility must be retained to allow WRAP to manage waste in a safe and cost-effective manner without unnecessary restrictions.

Ecology's Response: Ecology disagrees with the Requested Action.

According to discussion with the Permittees and as affirmed by the Permittees in the Project Managers' meeting in July 2000 (as documented in the meeting minutes in the Administrative Record), this TSD unit does not have the capability of managing bulk liquid wastes in tankers or drums. In addition, the permit application does not address facilities for management of bulk liquids in tankers or drums (e.g., no tanker sampling station). If such facilities and capabilities do exist, the Permittees need to provide a modification to the permit application, including the WAP, to address management of bulk liquids in tankers and drums. Note that 'bulk liquids in drums' does not refer to containers of liquids in lab-packs which are addressed in the permit application, including the WAP.

36. **Condition III.7.B.d.15.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-7, Lines 8 through 41, delete the text regarding Alternative Waste Management Plan.

Condition Impact Statement: N/A

Requested Action: Accept.

37. **Condition III.7.B.d.16.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-1, Lines 3 through 13, delete the text beginning with "The requirement . . . "

Condition Impact Statement: N/A

Requested Action: Accept.

38. **Condition III.7.B.d.17.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-2, Lines 39 and 40, delete the phrase "or its representative."

Condition Impact Statement: N/A

Requested Action: Accept.

39. **Condition III.7.B.d.18.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-2, Line 46, delete the phrase "the information is accurate", and replace with the following: "the waste to be shipped to WRAP is as described by the waste profile."

Condition Impact Statement: N/A

Requested Action: Accept.

40. **Condition III.7.B.d.19.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 2-3, Lines 8 through 33, delete the text and replace with text that is adequate to describe how containers are chosen for physical and chemical screening. Within thirty (30) days of the effective date of this Permit, a description of this procedure must be submitted to Ecology for review and approval; subsequent to any revisions required by Ecology, the description will be added to the text of Section 2.1.2 of this WAP as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification.

Condition Impact Statement: This condition would require submittal of information already contained in the waste analysis plan.

Requested Action: Delete this condition.

Comment Justification: There is no need for this condition. The Permittees believe that Figure 2-1, Waste Acceptance Process, provides the appropriate level of detail regarding the verification program and the selection of containers. Additional text regarding how containers are chosen for physical and chemical screening is unnecessary because the requested description already is provided in Figure 2-1.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the condition is clear that a procedural description is required by the condition. This is not fulfilled by the flowchart in Figure 2-1. For example, neither the flowchart nor the existing text describe if the containers chosen for physical screening are chosen randomly (by using a random numbers table); if they are chosen at a specific interval by counting off the containers as they are on the truck for shipping, as they are staged during receipt inspection, etc.; or if they are specifically targeted because of perceived problems. Therefore, this condition is necessary in order to ensure that the same approach is used consistently and to ensure that a container is not chosen because TSD unit personnel "know" it will meet acceptance criteria.

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41. **Condition III.7.B.d.20.** **Key Comment:** exceeds delegated regulatory authority, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-4, Lines 4 through 7, delete the text and replace with the following: "When the available information does not qualify as acceptable knowledge or is not sufficient to characterize a waste for management, the sampling and testing methods outlined in WAC 173-303-110 are used by the generator to determine whether a waste designates as ignitable, corrosive, reactive, and/or toxic and whether the waste contains free liquids. If the analysis is performed to complete characterization after acceptance of the waste by the TSD unit, then this Permit governs the sampling and testing requirements."

Condition Impact Statement: This condition would contradict the exemption from permitting at WAC 173-303-600(3)(d), which allows generator activities to occur under self-implementing provisions.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-600(3)(d) provides that "final facility standards do not

apply to: . . . a generator accumulating waste onsite in accordance with WAC 173-303-200."
There is no basis for imposing sampling and analysis permit conditions on generator activities.

The text in the waste analysis plan on page 2-4, lines 7-10 is a proper description regarding the use of acceptable knowledge for characterization and is consistent with Section 1.5 of the U.S. Environmental Protection Agency's Office of Solid Waste Emergency Response 9938.4-03, dated April 1994, entitled, "*Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes*". WAC 173-303-110(1) "sets forth the testing methods to be used to comply with the requirements of this chapter". WAC 173-303-070(3)(c) states "for the purpose of determining if a solid waste is a dangerous waste . . . a person must either: (i) Test the waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110; or (ii) Apply knowledge of the waste in light of the materials or the process used, when: (A) Such knowledge can be demonstrated to be sufficient for determining whether or not it designated and/or designated properly; and (B) All data and records supporting this determination in accordance with WAC 173-303-210(3) are retained onsite". WAC 173-303-110 applies in situations where WAC 173-303 specifically calls for testing. WAC 173-303-070(3)(c) allows generators to use knowledge to designate. The Permittees intend to use methods of WAC 173-303-110 for TSD confirmation of knowledge when available information does not constitute acceptable knowledge. WAC 173-303-070(3)(c) clearly provides regulatory flexibility for generators in designating waste. It is inappropriate to preclude such flexibility by attempting to regulate generator activities through permit conditions.

Ecology's Response: Ecology disagrees with the Requested Action.

It is appropriate to address generator requirements in the WAP, as supported by WAC 173-303-300(5)(e). The regulation states, "Waste analysis plan . . . the plan must contain at least: . . . The waste analyses which generators have agreed to supply." At the Permittees' request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address the generator requirements on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303-300(5)(e) in each TSD unit's WAP.

The wording of this condition resulted from the Permittees' request (during a 1998 meeting) to distinguish between requirements imposed by the Permit and the fact that the generators were to use the options allowed by the Dangerous Waste Regulations. This condition should not be construed as preferring acceptable knowledge over analytical data or analytical data over acceptable knowledge, for the purpose of waste designation. Finally, this condition does not impact the generator accumulation of waste in satellite or ninety (90) day-or-less accumulation areas as described in WAC 173-303-200.

42. **Condition III.7.B.d.21.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-4, Line 26 and Page 2-5, Line 3, correct the WAC citations to read as follows: "173-303-380(1) (j), -(k), -(n), and -(o)."

Condition Impact Statement: N/A

Requested Action: Accept.

43. **Condition III.7.B.d.22.** Key Comment: imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 2-4, Lines 31 through 42, delete the text beginning with the following: "In some situations . . ." Replace it with: "The following waste knowledge exceptions apply to waste accepted for management at the WRAP TSD unit:

- ♦ Hazardous debris as defined in WAC 173-303-040 that is managed in accordance with 40 CFR 268.45 (the "Debris Rule") is not required to be sampled. Management of debris in this manner is not dependent on the quantification of constituents to be federal and State-only LDR regulated.
- ♦ Wastes generated onsite may be shipped to the WRAP TSD unit provided the waste has been characterized for storage and a representative sample has been taken to characterize the waste for treatment and/or disposal.
- ♦ Waste which was previously disposed and then retrieved may be transferred to the WRAP TSD unit with only the necessary information to properly manage the waste at the storage unit.
- ♦ Waste which was received prior to the implementation of this guidance and has been characterized for storage only may be transferred between WRAP and permitted storage units without re-characterization; however, the pre-shipment review and verification requirements must be met.

On-site generators may ship waste, that cannot be sampled by the generator, to the WRAP TSD unit for completion of characterization provided that the waste is characterized for storage."

Condition Impact Statement: This condition is ambiguous and difficult to understand.

Requested Action: Delete this condition.

Comment Justification: The existing text and WAC 173-303-300 contains adequate requirements for waste analysis. Specifically, WAC 173-303-300(2) states:

"The owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats, or disposes of it. This analysis must contain the information necessary to manage the waste in accordance with the requirements of this chapter 173-303 WAC. The analysis may include or consist of existing published or documented data on the dangerous waste, or on waste generated from similar processes, or data obtained by testing, *if necessary*. The Permittees believe WAC 173-303-300(2) is intended to require the following:

- ♦ Detailed analyses are required before treating, storing, or disposing of waste.
- ♦ These analyses must be sufficient to manage the waste in accordance with WAC 173-303.
- ♦ Analyses required for treatment or disposal typically are more extensive than analyses for storage.
- ♦ Although ideal, analyses do not *necessarily* have to be obtained through direct testing of the waste being analyzed.

Direct testing before storage in WRAP might not be appropriate for some waste. The U.S. Environmental Protection Agency provides guidance regarding the use of acceptable knowledge for waste managed at TSD facilities in Section 1.5 of Office of Solid Waste Emergency Response 9938.4-03, dated April 1994, entitled, "*Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes*". Specifically, one situation identified by the U.S. Environmental Protection Agency in which it might be appropriate to apply acceptable

knowledge is when "health and safety risks to personnel would not justify sampling and analysis (e.g., mixed waste)." Waste for which sufficient information exists to ensure safe storage should not be subject to testing before such storage. Testing such waste subsequently will be performed to ensure proper treatment and/or disposal as appropriate in accordance with the land disposal restrictions of WAC 173-303-140 and treatment unit waste acceptance criteria. The Permittees must retain the flexibility to obtain treatment and disposal information on a schedule that allows for safe and efficient management of mixed waste.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete this condition.

This text was negotiated with the Permittees in workshops held in late 1996 and early 1997. In addition, during meetings with the Permittees regarding the review of the draft WAP (prior to its submission as part of the certified permit application in 1998), Ecology and the Permittees agreed that Ecology would provide this text as a permit condition. At that time, the Permittees informed Ecology that they did not have sufficient time to revise that portion of the application prior to submitting the certified application.

Ecology does not disagree with the text of the Comment Justification. However, the existing text in the WAP does not address hazardous debris. In addition, the text does not address the Permittees' recent agreement with Ecology that a representative sample to characterize the waste for treatment and/or disposal will be taken for waste generated onsite. Both issues are important given the Hanford Facility compliance history related to incomplete waste characterization and designation. Previous direction from Ecology in 1989 (letter dated August 15, 1989, from T.M. Michelena, Ecology, to R.D. Freeberg, USDOE-RL, entitled "Consolidation of Mixed Waste") required full characterization of waste for management in permitted waste storage units. This permit condition, which allows management in the TSD unit with only partial characterization, provided a sample has been obtained, is a departure from the requirement previously established for the Hanford Facility.

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44. **Condition III.7.B.d.23** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-5, Lines 45 through 47 and Page 2-6, Lines 1 through 5 (Section 2.2.1), delete the text and replace with the following: ". . . 100 percent of each shipment (including onsite transfers) are inspected at the TSD unit for possible damage or leaks, complete labeling, intact tamper seals (if waste has been subjected to physical or chemical screening at another location), and piece count. This is to ensure that the shipment: (1) is received in good condition, (2) is the waste indicated on the manifest or shipping papers, (3) has not been opened after physical and/or chemical screening was performed, and (4) is complete. Any issue resolution, including correction of document discrepancies, re-labeling, overpacking of leaking or deteriorated drums, must occur before verification activities may continue. Documentation of issue resolutions must be maintained in the TSD unit operating record. The container receipt inspection is performed by the WRAP operating organization at WRAP. It must be completed within 24 hours of receipt of the shipment and the shipment must be moved to storage or, if discrepancies exist, into a temporary holding area within the next 24 hours. Action must be taken to overpack any leaking or damaged containers immediately upon discovery. Any paperwork discrepancies for shipments from both offsite and onsite generators must be

resolved as required by WAC 173-303-370(4)."

Condition Impact Statement: This condition would exceed regulatory requirements of WAC 173-303-370 for receipt of waste and would increase the scope of WAC 173-303-395(4) for loading and unloading areas.

Requested Action: Delete this condition.

Comment Justification: The existing text is sufficient. WAC 173-303-370(4) requires that if "the [significant] discrepancy is not resolved within fifteen days after receiving the waste, the owner or operator must immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue."

WAC 173-303-370(5) states that "the owner or operator may decide that a dangerous shipment should not be accepted by his facility". WAC 173-303-370(5) does not specify when a shipment cannot be accepted, but does give permission to the owner or operator to deny a shipment based on his own discretion regarding discrepancies. By regulation, WAC 173-303-370(5)(a)(ii) allows the owner/operator to determine whether or not significant discrepancies between waste and documentation result in the need to reject the shipment.

This condition would deny the opportunity to resolve paperwork inconsistencies regarding waste transfers in a reasonable manner. WAC 173-303-370 does not require halting verification activities at WRAP because of minor paperwork problems. Additionally, there is no basis for extending any requirements of WAC 173-303-370 to receipt of waste from onsite.

This condition would impose requirements for onsite transfers that are inconsistent with WAC 173-303-370. There are no requirements in WAC 173-303-370 that impose container receipt inspections on onsite transfers as a condition of the permit. Container receipt inspections should be allowed anywhere within the Hanford Facility boundaries as long as proper controls are instituted to ensure no tampering has been done to the shipment.

Additionally, there is no basis for requiring container receipt inspection and movement to permanent or temporary storage within 24 hours of waste arrival at WRAP for any waste received. Although efforts are made to perform these functions within 24 hours of arrival, the Permittees believe that it is unreasonable to mandate the time limit as a permit condition subject to enforcement. WAC 173-303-395(4) imposes restrictions on TSD loading and unloading areas that are protective of human health and the environment. WAC 173-303-395(4) imposes requirements to contain/clean spills and prevent release, but does not include 24-hour limits on such areas. Depending on the situation, additional time might be necessary to correct discrepancies or arrange for relocation of waste.

Ecology's Response: Ecology disagrees with the Requested Action, but will modify the condition.

Ecology believes that this permit condition is necessary, primarily because the existing text of WAP allows receipt inspection for the TSD unit to occur at another location. Because of the distance between onsite generating units and the TSD units and, between the TSD units, the containers of waste are repeatedly handled, loaded on and unloaded from trucks, usually using forklifts. There are many opportunities for discrepancies in count and container identity, as well as damage to the containers and the labeling.

Ecology does not understand why the Permittees believe that "This condition would deny the opportunity to resolve paperwork inconsistencies regarding waste transfers in a reasonable manner."

Although Ecology believes that the time limits imposed are reasonable, and similar time limits have been imposed at a commercial facility (Allied Technology Group, Inc., Richland, Washington), Ecology will delete them from the condition at this time. However, time limits might be considered in the future if any incidents occur because of waste remaining in the receiving or staging area for extended periods of time.

Ecology believes that this condition will: (1) ensure identification of container damage and leaks, if any are present, after containers have been moved, possibly over extensive distances; (2) prevent the unauthorized addition of materials, which could be reactive or prohibited, to containers whose contents have already been screened at another location for acceptance at a specific TSD unit; (3) ensure that the TSD unit is managing waste that is acceptable and compatible with the TSD unit equipment, construction, configuration, and procedures; and (4) ensure that no orphaned drums are left behind at pickup points, or storage locations, or are lost along site roadways. This condition is necessary to protect human health and the environment because any of these situations could result in releases of dangerous/mixed waste or waste constituents, and this condition will minimize the risk of waste releases.

Permit Condition III.7.B.d.23. will be revised to read as follows: "Page 2-5, Lines 45 through 47 and Page 2-6, Lines 1 through 5 (Section 2.2.1), delete the text and replace with the following: ". . . 100 percent of each shipment (including onsite transfers) are inspected at the TSD unit for possible damage or leaks, complete labeling, intact tamper seals (if waste has been subjected to physical or chemical screening at another location), and piece count. This is to ensure that the shipment: (1) is received at the TSD unit in good condition, (2) is the waste indicated on the manifest or shipping papers, (3) has not been opened after physical and/or chemical screening was performed, and (4) is complete. Any issue resolution, including correction of document discrepancies, re-labeling, overpacking of leaking or deteriorated drums, must occur before verification activities may continue. Documentation of issue resolutions must be maintained in the TSD unit operating record. Any paperwork discrepancies for shipments from both offsite and onsite generators must be resolved as required by WAC 173-303-370(4)."

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45. **Condition III.7.B.d.24.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Ecology recognizes that the generator may hire the WRAP operating organization to treat waste, including sorting and repackaging, and thereby correct discrepancies and problems identified during the waste acceptance process. If correction of these discrepancies and problems are not accomplished within two (2) months of receipt of the waste shipment, the Permittees shall contact Ecology (specifically the Ecology Project Manager). Ecology will establish a compliance schedule for treatment of the waste shipment.

Condition Impact Statement: This condition would exceed and expand on the regulatory requirements of WAC 173-303-370, which apply only to waste received from offsite.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-370 does not contain any requirements that restrict owners/operators from receiving waste that they determine can be taken from offsite at their facilities. The Permittees are committed to resolving significant discrepancies as required by WAC 173-303-370(4). However, there is no regulatory basis for imposing this time limit on all discrepancies identified during waste acceptance. The Permittees do not believe that the "(2) months of receipt" time limit is appropriate for resolving discrepancies, provided that the waste is managed properly. Refer to related comment on Draft Permit Condition III.7.B.d.23.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that this condition is necessary to protect human health and the environment from potential releases due to management of liquids and/or incompatibles in containers for long periods of time. Ecology believes that long-term storage of non-compliant waste in containers at the Hanford Facility poses an unacceptable risk to human health and the environment. Past inspections by the Permittees (and by Ecology) have identified problems, such as bulging drums and damage to drum integrity, thereby creating the potential for releases. These kinds of problems increase when containers are stored for long periods of time. Even though the Permittees' comment, "The Permittees are committed to resolving significant discrepancies as required by WAC 173-303-370(4)" indicates a willingness to comply with the regulations, the fact remains that the Hanford Facility is often without funding for compliance with those regulations. During meetings with the Permittees in 1998, a USDOE Program Manager stated that additional time would be necessary for resolving significant discrepancies involving problems such as liquids or non-compliant items because USDOE would have to pursue and obtain funding, perhaps by budget requests, for which the funding will be obtained in one or more years. Ecology believes that this condition is necessary to ensure that the Permittees have a compliance schedule to justify budget requests and to ensure that the Hanford Facility has a driver for attaining compliance. The Backlog Waste Drums, that are still in storage from the 1991-92 era, are an example of such a long-term problem. Ecology desires to be able to establish a compliance schedule within the Permit, because milestones established in the Tri-Party Agreement for such situations would not apply to the co-operators of the Hanford Facility. (See Ecology's Response to the Permittees' Preamble Comment 1.) In considering the various generating units onsite, the various degrees of completeness in documentation depending upon the generating unit, and the various levels of process knowledge for waste designation, these conditions are necessary to protect human health and the environment from possible mismanagement and releases of unknown or reactive wastes.

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46. **Condition III.7.B.d.25.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Lines 11 through 14 (Section 2.2.2), delete the text and replace with the following: "as a verification activity. Physical screening by visual inspection or NDE could be performed by the WRAP operating organization before the waste is shipped to WRAP. In this case, the visual inspection is performed by observation of the generator filling empty containers with waste or examining the container contents at the location. NDE is performed using mobile equipment which meets the performance requirements identified in the Permit. When visual inspection or NDE is performed at a location other than WRAP, at least one tamper-resistant seal is applied to each container examined and verified as acceptable, so that the container may not be reopened unless the seal is broken. These seals are the same as custody seals and are subject to the same evidentiary requirements as custody seals. The seals must be placed by the observer/verifier before the container leaves his/her sight on

the day the observation occurs. The seal must be uniquely identified and controlled, e.g., signed and dated or uniquely numbered and tracked in a logbook. In addition, the seal must be easily differentiated from tamper-resistant seals used for other purposes. The verification must be documented in the paperwork that accompanies the waste shipment to WRAP and that paperwork must be placed in the TSD unit operating record. Also, the transfer documentation must identify whether the container required verification and the result of that verification. As long as the tamper-resistant seal remains intact, those containers of waste may be moved within the Hanford Solid Waste Complex without further physical screening, although container receipt inspections are required for all waste shipments, including transfers. The waste may still be subject to chemical screening."

Condition Impact Statement: This condition would impose an excessive level of control by stipulating requirements in extensive detail and has no regulatory basis.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(5) requires owners/operators to "develop and follow a written waste analysis plan that describes the procedures he will use to comply with the waste analysis requirements . . ." The text originally submitted in the WRAP permit application is consistent with the requirements of WAC 173-303-300 and provides adequate description of physical screening. This condition would delete that text and replace it with excessive detail regarding the physical screening process.

Ecology's Response: Ecology disagrees with the Requested Action.

This issue was identified in review comments prior to submission of the initial certified permit application. (See Ecology's Response to Permittees' Preamble Comment P5.) Ecology believes that the existing text in the WAP does not address this activity adequately. This condition was addressed in Ecology's Response to the Permittees' Comment 10 on the Fact Sheet.

Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure. If an adequate description is not provided, the permit condition, as provided for public comment, will become enforceable.

Permit Condition III.7.B.d.25. is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for performing physical screening by visual inspection or NDE before waste is sent to the TSD unit. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 2-6, Lines 11 through 14 (Section 2.2.2) of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition:

Page 2-6, Lines 11 through 14 (Section 2.2.2), delete the text and replace with the following: "as a verification activity. Physical screening by visual inspection or NDE could be performed by the WRAP operating organization before the waste is shipped to WRAP. In this case, the visual inspection is performed by observation of the generator filling empty containers with waste or examining the container contents at the location. NDE is performed using mobile equipment which meets the performance requirements identified in the Permit. When visual inspection or NDE is

performed at a location other than WRAP, at least one tamper-resistant seal is applied to each container examined and verified as acceptable, so that the container may not be reopened unless the seal is broken. These seals are the same as custody seals and are subject to the same evidentiary requirements as custody seals. Each seal must be placed by the observer/verifier before the container leaves his/her sight on the day the observation occurs. The seal must be uniquely identified and controlled, e.g., signed and dated or uniquely numbered and tracked in a logbook. In addition, the seal must be easily differentiated from tamper-resistant seals used for other purposes. The verification must be documented in the paperwork that accompanies the waste shipment to WRAP and that paperwork must be placed in the TSD unit operating record. Also, the transfer documentation must identify whether the container required verification and the result of that verification. As long as the tamper-resistant seal remains intact, those containers of waste may be moved within the Hanford Solid Waste Complex without further physical screening, although container receipt inspections are required for all waste shipments, including transfers. The waste may still be subject to chemical screening."

47. **Condition III.7.B.d.26.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Add the following text to Section 2.2.2: "Selection and interpretation of the appropriate physical screening method(s) are conducted by personnel who are qualified as described in the Training Plan (Appendix 8A) as amended by any Permit conditions. Each physical screening method is performed by qualified personnel."

Condition Impact Statement: N/A

Requested Action: Accept.

48. **Condition III.7.B.d.27.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Line 18, add a reference to the text to read as follows: "(See Section 3.1 for the criteria for choosing a physical screening method)."

Condition Impact Statement: N/A

Requested Action: Accept.

49. **Condition III.7.B.d.28.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Line 30, insert the phrase "The minimum" at the beginning of the sentence, so that the sentence reads as follows: "The minimum physical screening frequency is 5 percent for onsite generating units , . . . "

Condition Impact Statement: N/A

Requested Action: Accept.

50. **Condition III.7.B.d.29.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Line 40, add a reference to Section 1.1.1.3. to the sentence, so the sentence reads as follows: "All failed containers and shipments are dispositioned via the PES, as described in Section 1.1.1.3. of this WAP."

Condition Impact Statement: N/A

Requested Action: Accept.

51. **Condition III.7.B.d.30.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 14, delete "authorized independent agent are" and replace with "is".

Condition Impact Statement: N/A

Requested Action: Accept.

52. **Condition III.7.B.d.31.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Lines 17 and 18, delete "or Pacific Northwest National Laboratory (PNNL) packaged waste that is transferred to PNNL operated TSD units]".

Condition Impact Statement: N/A

Requested Action: Accept.

53. **Condition III.7.B.d.32.** **Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Lines 24 through 26, delete the text and replace with the following: "frequency, and exceptions for chemical screening. Chemical screening may be performed by the WRAP operating organization before the waste is shipped to WRAP. After chemical screening is done, tamper-resistant seals are applied over the container opening on each outer container screened. The requirements described for tamper-resistant seals used for visual examination apply for chemical screening, as well. Any requirement of this Permit related to chemical screening also applies for chemical screening performed before the waste is received at WRAP."

Condition Impact Statement: The last sentence of the condition does not make sense and cannot be implemented.

Requested Action: Delete the condition. Alternatively, delete the last sentence of the condition.

Comment Justification: This condition would have WRAP implementing chemical screening criteria while performing chemical screening.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete the condition. However, Ecology will revise the condition to address the text in the last sentence of the condition. Ecology's intent is that any requirement located elsewhere in the WAP, or in specific permit conditions, also apply to chemical screening performed at locations remote from the TSD unit.

Permit Condition III.7.B.d.32. is revised to read as follows: "Page 2-7, Lines 24 through 26, delete the text and replace with the following: "frequency, and exceptions for chemical screening.

Chemical screening may be performed by the WRAP operating organization before the waste is shipped to WRAP. After chemical screening is done, tamper-resistant seals are applied over the container opening on each outer container screened. The requirements described for tamper-resistant seals used for visual examination apply for chemical screening, as well. Any requirement elsewhere in this Waste Analysis Plan or Permit related to chemical screening also applies for chemical screening performed before the waste is received at WRAP."

54. **Condition III.7.B.d.33.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 28, delete the first sentence and replace with the following text: "Selection and interpretation of the appropriate chemical screening method(s) are conducted by personnel who are qualified as described in the Training Plan (Appendix 8A) as amended by any permit conditions. Each chemical screening method is performed by qualified personnel."

Condition Impact Statement: N/A

Requested Action: Accept.

55. **Condition III.7.B.d.34.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Lines 29 through 30, delete the text which reads: "The objective . . . documentation." and replace with the following: "The objective of chemical screening is to obtain reasonable assurance that the waste received by the TSD unit is consistent with the description of the waste on the waste profile and to provide information that will be used to safely manage the waste at the TSD unit."

Condition Impact Statement: N/A

Requested Action: Accept.

56. **Condition III.7.B.d.35.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Lines 30 through 33, delete the text that begins with "The following tests are selected . . ." This text is replaced with the following: "All of the listed screening tests are required to be conducted on all samples collected for chemical screening, unless a technical justification is documented describing the reason for not performing the chemical screening test. The justification may be provided by a procedure, noted in the special instructions to the waste profile at the time of approval, or documented in the verification record, i.e., a logbook notation why a test is not appropriate to the sample or matrix."

Condition Impact Statement: This condition would impose an excessive level of control by dictating screening tests and rationales for screening tests in far greater detail than intended by WAC 173-303-300.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(5)(a) states "The owner or operator must develop and follow a written waste analysis plan that describes the procedures . . . and the plan must contain

at least: (a) The parameters for which each dangerous waste . . . will be analyzed, and the rationale for selecting these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsections (1) through (4) of this section)". WAC 173-303-300 contains adequate requirements for waste analysis. This condition would impose requirements that exceed WAC 173-303-300 for chemical screening activities. There is no need to require technical justifications as to why a given chemical screening parameter was not performed on a given sample. In addition, the time and effort to document a technical justification is not cost effective and does not allow management efficiency in chemical screening. The Permittees believe that the language contained on page 2-7, lines 30 through 33 is appropriate and should remain in the waste analysis plan. The selection of these three parameters (peroxide, oxidizer, and water reactivity) is based on defensible safety principles for all waste.

Ecology's Response: Ecology accepts the Requested Action to delete the condition. Ecology has re-examined the text of the WAP and agrees that the language is appropriate and sufficient.

57. **Condition III.7.B.d.36. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 42, delete "Headspace testing" and replace with "Ignitability/headspace screening for volatile compounds."

Condition Impact Statement: N/A

Requested Action: Accept.

58. **Condition III.7.B.d.37. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 45, delete "Paint filter" and replace with "Paint Filter Liquids Test."

Condition Impact Statement: N/A

Requested Action: Accept.

59. **Condition III.7.B.d.38. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-8, Line 3, correct the reference to read as follows: "Section 2.2.5.2."

Condition Impact Statement: N/A

Requested Action: Accept.

60. **Condition III.7.B.d.39. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-8, Line 28, delete ", etc."

Condition Impact Statement: N/A

Requested Action: Accept.

61. **Condition III.7.B.d.40. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-8, Line 41, delete "special-case" and replace with: "special cases."

Condition Impact Statement: N/A

Requested Action: Accept.

62. **Condition III.7.B.d.41. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-8, Lines 45 through 47 and Page 2-9, Line 1, delete all text to the word "... contamination" and replace with: "Sampling is performed in accordance with WAC 173-303-110(2). A representative sample is obtained for chemical screening."

Condition Impact Statement: N/A

Requested Action: Accept.

63. **Condition III.7.B.d.42. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-9, Line 11, delete the phrase "shipping documentation" and replace it with "waste profile."

Condition Impact Statement: N/A

Requested Action: Accept.

64. **Condition III.7.B.d.43. Key Comment:** imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Add the following paragraph describing quality assurance to Section 2.2.5: "All confirmation activities shall be governed by TSD unit-specific governing documentation and performed in a consistent manner. Confirmation records are kept in a traceable, defensible manner. Records must be maintained in a protective manner, e.g., protected from fire, water, access and/or tampering by unauthorized personnel. In addition, electronic records must be protected from electromagnetic damage."

Condition Impact Statement: This condition would incorporate redundant recordkeeping requirements in excessive detail as part of the waste analysis plan.

Requested Action: Delete this condition. Alternatively, strike all language following the first sentence so the condition reads as follows:

Add the following text to Section 2.2.5. "All confirmation activities will be performed in accordance with TSD unit-specific governing documentation and performed in a consistent manner. Confirmation records will be kept in accordance with Permit Condition II.I.1.b."

Comment Justification: WAC 173-303-380 states "the owner or operator of a facility must keep a written operating record at their facility". WAC 173-303-380 does not require specific format for

recordkeeping. This condition incorporates redundant recordkeeping requirements in excessive detail. Permit Condition II.I.1.b., requires retention of all records required by WAC 173-303-300, which includes records associated with confirmation activities, but does not specify detailed procedures for recordkeeping.

Ecology's Response: Ecology disagrees with the Requested Action.

Contrary to the comment, this condition does not specify procedures or format for recordkeeping; however, it does identify that all confirmation activities need to be governed by procedures and need to be performed in a consistent manner. The condition also identifies requirements that confirmation records be traceable, defensible, and protected from situations that would result in loss of the records.

This condition was written to address Ecology's concern that QA/QC for confirmation was not addressed adequately in the permit application. Ecology believes that confirmation must be performed in a consistent manner on all waste shipments and that written procedures ensure a basis for consistency. Ecology agreed to substitute the phrase "controlling documentation" for "standard operating procedures" to alleviate the Permittees' (i.e., Hanford contractors') concern that USDOE would interpret the Permit to require a controlled manual under the USDOE system. Ecology's expectation, however, was that these would be TSD unit-specific procedures (e.g., desk instructions, which also commonly are called standard operating procedures).

This condition describing recordkeeping requirements for the TSD unit is justified by the General Conditions which describe that information required in a TSD unit's operating record is to be specified in the TSD unit-specific chapter. Because these records are related to waste analysis, it is appropriate to address these requirements in the WAP.

Specifically, Permit Condition II.I.1 states "... A TSD unit-specific Operating Record shall be maintained for each TSD unit at a location identified in Parts, III, V, and VI of this Permit. Each TSD unit-specific Operating Record shall be included by reference in the Facility Operating Record. Information required in each TSD unit-specific Operating Record is identified on a unit-by-unit basis in Part II, V, or VI of this Permit. The Facility Operating Record shall include, but not be limited to, the following information: ... II.I.1.b Records and results of waste analyses required by WAC 173-303-300; ... II.I.1.j Documentation (e.g., waste profile sheets) of all dangerous waste transported to or from any TSD unit subject to this Permit. This documentation shall be maintained in the receiving unit's Operating Record from the time the waste is received." These General Permit Conditions support this condition regarding the TSD unit-specific Operating Record. Clearly, the Permit may identify, in the TSD unit-specific chapter, records to be retained that are not identified in the General Conditions, because the information is not limited to the list given in Part II.

Ecology believes that it is reasonable that the unit-specific condition identify requirements for storage and retention that apply to the TSD unit. Ecology intends to remedy that omission in the General Conditions when the Permit is reissued in 2004.

The nature of the comment does identify that the condition needs to be modified to clarify that these records are part of the TSD unit-specific Operating Record and to require the location to be identified. The condition also will be modified so that it is no longer an insertion of text into the WAP.

Permit Condition III.7.B.d.43. is revised to read as follows: "All confirmation activities shall be governed by TSD unit-specific controlling documentation and performed in a consistent manner. Confirmation records shall be kept in a traceable, defensible manner. As part of the TSD unit-specific Operating Record, these records must be maintained in a protective manner (e.g., protected from fire, water, access and/or tampering by unauthorized personnel). In addition, electronic records must be protected from electromagnetic damage. A modification to the WAP must be submitted within thirty (30) days following the effective date of this Permit, to identify the location of WAP components of the TSD unit-specific Operating Record. Upon approval by Ecology, this information shall be incorporated as a Class 1 permit modification or, if necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification."

65. **Condition III.7.B.d.44.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: If a false negative occurs as described in line 24, page 2-9, the corrective actions mentioned in line 26 must include the re-evaluation of all affected video tapes/records since the previous acceptable QC check. If any results are questionable, those affected drums must be reevaluated and handled appropriately.

Condition Impact Statement: This condition should be rewritten to properly address quality control for all physical screening parameters used.

Requested Action: Rewrite this condition to replace Section 2.2.5.1 of the waste analysis plan with the following text: "**2.2.5.1 Physical Screening Quality Control.** This section describes the QC used by the WRAP operating organization to ensure that quality data are obtained when performing physical screening methods identified in Section 2.2.2, except visual inspection. Visual inspection does not consist of the use of instrumentation or chemical tests. Therefore, QC for visual inspection depends on appropriate training for the individual(s) performing the test. For the remaining physical screening tools (NDE, NDA, and Dose Rate Profile), quality controls for these methods will be incorporated in accordance with manufacturer's instructions or site-specific protocols. If any results are questionable, those affected drums must be re-evaluated and handled appropriately."

Comment Justification: This condition would address an excessive level of detail for quality control and would only apply to one physical screening tool. The Permittees are committed to applying quality control in physical screening activities and intend to resolve issues associated with false negatives; therefore, the Permittees request that the text proposed by Permittee's be incorporated into the Permit.

Ecology's Response: Ecology disagrees with the Requested Action.

However, Ecology is pleased by the comment that "The Permittees are committed to applying quality control in physical screening activities and intend to resolve issues associated with false negatives . . ." However, the suggested alternate condition does not provide an adequate description of procedures for quality control for the physical screening methods. Ecology expects inclusion of descriptions of procedures, not just vague references to manufacturers' instructions or site-specific protocols. See Condition II.E.2.d.iv. and -vii. In the absence of a standalone QA/QC plan, the information is expected to be part of the WAP. See Condition II.E.1.

Regarding the Condition Impact Statement which states: "This condition should be rewritten to

properly address quality control for all physical screening parameters used," Ecology has addressed quality control for the NDA and dose rate profile in Condition III.7.B.d.45.

66. **Condition III.7.B.d.45.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 2-9, in Section 2.2.5.1, note that quality control has not been presented for non-destructive assay (NDA) or for dose rate profile. Until such time that text describing those physical screening options is provided to Ecology for review and approval, the required revisions are made, the public comment conducted, and the text becomes an enforceable condition of this WAP, all physical screening must be by visual observation and NDE only, subject to other enforceable conditions of this Permit.

Condition Impact Statement: This condition would deny the use of legitimate physical screening tools until the Department of Ecology reviews and approves quality control efforts.

Requested Action: Delete this condition. The text provided in the Requested Action for Draft Permit Condition III.7.B.d.44 provides a comprehensive approach to physical screening quality control.

Comment Justification: WAC 173-303-300(5)(b) requires waste analysis plans to include "the methods of obtaining or testing for these parameters". WAC 173-303-110(1) states "Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation". The requirements of WAC 173-303-300 are not intended to require such prescriptive conditions in permits. WAC 173-303-110 imposes quality control procedures on designation activities when testing is used in accordance with WAC 173-303-070(3)(c)(i), but does not require quality control procedures to be incorporated into permits or waste analysis plans. This condition would limit the ability to use legitimate physical screening options without the Department of Ecology-approved quality control procedures. Refer to related response to Draft Permit Condition III.7.B.d.44.

Ecology's Response: Ecology disagrees with the Requested Action.

See the response to the comment on Condition III.7.B.d.44. Also, contrary to the Comment Justification, General Condition II.E requires a QA/QC plan. Ecology expects the QA/QC plan, or its equivalent text in the WAP, to include descriptions of the quality control procedures (see Condition II.E.2.a.). Ecology believes that the condition suggested in the previous comment "... quality controls for these methods will be incorporated in accordance with manufacturer's instructions or site-specific protocols" is not adequate because it does not describe the procedure for each method (NDA and Dose Rate Profile). Furthermore, "manufacturer's instructions or site-specific protocols" is a vague statement.

This condition is not intended to limit the ability of the Permittees to use legitimate physical screening options, rather it is intended to require the Permittees to describe the analytical and quality control procedures in the WAP, as required by WAC 173-303-300(5) and Conditions II.D and II.E. Ecology's review and approval of the text is as for any other permit application or permit modification.

Ecology structured this condition so that the Permittees are not required to adhere to an enforceable compliance schedule as is stated in many other permit conditions, but are given the opportunity to

provide this information on their own schedule.

67. **Condition III.7.B.d.46.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The equipment requirements of Table 4-1, as amended by any Permit conditions, apply to sampling for chemical screening. In addition, the following sampling equipment may be used in sampling for chemical screening: (1) For liquids and slurries – dip, tank, bomb, and bailer samplers, as well as tube-type samplers (e.g., thin-walled Shelby tubes, split spoons, probes), and (2) For sludges and solids – Tube-type samplers (as above) and augers; for small containers, a spoon may be used in place of a scoop.

Condition Impact Statement: N/A

Requested Action: Accept.

68. **Condition III.7.B.d.47.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-9, Lines 30 through 47 and Page 2-10, Lines 1 through 4, delete the text and replace with the following: "The required chemical screening quality control includes, but is not limited to, the following:

- ♦ Containers and equipment of the appropriate size and that are chemically compatible with the waste and all testing reagents will be used.
- ♦ A documented source of reagent water will be used.
- ♦ All chemicals and test kits shall be identified in the logbook/operating record by manufacturer; lot number(s) or, if no lot number is present, by date of manufacture; date of receipt; and expiration date (if none provided or not applicable, so indicate). All chemicals and test kits must be labeled so that they are traceable to the logbook/operating record.
- ♦ All chemical preparations, i.e., chemical mixtures or solutions, shall be documented in logbook/operating record by the method of preparation, e.g., weight or volume of chemical(s), identity of solute, volume or weight of solute, final concentration, as well as the name of the preparer, preparation date, expiration date. They must be labeled completely and traceable to the preparation.
- ♦ For each sampler, once each calendar quarter, at a minimum, one sample shall be sampled in duplicate and analyzed.
- ♦ One in 20 analyses at a minimum will be performed in duplicate. The duplicate sample shall not be the sampling duplicate.
- ♦ The results of quality control checks for each test kit lot or periodic testing and for daily quality control checks including equipment calibration will be recorded in a defensible manner."

Condition Impact Statement: The condition would impose an excessive level of control by incorporating extensive detail into the permit regarding chemical screening activities.

Requested Action: Rewrite the condition to read as follows: "Delete lines 29 through 47 on page 2-9, and lines 1 through 9 on page 2-10. Add the following text to line 29: "**2.2.5.2 Chemical Screening Quality Control.** This section describes the QC used by the WRAP operating organization to ensure that appropriate data are obtained when performing chemical screening

methods identified in Section 2.2.3.

For all chemical screening parameters:

- ◆ Each lot will be evaluated to determine that the lot is usable. Unstable reagents will be accounted for when determining the usability of the lot.
- ◆ For each lot, the source, concentration, date of receipt, lot number, and manufacturer/preparer (as applicable) will be maintained in a logbook.
- ◆ For individual chemical screening parameters, QC checks will be performed in accordance with manufacturer's instructions or site-specific protocols.

Comment Justification: WAC 173-303-300(5)(b) requires waste analysis plans to include "the methods of obtaining or testing for these parameters". WAC 173-303-110(1) states "Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation". The requirements of WAC 173-303-300 are not intended to require such prescriptive conditions in permits. WAC 173-303-110 imposes quality control procedures on designation activities when testing is used in accordance with WAC 173-303-070(3)(c)(i), but does not require quality control procedures to be incorporated into permits or waste analysis plans. WAC 173-303-300 requires written waste analysis plans to include the methods of testing used, but does not require development of extensive permit conditions regarding quality control. The Permittees perform chemical screening analyses according to manufacturer's instructions or appropriate site-specific protocols.

The text originally provided in the WRAP permit application requires revision to accurately reflect the use of chemical screening parameters in the verification program. Subsequent efforts to provide appropriate information regarding chemical screening have resulted in the development of a condition that would require the Permittees to make changes to the existing chemical screening quality control system. Therefore, the Permittees recommend incorporation of the suggested text to replace the information originally provided in Section 2.2.5.2, lines 29 through 47 on page 2-9 and lines 1 through 9, on page 2-10. The suggested text provides for a condition that more accurately reflects chemical screening quality control. Refer to comment on Draft Permit Condition III.7.B.d.45.

Furthermore, the fifth bullet of the Draft Permit condition cannot be met if there are no samples taken during the quarter. The intent of the sixth bullet, last sentence is not clear.

Ecology's Response: Ecology disagrees with the Requested Action.

General Permit Condition II.E. requires the Permittees to include a QA/QC plan, or equivalent, with all WAPs required by the Permit. The condition also includes items that are to be addressed. By comparison to this condition, Ecology has determined that the quality control measures for sampling and chemical screening, as provided by the Permittees, are inadequate. The Permittees state that "they perform chemical screening analyses according to manufacturer's instructions or appropriate site-specific protocols," but failed to provide adequate descriptions of the quality control procedures in the WAP and also did not provide that information in their comment. Ecology believes the quality control measures specified in this condition are reasonable because they reflect standard practice (see U.S. EPA, SW-846, "Test Methods for Evaluating Solid Waste") and address items in Condition II.E.

Ecology has revised this condition so that it is a statement of requirements and is no longer an insertion of text into the WAP. In addition, Ecology has deleted the fifth bulleted item and revised

some of the wording.

Permit Condition III.7.B.d.47. is revised to read as follows: The required quality control for chemical screening includes, but is not limited to, the following:

- ♦ Containers and equipment of the appropriate size and are chemically compatible with the waste and all testing reagents shall be used.
- ♦ A documented source of reagent water shall be used.
- ♦ All chemicals and test kits shall be identified in the logbook/operating record by manufacturer; lot number(s) or, if no lot number is present, by date of manufacture; date of receipt; and expiration date (if none provided or not applicable, so indicate). All chemicals and test kits must be labeled so that they are traceable to the logbook/operating record.
- ♦ All chemical preparations, i.e., chemical mixtures or solutions, shall be documented in logbook/operating record by the method of preparation, e.g., weight or volume of chemical(s), identity of solute, volume or weight of solute, final concentration, as well as the name of the preparer, preparation date, expiration date. They must be labeled completely and traceable to the preparation.
- ♦ One in 20 analyses at a minimum shall be performed in duplicate.
- ♦ The results of quality control checks for each test kit lot or periodic testing and for daily quality control checks including equipment calibration, shall be recorded in a defensible manner.

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69. **Condition III.7.B.d.48.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-10, Lines 6 through 9, delete the text and insert the following under a new bulleted heading "Equipment and Quality Control Checks": "The WRAP operating organization will perform the following quality control checks on each new test kit or reagent lot to be followed by rechecks on at least a six-month interval, unless a more frequent period is specified in the test kit instructions or the quality control check method.

- (a) **Ignitability/Headspace Screening for Volatile Organic Compounds:** Headspace screening equipment shall be calibrated using known standards in accordance with the manufacturer's instructions. In addition, the equipment will be quality control checked on each day of use by sampling the headspace of a reagent containing hexane. If it does not perform as expected, the equipment will be recalibrated.
- (b) **Peroxide Screening:** The quality control check for the peroxide test paper is as follows: (1) Moisten the test paper with water. Add two drops of 3% hydrogen peroxide solution to the test paper. The test paper should turn blue. If it does not, replace the test paper or reject the lot. (2) Add a drop of potassium dichromate solution to approximately ½-inch of water in a test tube. Place the peroxide test paper in the solution. The test paper should not turn blue. If it changes color, replace the test paper or reject the lot. (3) Add one drop of nitric acid to the test paper. The paper should turn yellow. If it does not, replace the test paper or reject the lot.
- (c) **Paint Filter Liquids Test:** The quality control check consists of visually inspecting each filter, prior to performing each test, to ensure that it is in good condition and is not torn or ripped. If it is damaged, the filter shall be replaced.
- (d) **PH Screen:** The quality control check for the pH test paper is as follows: (1) Place a drop of concentrated hydrochloric acid onto the test paper; the pH should be 0±1. (2) Place a drop of

acetic acid onto the test paper; the pH should be 2 to 3 ± 1 . (3) Place a drop of reagent water onto the test paper; the pH should be 7 ± 1 . (4) Place a drop of ammonium hydroxide onto the test paper; the pH should be 11 to 12 ± 1 . (5) Place a drop of sodium hydroxide onto the test paper; the pH should be 14 ± 1 . If the pH on most of these tests is not as specified, replace or reject the pH paper. If only one test produces results that are different than stated, check or replace the reagents. The most important check is the reagent water, although it frequently will have a slightly acidic pH. All of the stated pH checks also may be performed using pH buffer solutions.

- (e) **Oxidizer Screen:** The quality control check for the oxidizer test paper is as follows: Moisten the test paper with 3M hydrochloric acid. Add two drops of potassium dichromate solution to the paper. The paper should turn black. If the test is negative, replace the paper or reject the lot.
- (f) **Water Reactivity Screen:** The quality control check consists of testing the pH of the reagent water. If the pH is not 7 ± 1 , the reagent water shall be replaced. Note that this check may be performed as part of the pH quality control check.
- (g) **Cyanide Screen:** The ferrous ammonium citrate reagent is the most unstable reagent used in this test. The ferrous ion will oxidize to ferric upon standing for even a short period of time. If the reagent has a thick opaque color or if there are particulates floating in the solution, the reagent should be replaced. To check the ferrous ammonium citrate, perform both of the following tests: (1) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube. Add a drop of 1,10-phenanthroline to the test tube. The solution should turn blood red. (2) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube (this is solution 1). Add a small amount of potassium ferrocyanide to a test tube of water (this is solution 2). Add a small amount of solution 1 to solution 2 to form solution 3. Add a $\frac{1}{4}$ -inch of 3 Normal (i.e., 3N or 3M) hydrochloric acid to solution 3. The solution should turn dark blue. If either test is negative, replace the reagent or reject the lot.
- (h) **Sulfide Screen:** The quality control check for the sulfide test paper is as follows: (1) Add 1 to 2 drops of reagent water to the sulfide test paper. (2) Add two drops of 3 Normal (3N or 3M) hydrochloric acid to two sodium sulfide flakes in a disposable watch glass or weighing boat. (3) Touch the sulfide test paper to the flakes. The test paper should turn brown, black, or silvery. If the test is negative, replace the test paper or reject the lot.
- (i) **HOC Screen:** The quality control check is to perform the test according to the test kit instruction on a reagent containing approximately 50 ppm of a chlorinated organic compound. If the test does not indicate a positive result, replace or reject the lot. If two or more test kit lots do not indicate a positive result, replace and/or test the reagent and retest the test kit lots.

Condition Impact Statement: This condition would impose an excessive level of control by incorporating detailed requirements regarding chemical screening control.

Requested Action: Delete this condition.

Comment Justification: The WRAP permit application contains an adequate level of detail regarding waste analysis and is consistent with the intent of WAC 173-303-300. The Requested Action in response to Draft Permit Condition III.7.B.d.47 provides a comprehensive approach to chemical screening quality control. This condition would create ambiguity regarding enforceable conditions of chemical screening activities.

Ecology's Response: Ecology disagrees with the Requested Action.

General Permit Condition II.E. requires the Permittees to include a QA/QC plan, or equivalent, with all WAPs required by the Permit. The condition also includes items that are to be addressed. By comparison to this condition, Ecology has determined that the description of quality control for chemical screening, as provided in the WAP, is inadequate.

The text of this draft permit condition was provided by the Permittees. See Ecology's Response to the Permittees' Preamble Comment P5. Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure for each chemical screening parameter/procedure. If an adequate description is not provided, the permit condition as provided for public comment will become enforceable.

Permit Condition III.7.B.d.48. is revised to read as follows: "The Permittees shall prepare an adequate description of quality control for chemical screening. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 2-10, Lines 6 through 9, under a new bulleted heading "Equipment and Quality Control Checks" of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition:

Page 2-10, Lines 6 through 9, delete the text and insert the following under a new bulleted heading "Equipment and Quality Control Checks": "The WRAP operating organization will perform the following quality control checks on each new test kit or reagent lot to be followed by rechecks on at least a six-month interval, unless a more frequent period is specified in the test kit instructions or the quality control check method.

- (a) Ignitability/Headspace Screening for Volatile Organic Compounds: Headspace screening equipment shall be calibrated using known standards in accordance with the manufacturer's instructions. In addition, the equipment will be quality control checked on each day of use by sampling the headspace of a reagent containing hexane. If it does not perform as expected, the equipment will be recalibrated.
- (b) Peroxide Screening: The quality control check for the peroxide test paper is as follows: (1) Moisten the test paper with water. Add two drops of 3% hydrogen peroxide solution to the test paper. The test paper should turn blue. If it does not, replace the test paper or reject the lot. (2) Add a drop of potassium dichromate solution to approximately ½-inch of water in a test tube. Place the peroxide test paper in the solution. The test paper should not turn blue. If it changes color, replace the test paper or reject the lot. (3) Add one drop of nitric acid to the test paper. The paper should turn yellow. If it does not, replace the test paper or reject the lot.
- (c) Paint Filter Liquids Test: The quality control check consists of visually inspecting each filter, prior to performing each test, to ensure that it is in good condition and is not torn or ripped. If it is damaged, the filter shall be replaced.
- (d) pH Screen: The quality control check for the pH test paper is as

follows: (1) Place a drop of concentrated hydrochloric acid onto the test paper; the pH should be 0 ± 1 . (2) Place a drop of acetic acid onto the test paper; the pH should be 2 to 3 ± 1 . (3) Place a drop of reagent water onto the test paper; the pH should be 7 ± 1 . (4) Place a drop of ammonium hydroxide onto the test paper; the pH should be 11 to 12 ± 1 . (5) Place a drop of sodium hydroxide onto the test paper; the pH should be 14 ± 1 . If the pH on most of these tests is not as specified, replace or reject the pH paper. If only one test produces results that are different than stated, check or replace the reagents. The most important check is the reagent water, although it frequently will have a slightly acidic pH. All of the stated pH checks also may be performed using pH buffer solutions.

- (e) Oxidizer Screen: The quality control check for the oxidizer test paper is as follows: Moisten the test paper with 3M hydrochloric acid. Add two drops of potassium dichromate solution to the paper. The paper should turn black. If the test is negative, replace the paper or reject the lot.
- (f) Water Reactivity Screen: The quality control check consists of testing the pH of the reagent water. If the pH is not 7 ± 1 , the reagent water shall be replaced. Note that this check may be performed as part of the pH quality control check.
- (g) Cyanide Screen: The ferrous ammonium citrate reagent is the most unstable reagent used in this test. The ferrous ion will oxidize to ferric upon standing for even a short period of time. If the reagent has a thick opaque color or if there are particulates floating in the solution, the reagent should be replaced. To check the ferrous ammonium citrate, perform both of the following tests: (1) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube. Add a drop of 1,10-phenanthroline to the test tube. The solution should turn blood red. (2) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube (this is solution 1). Add a small amount of potassium ferrocyanide to a test tube of water (this is solution 2). Add a small amount of solution 1 to solution 2 to form solution 3. Add a $\frac{1}{4}$ -inch of 3 Normal (i.e., 3N or 3M) hydrochloric acid to solution 3. The solution should turn dark blue. If either test is negative, replace the reagent or reject the lot.
- (h) Sulfide Screen: The quality control check for the sulfide test paper is as follows: (1) Add 1 to 2 drops of reagent water to the sulfide test paper. (2) Add two drops of 3 Normal (3N or 3M) hydrochloric acid to two sodium sulfide flakes in a disposable watch glass or weighing boat. (3) Touch the sulfide test paper to the flakes. The test paper should turn brown, black, or silvery. If the test is negative, replace the test paper or reject the lot.
- (i) HOC Screen: The quality control check is to perform the test according to the test kit instruction on a reagent containing approximately 50 ppm of a chlorinated organic compound. If the test does not indicate a positive result, replace or reject the lot. If two or more test kit lots do not indicate a positive result, replace and/or test

the reagent and retest the test kit lots.”

70. **Condition III.7.B.d.49.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The phrase "shipping documentation" is used throughout Section 3.0. The Permit requires that the shipping documentation be evaluated against the "waste profile" so that only approved waste is received by the TSD unit. Therefore, ultimately each physical and chemical screening result must be in agreement with the waste profile to determine the acceptability of the result and, thereby, whether or not the container fails.

Condition Impact Statement: N/A

Requested Action: Accept.

71. **Condition III.7.B.d.50.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: The result of failure (i.e., "a container fails . . . ") as described in Section 3.1, Physical Screening Parameters, under the heading "Failure criteria" may be a return to the generator, a re-profiling of the waste stream, or treatment (processing or reprocessing) at the WRAP TSD unit. The result of failure for chemical screening (e.g., failing the test, constitutes failure), as described in Section 3.2, Chemical Screening Parameters, under the heading "Tolerance" may be the same outcomes as for physical screening. In addition, a failure of the chemical screening may be the expected outcome of the test, dependent upon the waste profile.

Condition Impact Statement: N/A

Requested Action: Delete this condition.

Comment Justification: This condition is redundant to the text of Section 1.1.1.3.3 of the waste analysis plan, which comprehensively addresses resolution of conformance issues. The condition is confusing and does not provide a clear, enforceable condition. This condition becomes more confusing when compared to the final sentence of Draft Permit Condition III.7.B.d.63., which seems to indicate that failure of a waste means that the waste will be returned to the generating unit.

Ecology's Response: Ecology disagrees with the Requested Action.

Unfortunately, the Permittees use the term "failure" in multiple places in the WAP with multiple meanings, leading to multiple different outcomes. This lack of clarity is a concern to Ecology. Ecology discussed this issue with the Permittees during the meetings regarding the review of WAP prior to submission of the certified application in 1998. The Permittees had an opportunity to clarify the text before submitting the certified permit application, but did not do so. Therefore, this condition was transcribed from notes on that discussion. Also see Ecology's Response to the Permittees' Preamble Comment P9, item 5.

72. **Condition III.7.B.d.51.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Lines 2 and 3,

delete the text and replace with the following: "Physical and chemical screening parameters for verification must be chosen from those in Sections 3.1 and 3.2. Parameters for waste designation and to meet LDR requirements are addressed in Section 3.3."

Condition Impact Statement: The condition includes reference to generator activities, which is inconsistent with regulations that exempt generator activities from permitting requirements per WAC 173-303-600(3)(d).

Requested Action: Delete the second sentence of this condition. Alternatively, reword the last sentence of the condition to read: "Other sampling and analysis parameters are addressed in Section 3.3."

Comment Justification: WAC 173-303-600(3)(d) provides that "final facility standards do not apply to: . . . a generator accumulating waste onsite in accordance with WAC 173-303-200." There is no basis for imposing sampling and analysis permit conditions on generator activities (refer to comment response to Draft Permit Condition III.7.B.d.20.).

Ecology's Response: Ecology disagrees with the Requested Action.

According to the Dangerous Waste Regulations, it is appropriate to address generator requirements in the WAP, as supported by WAC 173-303-300(5)(e). The regulation states "Waste analysis plan . . . the plan must contain at least: . . . The waste analyses which generators have agreed to supply." At the Permittees request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address the subject of "waste analyses which generators have agreed to supply" on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303-300(5)(e) in each TSD unit's WAP.

73. **Condition III.7.B.d.52. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 7, replace the phrase "could be used to perform" with the phrase "are approved for use in performing" so that the sentence reads as follows: "The following methods are approved for use in performing physical screening."

Condition Impact Statement: N/A

Requested Action: Accept.

74. **Condition III.7.B.d.53. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 17, replace the phrase "could be" with the word "are" so the sentence reads as follows: "Homogenous loose solids are probed to determine the presence of material not documented . . ."

Condition Impact Statement: N/A

Requested Action: Accept.

75. **Condition III.7.B.d.54. Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Lines 35 through 38, delete the text and replace with the following text: "The container is scanned top-to-bottom and side-to-side with a non-destructive examination (NDE) system according to documented and approved procedures. At a minimum, the lifts, conveyors rotators, and manipulators for the real-time imaging systems shall be capable of handling drums up to 85-gallons in size and up to 1000 pounds in weight and boxes up to 7000 pounds in weight. The minimum image quality, X-ray system performance, and system operator requirements shall be in accordance with the documented specifications for operating the NDE system. The X-ray components shall include the following: (1) a nine-inch (diagonal) entrance field image intensifier, or equivalent, (2) a twelve-inch, high resolution video display monitor, (3) a video printer, and (4) a high-performance, broadcast quality, S-VHS/VHS recorder/player. Quality assurance measures that indicate X-ray imaging quality shall be utilized and documented during equipment startup. For verification activities by NDE, data are observed on a video monitor and captured on video tape to provide a record. Personnel experienced in the interpretation of NDE imagery will record their observations. These observations are then compared to the inventory of container contents on the shipping documentation and also must be in agreement with the waste profile."

Condition Impact Statement: This condition would impose an excessive level of control by incorporating extensive detail regarding nondestructive examination activities in excess of WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it." WAC 173-303-300 contains adequate requirements for testing of waste without specifying the need for the level of detail that this condition would require. Nondestructive examination is performed to applicable manufacturer's instructions or site-specific protocols. WAC 173-303-300 does not require incorporation of such detail as a permit condition. The Permittees believe that the description provided in the deleted text is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the description of NDE provided in the WAP is not adequate. NDE is a substitute method of visual examination or physical description. Because this method requires the use of equipment that must be operated according to procedures, the WAP needs to include a description [WAC 173-303-300(5)].

The Permittees were asked to provide a description of the NDE equipment and its method of operation; therefore, the text of this draft permit condition was provided by the Permittees. See Ecology's Response to the Permittees' Preamble Comment P5.

76. **Condition III.7.B.d.55.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-2, Line 43, replace the phrase "could be used to perform" with the phrase "are approved for use in performing" so the sentence reads as follows: "The following methods are approved for use in performing chemical screening."

Condition Impact Statement: N/A

Requested Action: Accept.

77. **Condition III.7.B.d.56.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-3, Lines 28 and 29, in addition to the text provided, the following condition applies: The required method for the Paint Filter Liquids Test is Method 9095 in the U.S. Environmental Protection Agency (EPA), SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (the most recently promulgated version).

Condition Impact Statement: N/A

Requested Action: Accept.

78. **Condition III.7.B.d.57.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-3, Lines 41 through 44, delete the text and replace with the following: "Method: Full range pH paper with a stated precision of 1.0 pH unit and a corresponding color chart is used for testing. For aqueous samples, a representative test portion of the sample is introduced onto the strip of pH paper. For solids, sludges, and non-aqueous liquids, a representative test portion is mixed with an approximately equal amount of water. The aqueous portion (extractant) of this mixture is then introduced onto the strip of pH paper. The paper is compared visually to the color chart to determine the best color match. The pH is recorded to the nearest whole pH unit."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: This condition would impose a level of detail for pH paper that is overly prescriptive. The Permittees believe that the description originally submitted in the WRAP permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the original text of the WAP did not provide an adequate description of the procedure for pH determination as required by WAC 173-303-300 and Condition II.E.2.d.iv. As an alternative, the Permittees did not reference a standard method from a referenced source such as the American Society for Testing and Materials (ASTM) or the Association of Official Analytical Chemists (AOAC), thereby making a description of the procedure necessary. Therefore, Ecology accepted text from the Permittees after submission of the certified permit application. See Ecology's Response to the Permittees' Preamble Comment P5.

79. **Condition III.7.B.d.58.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 7 and 8, delete the text and replace with the following: "Method: Potassium iodide (KI) starch test paper is used for testing. KI oxidizes to iodine (I₂) in the presence of starch to yield a dark blue-black coloration on the test paper. A representative test portion of the sample is placed on a disposable watch dish or weighing boat. The KI test paper strip is acidified with 3M hydrochloric acid (HCl) and placed in contact with the test portion. A darkening of the test paper is a positive indication of the oxidizing properties of the sample."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it." WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the oxidizer screen that is overly prescriptive. The Permittees believe that the description originally submitted in the WRAP permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See response to Comment on Condition III.7.B.d.57.

80. **Condition III.7.B.d.59.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 19 through 21, delete the text and replace with the following: "Method: Water reactivity of waste is determined by adding a representative test portion to an approximately equal volume of water in a disposable watch glass or weighing boat. The mixture is observed for positive indications of water reactivity such as temperature change (increase or decrease), gas evolution, gelling or polymerization."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the

water reactivity screen that is overly prescriptive. The Permittees believe that the description originally submitted in the WRAP permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See response to Comment on Condition III.7.B.d.57.

81. **Condition III.7.B.d.60.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 32 through 35, delete the text and replace with the following: "Method: A ferrous ammonium citrate solution is used as a colorimetric indicator of free cyanides and some complex cyanides. The reagent turns a dark Prussian blue color due to the formation of blue iron ferrocyanide in the presence of cyanide under acidic conditions. A representative test portion is placed on a disposable watch glass or weighing boat. An approximately equal amount of water is added to solid matrices. The ferrous ammonium citrate solution is added and mixed into the test portion. The mixture is then acidified with 3M hydrochloric acid (HCl). A dark blue color, if present, indicates the presence of cyanides."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the cyanide screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally submitted in the WRAP permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See response to Comment on Condition III.7.B.d.57.

82. **Condition III.7.B.d.61.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 46 through 49, delete the text and replace with the following: "Method: are used for testing. Under acidic conditions, sulfide compounds release hydrogen sulfide (H₂S) and, in the presence of this H₂S, the lead acetate paper changes to a silvery brown or black color due to the formation of lead sulfide (PbS). A representative test portion is placed on a disposable watch glass or weighing boat. The test portion is acidified with 3M hydrochloric acid (HCl). A lead acetate test paper strip is dampened with water and placed near the acidified test portion. A darkening of the test paper is a

positive indication of the presence of sulfides in the test portion."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the sulfide screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally submitted in the WRAP permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See response to Comment on Condition III.7.B.d.57.

83. **Condition III.7.B.d.62.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Lines 11 through 14, delete the text and replace with the following: "Method: A precise amount of oil (i.e., the test portion) is placed into the first of two disposable test tubes provided with the test kit. An ampule containing a colorless catalyst is broken and the contents are mixed thoroughly with the test portion. A second ampule containing metallic sodium is broken and the sodium, activated by the catalyst, strips chlorine from any chlorinated organic compounds present to form sodium chloride. An aqueous buffer solution is added to the test portion. This neutralizes the excess sodium and extracts the sodium chloride into the water. The water layer is then separated from the oil and decanted into the second test tube. An ampule containing a precise amount of reagent is broken and the contents mixed with the water. An ampule containing an indicator is then broken and the contents mixed with the water. The color of the mixture is dependant on the amount of chlorinated organic compounds in the original test portion of oil."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the

halogenated organic carbon screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally submitted in the WRAP permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See response to Comment on Condition III.7.B.d.57.

84. **Condition III.7.B.d.63.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Lines 16 through 17, delete the text and replace with the following: "Tolerance: The presence of halogenated organic compounds (HOCs) in the waste requires that either (1) the generator must supply laboratory data obtained by the SW-846, Method 8082 for the waste in the specific container, or (2) the specific container of the waste stream must be sampled by the TSD unit and the waste analyzed by SW-846 Method 8082 to determine if the waste contains polychlorinated biphenyls (PCBs). If the waste does contain PCBs, the waste profile must be re-evaluated to determine if the waste is TSCA-regulated and, if the waste is not TSCA-regulated, then the quantitative analytical data must be useable to verify that the concentration of PCBs in the waste is less than 50 ppm. The waste fails if the waste stream is TSCA-regulated or the concentration of PCBs is equal to or greater than 50 ppm. The TSD unit may fail the waste (i.e., return it to the generator) without obtaining the quantitative analytical data."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements and would impose requirements on TSCA waste for which the Department of Ecology has no legal authority to regulate.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the halogenated organic carbon screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally provided in the WRAP permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

WAC 173-303-071(3)(k) specifically excludes Toxic Substances Control Act-managed polychlorinated biphenyls from the Dangerous Waste Regulations.

WAC 173-303-100(6) allows generators to designate halogenated organic carbons based on existing knowledge and also allows for the identity and concentration to be determined by applying either knowledge or by testing. This condition would impose specific laboratory testing on the generating unit for any waste that contains halogenated organic carbons or testing by WRAP in search of polychlorinated biphenyls, both without regulatory authority. In addition, WAC 173-303-600(3)(d) specifically excludes generators who are accumulating waste from final facility

standards. Refer to comment on Draft Permit Condition III.7.B.d.20.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the original text of the WAP did not provide an adequate description of "Tolerance" for the HOC chemical screening in that the outcome of "failure" is not described. This description is needed to clarify the text of the WAP. Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of "Tolerance" for this procedure.

Contrary to the comment which states "In addition, WAC 173-303-600(3)(d) specifically excludes generators who are accumulating waste from final facility standards.," Ecology emphasizes that it is appropriate to address generator requirements in the WAP, as supported by WAC 173-303-300(5)(e). The regulation states "Waste analysis plan . . . the plan must contain at least: . . . The waste analyses which generators have agreed to supply." At the Permittees' request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address the subject of "waste analyses which generators have agreed to supply" on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303-300(5)(e) in each TSD unit's WAP.

Note that the draft text with specific references to analyte concentrations regulated by the Toxic Substances Control Act TSCA has been removed from the condition.

Permit Condition III.7.B.d.63. is revised to read as follows: "The Permittees shall prepare an adequate description of "Tolerance" for the HOC chemical screening. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 3-5, Lines 16 through 17 of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification."

85. **Condition III.7.B.d.64.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Line 20, delete the phrase "Sample and".

Condition Impact Statement: N/A

Requested Action: Accept.

86. **Condition III.7.B.d.65.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Lines 21 and 22, delete the text and replace with the following: "Parameters needed to meet designation, characterization, and LDR requirements for waste stored and/or treated at WRAP are identified in Appendix A of this WAP."

Condition Impact Statement: This condition would contradict the WAC 173-303-600(3)(d) exemption for generators by incorporating requirements into the permit that apply to generators.

Requested Action: Rewrite this condition to read:

"Delete the text on page 3-5, lines 21 and 22 and replace it with the following: "Parameters needed to meet other waste characterization needs for waste stored and/or treated at WRAP are identified in Appendix A."

Comment Justification: WAC 173-303-600(3)(d) specifically excludes generator accumulation from the final facility standards. It is inappropriate for the Department to attempt to regulate generator activities through a RCRA permit (refer to comment response to Draft Permit Condition III.7.B.d.20.).

Ecology's Response: Ecology disagrees with the Requested Action.

According to the Dangerous Waste Regulations, it is appropriate to address generator requirements in the WAP, as supported by WAC 173-303-300(5)(e). The regulation states "Waste analysis plan . . . the plan must contain at least: . . . The waste analyses which generators have agreed to supply." These parameters apply to generators and to the TSD unit. At the Permittees request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address the subject of "waste analyses which generators have agreed to supply" on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303-300(5)(e) in each TSD unit's WAP.

87. **Condition III.7.B.d.66.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Delete the title of Section 4.0 and replace it with the following: "Selecting Sampling Procedures." The content of this section, as amended, applies to all sampling that is done by or at the direction of the TSD unit for (1) characterization of waste after processing, (2) LDR of treated waste, or (3) additional characterization, if needed, for treatment or disposal.

Condition Impact Statement: N/A

Requested Action: Accept.

88. **Condition III.7.B.d.67.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Lines 7 through 8, delete the text "or other approved sample preservation method for waste in accordance with 62 FR 62079" and replace with the following: "except as amended by the Permit."

Condition Impact Statement: This condition contains provisions that are inconsistent with SW-846.

Requested Action: Rewrite the condition to read as follows: Delete the text in lines 7 and 8 on page 4-2 and replace it with the following: "Sample preservation and holding times follow SW-846 protocol."

Comment Justification: Preservation and holding times will be applied appropriately to ensure accuracy and precision of testing data in accordance with SW-846. For data to be legally

defensible, preservation must be consistent with authoritative sources.

Ecology's Response: Ecology disagrees with the Requested Action.

As a general rule, the Hanford onsite laboratories do not adhere to the preservation and holding times specified in U.S. EPA, SW-846, "Test Methods for Evaluating Solid Waste" because of the radioactive nature of most waste samples. In some cases, the level of radioactivity in mixed waste samples would damage refrigeration units. In addition, the radioactivity is usually sufficiently high that biological agents are destroyed and, therefore, unable to cause decomposition or chemical transformation in samples. (The purpose of refrigeration as a means of sample preservation is to slow sample decomposition and chemical transformation.) Frequently, mixed waste samples are analyzed after the holding time has expired so that radioactive decay can reduce the dose rate of the samples. Rather than knowingly include a condition that will immediately lead to a violation (even if it is at the request of the Permittees), Ecology will retain the condition as stated.

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89. **Condition III.7.B.d.68.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: The following condition applies for the preservation and holding times for samples and for laboratory extracts of the samples. Waste samples are treated and preserved as necessary to protect the sample. Tables 2-36 and 4-1 in SW-846 contains recommended treatment/preservative and holding times. Not all samples require preservation and placing a holding time on a sample may not always be appropriate. Samples with a high concentration of the analyte or non-LDR samples may not require preservation, whereas aqueous samples and samples with low concentrations of the analyte or LDR samples require preservation. If the required preservation interferes with some of the analytes requested, then multiple aliquots of sample may need to be obtained for analysis. Samples taken for analysis of a persistent constituent or non-biologically degradable constituent may not require a holding time. For example, a sample for PCB analysis does not require a holding time (although the laboratory extractant is subject to a holding time). The recommended holding time and preservation for hexavalent chromium (Cr⁺⁶) listed in the Tables are required for all sample matrices unless the hexavalent chromium concentration is assumed to be represented by the total chromium in the sample. The recommended preservation and holding time for mercury (Hg) is required in all sample matrices. For the laboratory-prepared organic extracts (e.g., semi-volatile organic analysis and PCBs) the holding times listed in the Tables are required to be met for each extract.

Condition Impact Statement: This condition contains provisions that are inconsistent with SW-846.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-110 (1) states "All methods and publications listed in this section are incorporated by reference," (i.e., WAC 173-303-110(3)(a) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication, SW-846 (Third Edition (November 1986) as amended by Updates . . . and III (December 1996)". The Permittees believe that WAC 173-303-110, through incorporation of SW-846, Update III, by reference, is adequate for establishing appropriate preservation and holding times for samples and laboratory extracts. This condition would be inconsistent with SW-846.

The Requested Action, coupled with the response to Draft Permit Condition III.7.B.d.67, contains an appropriate level of detail for a permit condition and a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See response to Comment on Condition III.7.B.d.67.

90. **Condition III.7.B.d.69.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Line 11, delete the title of Section 4.5 and replace it with the following: "Establishing Quality Assurance and Quality Control Procedures for Sampling."

Condition Impact Statement: N/A

Requested Action: Accept.

91. **Condition III.7.B.d.70.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Line 19, the phrase "appropriate personnel" is defined as the sampler or a person who is directed by the sampler.

Condition Impact Statement: N/A

Requested Action: Accept.

92. **Condition III.7.B.d.71.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, insert the following after the sentence in line 20: "If sampling is conducted in a posted radiological zone, then the logbook entries may be made by a person who is outside the zone or by the sampler immediately after the sampling is completed."

Condition Impact Statement: N/A

Requested Action: Accept.

93. **Condition III.7.B.d.72.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Lines 20 through 21, delete the phrase "or copies of logs are maintained by the appropriate personnel after completion of sampling activities" and replace with the following: "are permanent records of the TSD unit and must be retained in the TSD unit operating record."

Condition Impact Statement: N/A

Requested Action: Accept.

94. **Condition III.7.B.d.73.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, insert the following text after line 21 as a new paragraph: "The log of sampling activities is kept in an inventoried, uniquely numbered, bound logbook with sequentially numbered pages. Any affixed information, e.g., pictures, copies of chain-of-custody documentation, shall be permanently attached to a logbook page and initialed and dated across the edge of the attached material onto the logbook page so that removal or tampering with the attachment(s) can be identified. No affixed material may be placed over any other affixed items or written entries. The requirements for defensible data recording apply, including correction of entries by single line cross-out, initial and date, and give reason for the change. A signature is required rather than initials if the correction is made by someone other than the original recorder. No entries shall be obliterated, e.g., "white out" must not be used. The identity of the person who is initialing the record must be easily determined."

Condition Impact Statement: This condition would impose excessive detail on the WRAP operating organization regarding how sampling logs are maintained.

Requested Action: Delete this condition. Alternatively, replace this condition with one that reads as follows: "The log of sampling activities described on page 4-2, lines 14 through 21 shall be kept in accordance with standard industrial data recording practices."

Comment Justification: WAC 173-303-380(1) states "the owner or operator of a facility must keep a written operating record at their facility". WAC 173-303-380 does not specify procedures for recordkeeping as this condition would. WAC 173-303-380 and Permit Condition II.I.1. require various records to be retained and maintained, but not to the level of specificity that would be incorporated through this condition. This condition would require recordkeeping of sampling activities to a level of detail that is inconsistent with regulatory requirements of WAC 173-303-380, and other permits issued by the Department of Ecology.

Ecology's Response: Ecology partly agrees with the Requested Action and will revise the draft permit condition.

Ecology believes the WAP needs to describe the procedure for data recording. The General Permit Conditions in Part II support this position. Condition II.E.1. states "All WAPs . . . required by this Permit shall include a quality assurance/quality control (QA/QC) plan, or equivalent . . ." In addition, Condition II.E.3 specifies that "Each QA/QC plan shall include a Data Management Plan, or equivalent, . . . this plan shall identify and establish data documentation materials and procedures . . . The plan shall also provide the format to be used to record . . ." Furthermore, Condition II.E.5 states "The level of QA/QC for the collection, preservation, transportation, and analysis of each sample which is required for implementation of this Permit, may be based upon Ecology approved Data Quality Objective (DQO) for the sample. These DQOs shall be approved by Ecology, in writing, or through incorporation of unit plans and Permits into Parts III, V, and/or VI of this Permit." When required to record data for regulatory and permit compliance, the standards of traceability and defensibility for evidence apply. This is the basis for the requirement for chain of custody for samples, as well.

Permit Condition III.7.B.d.73. is revised to read as follows: "The Permittees shall prepare an adequate procedural description of recordkeeping for sampling. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will be inserted on Page 4-2 after Line 21 as a new paragraph of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as

a Class 1 Permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification. If adequate description is not provided as specified herein, the following text shall be an enforceable condition:

Page 4-2, insert the following text after line 21 as a new paragraph: "The log of sampling activities is kept in an inventoried, uniquely numbered, bound logbook with sequentially numbered pages. Any affixed information, e.g., pictures, copies of chain-of-custody documentation, shall be permanently attached to a logbook page and initialed and dated across the edge of the attached material onto the logbook page so that removal or tampering with the attachment(s) can be identified. No affixed material may be placed over any other affixed items or written entries. The requirements for defensible data recording apply, including correction of entries by single line cross-out, initial and date, and give reason for the change. A signature is required rather than initials if the correction is made by someone other than the original recorder. No entries shall be obliterated, e.g., "white out" must not be used. The identity of the person who is initialing the record must be easily determined."

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95. **Condition III.7.B.d.74.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Lines 23 through 26, delete the text and replace with the following: "Chain of custody and chain-of-custody documentation are maintained for samples at all times. Two chain-of-custody documentation systems are employed by WRAP: electronic for chain-of-custody internal to the WRAP processing area and hard copy for all other chain-of-custody. Electronic chain-of-custody is provided by the Data Management System (DMS), a computer database, for samples collected from waste undergoing processing in the WRAP gloveboxes. After a sample is collected and placed in a sample transfer container, the sample collector enters his/her unique password into the chain-of-custody screen on the DMS. When custody of the sample is transferred from one individual to another within the WRAP TSD unit, both individuals enter their passwords into the DMS at the time of custody transfer. The DMS includes, but may not be limited to, the following information: the container from which the sample originated, the unique sample number assigned, date and time of collection, sample type, sample location, method(s) of transfer to the laboratory, identity of the sample collector, identity of all subsequent internal WRAP custodians. The information on the DMS is transferred to an independent computer system on a daily basis. The independent system transfers the data to an electronic storage medium which is kept in an appropriately protected storage vault. After preparation of the sample for transfer to a laboratory, a chain-of-custody form (hard copy) is generated by TSD unit personnel. The final custodian listed on the electronic chain-of-custody is the initial custodian on this chain-of-custody form. In addition, for all samples collected outside of the gloveboxes, a chain-of-custody form (hard copy) is filled out by the sample collector. This form includes any transfers of custody within the TSD unit. The hard copy chain-of-custody form travels with each sample to the laboratory."

Condition Impact Statement: This condition would specify an excessive level of detail regarding chain-of-custody activities that are used to ensure sample integrity.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(1) "requires the facility owner or operator to confirm

his knowledge concerning a dangerous waste before he stores, treats, or disposes of it". Chain-of-custody protocols are used by owners and operators to ensure that information obtained for compliance with WAC 173-303-300 is not compromised by inadvertent or intentional tampering. However, there are no provisions in WAC 173-303-300 and WAC 173-303-110 that allow for incorporation of specific chain-of-custody procedures into permits. This condition would specify excessive controls regarding chain-of-custody procedures. The Permittees believe that the level of detail that describes chain-of-custody procedures on page 4-2, lines 23 through 26 is appropriate and meets the intent of WAC 173-303-300 and WAC 173-303-110. This condition would not enhance protection of human health or the environment, but would hinder management efficiency and cost effectiveness at WRAP.

Furthermore, the Draft Permit condition does not describe properly how the data management system (DMS) and solid waste information tracking system (SWITS) communicate. Chain-of-custody information does not transfer from DMS to SWITS. Finally, information from DMS is not transferred to SWITS daily.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the original text of the WAP did not provide an adequate description of the chain of custody procedure for the TSD unit, as required by Condition II.E.2.d. Ecology accepted this text from the Permittees after submission of the certified permit application. See Ecology's Response to the Permittees' Preamble Comment P5 for further detail. The Permittees state in their comment that "the Draft Permit condition does not describe properly how the data management system (DMS) and solid waste information tracking system (SWITS) communicate. Chain-of-custody information does not transfer from DMS to SWITS. Finally, information from DMS is not transferred to SWITS daily." Unfortunately, the Permittees do not provide the correct information in their comment. Therefore, Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure, especially to correct this misinformation. Failure to provide the description required by the condition will be a Permit Violation.

Permit Condition III.7.B.d.74. is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for chain of custody for this TSD unit. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. If said description is not adequate and Ecology approval not granted, the original text shall be the enforceable condition. Subsequent to any revisions required by Ecology, the description will replace the text on Page 4-2, Lines 23 through 26 of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 Permit modification."

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96. **Condition III.7.B.d.75.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Section 5.0 is deleted in entirety and replaced by the text of Attachment 45.

Condition Impact Statement: This condition would impose a level of control regarding selection of laboratory and analytical methods that exceeds the regulatory requirements of WAC 173-303-300 and WAC 173-303-110.

Requested Action: Rewrite the condition to read as follows: "Section 5.0 is deleted in entirety and replaced by the following text:

5.0 Selecting a Laboratory, Laboratory Testing, and Analytical Methods.

QC shall be applied in implementing both sampling and analytical techniques. Specific performance standards for QA and QC procedures for individual sampling and analysis activities are dynamic and shall be revised as warranted to reflect technological advances in available, appropriate techniques. These performance standards shall be described in policies maintained and used at WRAP and shall be available for review by the Department of Ecology upon request.

5.1 Sampling Program

Sampling procedures for WRAP operations are described in Section 2.2.4. The selection of sample collection devices shall depend on the type of sample, the sample container, the sampling location, and the nature and distribution of regulated constituents in the waste. In general, the methodologies used correspond to those referenced by 40 CFR Part 261, Appendix I. The selection and use of the sample collection device shall be supervised or performed by a person who is thoroughly familiar with sampling protocols.

Sampling equipment shall be constructed of materials that are nonreactive with the waste being sampled. Materials such as glass, PVC plastic, aluminum, or stainless steel could be used. Care shall be taken in the selection and use of the sample collection device to prevent contamination of the sample and to ensure compatibility with waste being sampled. Individual container samples that are related and compatible could be composited before analysis.

5.2 Analytical Program

A program of analytical QC practices and procedures has been developed on the Hanford Site to ensure that precision and accuracy are maintained throughout the laboratories. Good laboratory practices that encompass sampling, sample handling, housekeeping, and safety are maintained at onsite laboratories.

5.3 Conclusion

The aforementioned sampling and analytical quality practices help ensure that the data obtained are precise and accurate for the waste stream being sampled. The analytical results are used by operations management to decide whether or not to accept a particular waste and, on acceptance, to determine the appropriate method of TSD. Results also are important to ensure that the waste is managed properly and that incompatible waste is not combined inadvertently. Just as these results are important, so is the quality of these results."

Comment Justification: WAC 173-303-300 provides adequate requirements for waste analysis. The text suggested by the Permittees in the Requested Action contains a level of detail appropriate for inclusion as a permit condition and accurately reflects the Permittees' approach to selecting a laboratory, performance of laboratory testing, and use of analytical methods. This condition would impose overly prescriptive requirements by incorporating a detailed document (Attachment 45) into the permit. The Permittees insist that the suggested text is more appropriate. Refer to Comment 1 in the Comments on the Proposed Modifications to Attachment 45.

The Permittees recommend incorporation of the suggested text to replace the information originally provided in Section 5.0 of the waste analysis plan. The suggested text ensures an appropriate level of precision and accuracy for data obtained from waste in accordance with the waste analysis program, and for selection of laboratory testing and use of analytical methods.

The text offered by the Permittees in lieu of the condition contains a level of detail consistent with that contained in the U.S. Environmental Protection Agency, Region 10, Arlington, Oregon, RCRA permit.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to Comment 1 regarding Attachment 45.

97. **Condition III.7.B.d.76.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: The preparative method for the toxicity characteristic is EPA, SW-846 Method 1311, Toxicity Characteristic Leaching Procedure (TCLP). To ensure that the test portion is representative of the waste, a test portion of 50 grams or more is preferred. If a test portion of 50 grams or more is used for the determination, then only a single extraction is required to be performed. However, if the test portion is less than 50 grams, each material to be tested must be extracted in duplicate or multiple replicates so that the precision of the extraction can be determined and evaluated. All routine and quality control data associated with the TCLP and subsequent determinative methods are required to be maintained in the TSD unit operating record.

Condition Impact Statement: This condition is redundant with provisions of WAC 173-303-110 and SW-846.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-110(3)(a) and -045(1)(a) incorporate the Third Update of SW-846 into WAC 173-303 by reference. SW-846, Method 1311, Section 7.2, states that "a minimum sample size of 100 grams (solid and liquid phases) is recommended. SW-846, Section 2.1, states that "if an alternative analytical procedure is employed, then EPA expects the laboratory to demonstrate and document that the procedure of providing appropriate performance for its intended application". In addition, 62 Fed. Reg. 62084 (November 20, 1997) states, "for mixed waste testing, sample sizes of less than 100 grams can be used, if the analyst can demonstrate that the test is still sufficiently sensitive to measure the constituents of interest at the regulatory levels specified in the TCLP and representative of the waste stream being tested . . . Use of a sample size of less than 100 grams is highly recommended for mixed wastes with concentrations of radionuclides that may present serious radiation exposure hazards". These references place the burden on the regulated community to ensure adequacy of test methods. Therefore, based on the sources cited herein, this condition is unnecessary and redundant.

Ecology's Response: Ecology agrees to delete this condition.

Ecology is aware of the references cited by the Permittees in the Comment Justification. However, for most wastes, Ecology believes that a 50-gram minimum test portion is of sufficient size to be representative. This test portion size was previously stated as a requirement in the SW-846, Method 1311, but has since been removed. Ecology agrees that the burden of providing acceptable data lies with the regulated community. It must be noted that the nature of the TCLP method is such that results usually are not replicated with precision like that for total metals.

98. **Condition III.7.B.d.77.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Instead of performing the TCLP as described above, a material may be analyzed for the total concentration of the Toxicity Characteristic (TC) constituents. For this approach, solids and sludges must undergo a digestion procedure for metals or an extraction procedure for organics. Then, based on the assumption that the analytes are 100% (totally) leachable from the waste, the resulting data are evaluated against the TC criteria allowing for the 20-fold dilution that is inherent in the TCLP extraction for solids and sludges. (Note that the dilution factor does not apply for liquids.) That is, for each toxic characteristic metal and organic compound, if the analyte concentration is less than 20 times the TC limits, then the waste is not considered to possess the characteristic of toxicity for that constituent. If the totals are more than 20 times the TC limits, then a TCLP must be performed (or, if undergoing stabilization, the waste may be retreated before performing another screening).

Condition Impact Statement: This condition would establish a condition allowing totals analysis but would prohibit its use for assuming a waste exceeds the toxicity characteristic leaching procedure or land disposal restriction threshold, even though regulatory intent allows such use.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-110(3)(a) and -045(1)(a) incorporate the Third Update of SW-846 into WAC 173-303 by reference. SW-846, Method 1311, Section 1.2 states, "if a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run." 62 Fed. Reg. 62084 (November 20, 1997) states, "the grinding or milling step in the TCLP has raised ALARA concerns for individuals who test mixed waste. The use of total constituent analysis, instead of the TCLP, also might minimize the generation of secondary mixed or radioactive waste through the use of smaller sample sizes and reduction, or elimination, of high dilution volume leaching procedures." The cited references allow for appropriate use of totals analysis without unnecessary additional requirements.

The condition discusses a provision already available to the regulated community in SW-846. The provision does not need to be repeated as a permit condition. This condition would impose unnecessary restrictions and expenditures on the Permittees with respect to totals analyses and with the potential to cause ALARA concerns. The Permittees can comply with existing regulations that allow the approach requested.

Ecology's Response: Ecology agrees to delete this condition.

Ecology is aware of the references cited by the Permittees in the Comment Justification.

99. **Condition III.7.B.d.78.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-1, Lines 2 through 10, delete the text and replace with the following: "The frequency to re-evaluate the waste profile and supporting data and documentation is each twelve (12) months, at a minimum, or more often if the generator has informed the TSD unit of a change in the waste generation process or if the TSD unit has identified that the waste received at the TSD unit or the description on the manifest or shipping papers does not match the waste profile. If the generator has informed the TSD unit of a change in the waste generation process, the waste re-enters the waste stream approval process described in Section 2.1.1. as amended by any Permit conditions. The TSD unit will evaluate

verification data against the waste profile to identify any waste streams for which a change in waste generation process is suspect. If a waste stream is suspect, that waste stream also will re-enter the approval process described in Section 2.1.1 as amended by any Permit condition."

Condition Impact Statement: N/A

Requested Action: Accept.

100. **Condition III.7.B.d.79.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-1, Lines 7 and 8, delete the sentence beginning with "Differences include . . ." and replace with the following text: "Differences include, but are not limited to, the following: (1) physical and chemical screening frequencies for verification (minimum percentages of 5% for waste from onsite generator units and 10% for waste from offsite generators (note that chemical screening frequency is dependent on the physical screening frequency), (2) shipping documentation (Uniform Hazardous Waste Manifests are used for waste from offsite generators and waste tracking forms are used for waste from onsite generator units), and (3) LDR documentation requirements (notification for waste from offsite generators and the information contained in the notice for waste from onsite generator units)."

Condition Impact Statement: N/A

Requested Action: Accept.

101. **Condition III.7.B.d.80.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-1, Line 38, delete the phrase "and not per Section 1.1.1.1"

Condition Impact Statement: N/A

Requested Action: Accept.

102. **Condition III.7.B.d.81.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-1, Line 43, correct the WAC citation to read as follows: "WAC 173-303-380(1)(j), -(k), -(l), -(m), -(n), or -(o)."

Condition Impact Statement: N/A

Requested Action: Accept.

103. **Condition III.7.B.d.82.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 28, delete the word "an" and replace with the phrase "that a federal."

Condition Impact Statement: N/A

Requested Action: Accept.

104. **Condition III.7.B.d.83.** **Key Comment:** exceeds delegated regulatory authority, reflects

approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 29, delete the phrase "or equivalent."

Condition Impact Statement: This condition would eliminate the flexibility for method selection provided in 40 CFR 268.40(b). This condition is inconsistent with 62 Fed. Reg. 62079, at 62084 (November 20, 1997) *Joint NRC/EPA Guidance on Testing Requirements for Mixed Radioactive and Hazardous Waste*.

Requested Action: Delete this condition.

Comment Justification: The Department of Ecology is eliminating an alternate methods available through regulations to the regulated community. Therefore, the Department of Ecology is treating the U.S. Department of Energy differently than the rest of the regulated community, in violation of the sovereign immunity waiver's requirement that Federal agencies comply "in the same manner, and to the same extent, as any person".

Ecology's Response: Ecology disagrees with the Requested Action.

The following is the text of 40 CFR 268.40(b): "For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, as incorporated by reference in Sec. 260.11, must be used to measure compliance. An exception is made for D004 and D008, for which either of two (2) test methods may be used: Method 1311, or Method 1310, the Extraction Procedure Toxicity Test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Administrator under the procedures set forth in Sec. 268.42(b)." In the context of the WAP, it must be understood that there are no methods which are "equivalent" to the U.S. EPA methods. Therefore, nothing in this permit condition precludes any alternative offered in this regulation.

The 62 Federal Register 62079, at 62084 (November 20, 1997) *Joint NRC/EPA Guidance on Testing Requirements for Mixed Radioactive and Hazardous Waste* restates the requirement found in the Code of Federal Regulations (CFR) requiring the use of SW-846 methods. Specifically, Appendix A of this guidance document identifies that "the use of an SW-846 method is mandatory for the following nine Resource Conservation and Recovery Act (RCRA) applications contained in 40 CFR Parts 260 through 270:" . . . "Sections 268.7(a), 268.40(a), (b), and (f); 268.41(a), 268.43(a)--Leaching procedure for evaluation of waste to determine compliance with land disposal treatment standards." Therefore, contrary to the Permittees' comment, there are no alternatives to U.S. EPA methods which are available to any regulated entity to comply with the federal Land Disposal Restriction requirements.

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105. **Condition III.7.B.d.84.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line

30, delete the phrase "or any other reliable method allowed by regulations."

Condition Impact Statement: This condition denies the Permittees the ability to use methods allowed by regulations.

Requested Action: Delete this condition

Comment Justification: WAC 173-303-110 allows for use of SW-846 and other methods to meet the requirements of WAC 173-303. WAC 173-303-110(5) provides the process by which "any person may request the department to approve an equivalent testing method . . ." This condition would unnecessarily limit options available to the Permittees for compliance with testing requirements of WAC 173-303-110.

Ecology's Response: Ecology disagrees with the Requested Action.

The comment would be appropriate if this text of the WAP were related to general waste analysis methods. However, the specified text of the WAP addresses analysis of waste to meet LDR requirements. Therefore, this condition deletes an inappropriate phrase from text concerned with analysis to meet the requirements of the federal LDR requirements, as stated in 40 CFR 268.40(b), and the State of Washington LDR as stated in WAC 173-303-140(4). See response to Comment on Condition III.7.B.d.83.

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106. **Condition III.7.B.d.85.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 34, delete the phrase "or any other method allowed by regulations" and replace with the phrase "WAC 173-303-110, or this Permit."

Condition Impact Statement: This condition arbitrarily would restrict the Permittees' ability to use reliable test methods that could be approved via an equivalent testing method petition as allowed by WAC 173-303-110.

Requested Action: Delete this condition

Comment Justification: WAC 173-303-110 allows for use of SW-846 and other methods to meet the requirements of WAC 173-303. WAC 173-303-110(5) provide the process by which "any person may request the department to approve an equivalent testing method . . ." This condition would unnecessarily limit options available to the Permittees for compliance with testing requirements of WAC 173-303-110.

Ecology's Response: Ecology disagrees with the Requested Action.

Contrary to the Comment Justification provided, this condition specifically allows the use of an equivalent method approved according to the requirements of the Dangerous Waste Regulations (WAC 173-303-110) and also allows for methods to be chosen from the sources listed in Attachment 45 which is part of this Permit.

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107. **Condition III.7.B.d.86.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 39, delete

the word "sample" and replace with the word "analytical."

Condition Impact Statement: N/A

Requested Action: Accept.

108. **Condition III.7.B.d.87.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 41, delete the phrase "by WRAP."

Condition Impact Statement: N/A

Requested Action: Accept.

109. **Condition III.7.B.d.88.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 42, add the following text: "A copy of the certification is placed in the WRAP operating record."

Condition Impact Statement: N/A

Requested Action: Accept.

110. **Condition III.7.B.d.89.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 44, delete the word "Where" and replace with the word "When."

Condition Impact Statement: N/A

Requested Action: Accept.

111. **Condition III.7.B.d.90.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 47, correct the WAC citation to read as follows: "WAC 173-303-380(l)(k), -(n), -(o)."

Condition Impact Statement: N/A

Requested Action: Accept.

III.7.B.e. Chapter 4

112. **Condition III.7.B.e.1.** **Key Comment:** exceeds delegated regulatory authority

Draft Permit conditions as proposed by the Department of Ecology: Page 4-1, Line 13, delete "typically."

Condition Impact Statement: This condition unreasonably would limit operational flexibility.

Requested Action: Delete this condition.

Comment Justification: This condition adversely would impact the ability to process waste unless a Permit modification is processed for each different type of container. This condition unnecessarily would force the management of atypical but otherwise acceptable waste container at facilities that do not have the level of human health and environmental safety provided by WRAP. This is the same as Draft Permit Condition III.7.B.b.1.

Ecology Response: Ecology agrees with the Requested Action. The condition is deleted as requested. Condition III.B.e.2. was intended to address Ecology's concerns about management of atypical waste containers by WRAP. This is addressed by Condition III.7.B.b.1., which reads as follows: "Page 2-1, Line 22 at the end of the paragraph, after the word "... basis ..." insert "provided that procedures are implemented resulting in the safe management of these boxes at WRAP. Prior to acceptance at WRAP, boxes weighing more than 3,175 kilograms will be evaluated to determine if appropriate restrictions and protective measures can be implemented to ensure safe processing can occur at WRAP. Documentation of this evaluation will be retained as part of the operating record. Move this condition as well as the sentence on Page 2-1, Lines 21 through 22, beginning with "The maximum ..." to Chapter 4, Section 4.1.2."

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113. **Condition III.7.B.e.2.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Containers and boxes meet the requirements for Type A packagings and packages as specified in 49 CFR 173.24, 173.24a, 173.410 through -412.

Condition Impact Statement: This condition would restrict WRAP from receiving waste that has been packaged in containers as allowed by WAC 173-303-190 and transported as allowed by WAC 173-303-240. This condition would require WRAP to repackage waste into acceptable containers or not use WRAP for its intended purpose. This condition would result in the unnecessary generation of waste, because empty burial boxes would require disposal.

Requested Action: Delete this condition.

Comment Justification: The language found on page 4-1, lines 13 through 21 of the WRAP permit application is accurate, provides necessary operational flexibility, and should not be arbitrarily changed or deleted. This condition would limit the ability of WRAP to receive waste in other containers and has no regulatory basis. This condition would deny management of waste that is appropriate for treatment and/or storage at WRAP. The Department of Ecology's rationale is inadequate for prohibiting waste in other than U.S. Department of Transportation-approved Type A containers from management at WRAP.

WAC 173-303-190(1) states that "the generator must package all dangerous waste for transport in accordance with U.S. DOT regulations on packaging, 49 CFR Parts 173, 178, and 179."

WAC 173-303-240(2) states that "any person who transports a dangerous waste must comply with the requirements of WAC 173 303-240 through 173-303-270, when such dangerous waste is required to be manifested by WAC 173-303-180". WAC 173-303-240(4) states that "these requirements do not apply to onsite (as defined in WAC 173-303-040) transportation of dangerous

waste by generators, or by owners/operators of permitted TSD facilities". These requirements allow for use of waste containers for offsite shipments if the containers meet U.S. Department of Transportation regulations. These requirements exempt transportation in containers from regulatory control if the containers are transported onsite.

Ecology Response: Ecology agrees with the Requested Action. The condition is deleted.

114. **Condition III.7.B.e.3.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 4-1, Line 29, after "... TSD requirements" add "and designed to prevent corrosion of the container and, if applicable, meet LDR requirements."

Condition Impact Statement: This condition would require sorbents for waste in storage to meet requirements for disposal.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-140(4)(b) imposes restrictions on sorbents used for disposal of waste in landfills. This condition would specify the types of sorbents to be used in waste stored at WRAP based on requirements for disposal. WRAP will not be permitted as a disposal facility and therefore, requirements related to waste disposal are inappropriate for inclusion in the permit.

The text originally written in the WRAP permit application is accurate and should not be removed. The WRAP operating organization must be allowed to select sorbents for a variety of management circumstances. It is the Permittees' intent that sorbents placed in waste containers destined for disposal must meet the requirements of WAC 173-303-140(4)(b) before disposal. There is no regulatory basis for imposing the use of land disposal restriction/disposal sorbents on storage and treatment activities.

Sorbents are not designed to prevent corrosion but to stabilize liquids. Waste container liners and coatings are specified based on the nature of the waste to prevent corrosion of the drum. The TSD requirements will specify whether LDR compliant sorbents are needed or not.

Ecology Response: Ecology disagrees with the Requested Action; however, Ecology will modify the language of the condition to address the Permittees' concerns regarding sorbent corrosion. The statement that "... text originally written in the WRAP permit application is accurate and should not be removed." is inaccurate because Condition III.7.B.e.3. does not delete any text. The Permittees also say that, if containers are destined for disposal, sorbents will meet WAC 173-303-140 land disposal restrictions (LDR), yet they object to the statement in the condition that the sorbent will meet LDR requirements, if applicable. WRAP is, in large part, designed to process waste to ultimately be disposed of at regulated facilities.

The intent of this part of the condition language is to make sure containerized waste will be treated, as necessary, with sorbents that meet the LDR requirements as specified in WAC 173-303-140(4)(b) so that those containers treated at WRAP and shipped to disposal facilities will contain compliant sorbent. Ecology will not change that portion of the condition. Ecology will delete the

text in the condition that refers to corrosion as follows: "and designed to prevent corrosion of the container . . ." The condition is revised to read as follows: "Page 4-1, Line 29, after " . . . TSD requirements." add the following: "Materials used to sorb waste destined for land disposal must meet LDR requirements in accordance with WAC 173-303-140(4)(b)."

115. Condition III.7.B.e.4. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-1, Line 40, delete "approved" and replace with "appropriate."

Condition Impact Statement: N/A

Requested Action: Accept.

116. Condition III.7.B.e.5. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Line 45, delete the phrase "as previously discussed" and replace with the following: "according to the same regulations as other containers."

Condition Impact Statement: N/A

Requested Action: Accept.

117. Condition III.7.B.e.6. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-3, Lines 6 through 8, move the text in Section 4.1.4.1. to Page 4-1, Line 33.

Condition Impact Statement: N/A

Requested Action: Accept.

118. Condition III.7.B.e.7. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-3, Line 6, add the following: "The WRAP floors and curbing serve as the secondary containment for any spills that might occur inside the building."

Condition Impact Statement: N/A

Requested Action: Accept.

119. Condition III.7.B.e.8. Key Comment: exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: The Permittees shall submit to Ecology an annual report documenting the annual inspection and repair of panel delaminations at Building 2336-W. The report will include the following:

- (a) Scaled drawings (sized to one scale) indicating current panel delaminations, excluding previously repaired delaminations.
- (b) A record of repairs made subsequent to this year's inspection.
- (c) A listing of current panel delaminations, including location on building (i.e., specific portion of roof or wall), size, history of repair, moisture content, and location on panel (i.e., relative to edges).
- (d) Any delaminations identified on a panel during each inspection shall be listed sequentially, relative to previous panel delaminations for that panel.

This information shall be submitted to Ecology within ninety (90) days of inspection. All scaled drawings will be of the same scale, as documented in 1999, in order to compare changes in panel delamination rates.

Condition Impact Statement: This condition would establish arbitrary inspections and reports for WRAP.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-320 requires an owner/operator to "inspect his facility to prevent malfunctions and deterioration, operator errors, and discharges which may cause or lead to the release of dangerous waste constituents to the environment, or a threat to human health". WAC 173-303-630(6) requires an owner/operator to "inspect areas where containers are stored . . .". The condition would impose inspection requirements on the Permittees that are inconsistent with WAC 173-303-320 and WAC 173-303-630(6). The Permittees contend that WRAP is structurally sound and that panel delamination does not pose a threat to human health and the environment. As noted in the following, engineering data supporting this contention have been prepared and documented.

While visually detracting, the panel delamination has no effect on the structural integrity of the 2336-W Building. This has been communicated previously to the Department of Ecology [letter, J. E. Rasmussen, U.S. Department of Energy, to M. A. Wilson, Washington State Department of Ecology, "Response to State of Washington Department of Ecology (Ecology) April 2, 1998, Letter on Professional Engineer's (P.E.) Stamp on Central Waste Complex (CWC) and Waste Receiving and Processing Facility (WRAP) Permit Application Material," dated July 29, 1998. Existing warranty repair activities are sufficient for addressing recurrence of panel delamination to date. Further, the 2336-W Building walls and roof are not part of the containment system required by WAC 173-303-630 for container storage areas. Conducting and documenting the inspections as well as creating certified reports as required by Permit Condition I.E.21 would be a costly effort that would add no value to protectiveness of human health and the environment.

The Permittees are not seeking to permit this unit as a containment building. The Department of Ecology improperly has applied (1) WAC 173-303-630(7)(d) and (2) waste management unit requirements by drawing on containment building requirements for a container management unit. Although the Department of Ecology has properly quoted the regulations contained in WAC 173-303-630(7)(d), the application of this requirement is inconsistent with the "Responsiveness Summary Amendments to the Dangerous Waste Regulations Chapter 173-303-WAC", Publication #95-423, dated October 1995. In this document, the Department of Ecology responds to Comment Number 211 by stating "Ecology recognizes that providing covered storage for a large number of containers is an expensive undertaking. The language allows discretion, but it clearly indicates that the purpose of protective covering is to prevent the release of waste based on the

nature of the waste or the design of the container. Under foreseeable circumstances, well managed and maintained steel, or polyethylene drums would not need protective covering. Fiber drums or "super sacks" may need covering depending on site-specific conditions such as duration of storage, climate, and waste type. This requirement allow facilities the greatest flexibility to address the issues of maintaining legible labels and container integrity." The Permittees submit that the TSD unit activities at WRAP, the containers used, the climate at the Hanford Facility, and the types of waste do not lead to a conclusion a protective covering is necessary. There is no authority for the Department of Ecology to apply requirements from containment buildings to container management. Waste management unit requirements have been promulgated based on the definition of the waste management unit. With the exception of miscellaneous units found in WAC 173-303-680, the Department of Ecology has overstepped its authority by drawing on containment building requirements for permitting the WRAP TSD unit.

Ecology Response: Ecology disagrees with the Requested Action; however, the condition will be revised to accommodate some of the Permittees' concerns. (Note: The first paragraph of the proposed permit condition was omitted by the Permittees in their comment. Refer to the original permit conditions sent out for public comment.) The Permittees' comments focus mostly on the container storage aspect of WRAP and ignore the main function of WRAP as a waste treatment facility. Ecology acknowledges that part of the function of WRAP is to temporarily store waste containers before and after processing; however, the main purpose of WRAP is to process, repackage, and treat containerized waste, some of which contain dangerous and mixed waste. WRAP contains sensitive, complex, integrated process and computer equipment not designed to be exposed to the elements. Some of the process line equipment has built-in containment with negative air pressure to capture vapors, etc. that would otherwise be released from the waste containers being handled, repackaged, and treated inside these structures. This process line equipment is not designed to be exposed to the elements. In addition, the building serves as a secondary vapor/particulate capture structure for waste constituents and is designed with negative air pressure venting to an emissions control system to capture any vapors/suspended material that would potentially expose workers or escape the WRAP building. The vapors/suspended material may include dangerous/mixed waste constituents. The Permittees are also allowed to open certain containers inside the building, but outside of the process lines, for some limited waste treatment activities. That activity would not be allowed outside of the 2336 Building. The walls, floors, and roof of Building 2336 are designed as a basic part of the containment at WRAP and are crucial to safe operation of WRAP.

The Permittees are required to comply with all applicable regulations relating to containment buildings for many of the previously stated reasons. As stated in WAC 173-303-630(7)(d), "The department may require generators to protect their containers from the elements by means of a building or other protective covering if Ecology determines such protection is necessary to prevent a release of waste or waste constituents due to the nature of the waste or design of the container." The nature of the waste to be processed at WRAP is potentially some of the most toxic waste found anywhere. Based on past history of poor waste tracking and documentation at Hanford and other mixed waste generators, the nature of the waste may not be fully characterized upon arrival at WRAP implying an even greater need for protective covering in the form of a building at WRAP. In addition, by reference in WAC 173-303-695, requirements found in 40 CFR, Part 264, apply to WRAP. Specifically, 40 CFR 264.1100, Subpart DD (Containment Buildings), requires "units" such as WRAP, where hazardous waste is stored or treated, to conduct such operations in a ". . . completely enclosed, self supporting structure that is designed and constructed . . . to support . . . waste contents, and any personnel and heavy equipment that is operated within the unit . . ." 40 CFR also requires that WRAP ". . . is designed and operated to ensure containment and prevent

the tracking of materials from the unit by personnel or equipment.”

Ecology agrees with the Permittees that WAC 173-303-320 requires an owner/operator to “inspect his facility to prevent malfunctions and deterioration, operator errors, and discharges which may cause or lead to the release of dangerous waste constituents to the environment, or a threat to human health.” The Permittees have been aware of Ecology’s expectations (as stated in the permit condition) related to the building panel inspections and documentation for at least two (2) years, yet have provided insufficient documentation to show that previous indications for future containment problems have been resolved. Panel delamination has been occurring from the time WRAP was constructed. As of 1997 (the latest documentation submitted to Ecology), a selected (not worst case) row of fifty-two (52) roof panels had a total of eighty-four (84) separate panel delaminations (roughly an average of one and a half (1.5) delaminations/panel). Only eight (8) of the fifty-two (52) panels remained unaffected at that time. The size of the delaminated area has been reported for only a small percent of the hundreds of panel delaminations (in 1997). In 1998, the Permittees had a professional civil engineer stamp a previous panel evaluation report (from 1995) and submitted it to Ecology; however, no information was presented as part of that submittal indicating the engineer had reviewed or considered the actual panel delamination data including diagrams of the delaminations. Accurate baseline data, such as scaled panel drawings accurately indicating the areas that have delaminated, has not been submitted to Ecology.

Another issue is whether panel delamination will continue, and eventually affect structural integrity of the 2336 Building. To date, Ecology has reviewed the efforts of the Permittees to inspect and resolve the building integrity issue and, so far, the Permittees have not provided sufficient evidence that panel delamination is no longer occurring, or has been reduced to an insignificant rate. Panel delamination has continued significantly beyond the panel manufacturers original estimate. The Permittees recently stated (but have not submitted any documented supporting evidence) that delaminations decreased in 1999 and indicated that the situation was no longer a problem. In fact, the summer temperatures at Hanford in 1999 were cooler than normal and Ecology believes a lower number of panel blisters are likely not indicative of a normal year, or what would be expected during a hotter than average summer. One (1) year of verbal evidence is not sufficient to remove the permit condition. In addition, in the past, water has entered some of the affected panels, yet no analysis of that situation has been submitted for review to Ecology.

The Permittees indicate that based on the types of containers, waste types, and climate at Hanford, protective covering for containers may not be needed. Although the Permittees did not provide information to support their contention, evidence does exist to the contrary. There are documented reports of waste containers failing due, in part, to the wide diurnal temperature fluctuations at Hanford. Other factors contributing to problems with containers at Hanford include the type of waste, as well as the type of container. Corrosion and breaches in the waste containers have resulted from various combinations of these factors.

Ecology has recently become aware of another problem with the building that may affect structural integrity and containment. The problem is that the seals between panels may be inadequate. Ecology will look into this problem further. This may result in additional condition(s) being drafted in the future.

The condition is revised as follows:

“The Permittees shall submit to Ecology an annual report documenting the annual inspection and repair of panel delaminations at Building 2336-W. The inspection shall occur during the hottest

period of each summer. The report must include the following:

- (a) Scaled drawings (sized to one scale) indicating current panel delaminations, excluding pre-existing successfully repaired delaminations.
- (b) A record of repairs made subsequent to each year's inspection.
- (c) A listing of current panel delaminations, including location on building (i.e., specific portion of roof or wall), size, history of repair, moisture content, and location on panel (i.e., relative to edges).
- (d) Any delaminations identified on a panel during each inspection shall be listed sequentially, relative to previous panel delaminations for that panel.
- (e) A listing of all panel seal failures including location on building, size, and repair information.

This information shall be submitted to Ecology within ninety (90) days of inspection. All scaled drawings must be of the same scale and scaled to match all previous panel delamination drawings in order to compare changes in panel delamination rates."

120. **Condition III.7.B.e.9.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-4, Line 21, delete the word "only" and replace with the word "main."

Condition Impact Statement: N/A

Requested Action: Accept.

121. **Condition III.7.B.e.10.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 4-4, Line 22, add the following text: "The estimated amount of water discharged by the fire suppression system during a twenty (20) minute discharge is 13,578 gallons for the Shipping/Receiving Area; 8,626 gallons for the NDE/NDA Area; and 8,412 gallons for the Process Area. The Permittees shall provide appropriately sized equipment capable of removing the secondary containment volume within twenty-four (24) hours. If the situation threatens human health or the environment, the Permittees shall remove liquid from the secondary containment immediately, within twenty-four (24) hours. If the twenty-four (24) hour schedule cannot be met, the Permittees shall notify Ecology and request approval for an alternate schedule."

Condition Impact Statement: This condition would contain excessive detail regarding procedures for removal of liquids from secondary containment to meet WAC 173-303-630(7).

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-630(7)(a)(ii) states that "spilled or leaked waste and accumulated precipitation must be removed from the containment system in as timely a manner as is necessary to prevent overflow". This condition arbitrarily would specify a time limit for removal from secondary containment without regulatory authority.

Some key problems with this condition are as follows.

The specification to obtain/maintain equipment that could empty the secondary containment system within 24 hours is inappropriate for a permit condition and is and has no regulatory basis. If a fire emergency were to occur in the secondary containment area, debris/recovery activities could prevent pumping of the containment within 24 hours. The permit should not restrict emergency response actions or hinder post-event analyses. Flexibility is required in this area and the condition is unnecessarily restrictive.

WAC 173-303-630(7)(a)(ii) protects human health and the environment. Requirements in excess of the regulation add no further benefit or value and impose costs that will detract from resources available to support cleanup.

Ecology Response: Ecology does not agree with the Requested Action; however, the condition has been revised to accommodate some of the Permittees' concerns.

The schedule for removal of fire suppression water will be deleted. The estimated amount of fire suppression water accumulated in each area of WRAP during a twenty (20) minute discharge will remain in the condition. Ecology expects that if the situation threatens human health or the environment, the Permittees will remove liquid from the secondary containment immediately. The requirement to conduct corrective action for problems presenting an immediate threat to human health and the environment is stated elsewhere in the Permit and in WAC 173-303; therefore, it has been deleted from the revised condition. The condition is revised as follows:

"Page 4-4, Line 22, add the following text: "The estimated amount of water discharged by the fire suppression system during a twenty (20) minute discharge is 13,578 gallons for the Shipping/Receiving Area; 8,626 gallons for the NDE/NDA Area; and 8,412 gallons for the Process Area."

122. **Condition III.7.B.e.11.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-4, Line 33, delete the phrase " (Chapter 7)" and insert the following: "in Section 7.2.5. of Appendix 7A."

Condition Impact Statement: N/A

Requested Action: Accept.

123. **Condition III.7.B.e.12.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-4, Line 39, insert the following text as a bullet: "Normally solids are removed using a vacuum system and/or a broom. After all the material is removed, the area is decontaminated using a method appropriate for the material spilled."

Condition Impact Statement: N/A

Requested Action: Accept.

124. **Condition III.7.B.e.13.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-4, Line 47, delete

the text from the bullet and replace with the following: "If the waste is unknown, samples are taken and analyzed to identify dangerous constituents and for designation, treatment, and disposal purposes."

Condition Impact Statement: N/A

Requested Action: Accept.

125. **Condition III.7.B.e.14.** **Key Comment:** exceeds delegated regulatory authority

Draft Permit conditions as proposed by the Department of Ecology: Page 4-5, Line 27, insert the following text: "Records of all spills and releases of hazardous substances, including radiation survey results, shall be maintained as part of the WRAP operating record. These records include, but are not limited to, electronic and paper records. These records will eventually be utilized during closure activities at WRAP, as noted in Chapter 11 of this Permit."

Condition Impact Statement: This condition would impose retention of radiation survey results without regulatory authority.

Requested Action: Delete the phrase "including radiation survey results" from this condition.

Comment Justification: The Permittees agree that radiation survey results could be used for determining spill boundaries. However, it is inappropriate to require such survey information as part of the operating record, because WAC 173-303 has no stated purpose nor regulations directly applicable to radionuclides.

This condition would regulate waste acceptance criteria related to the radioactive component of mixed waste. The U.S. Department of Energy must retain jurisdiction over the source, special nuclear, and byproduct material components of mixed waste in accordance with the Atomic Energy Act.

It is inappropriate for a state to unilaterally assert authority over radioactive materials. As stated previously, source, special nuclear, and byproduct materials specifically are excluded from the definition of solid waste set forth at RCRA 42 U.S.C. § 6903(27); also refer to 42 U.S.C. § 6905(a). The Atomic Energy Act; U.S. Department of Energy's Byproduct Rule (10 CFR 962); the U.S. Environmental Protection Agency Notice Regarding State Authorization [(51 Fed. Reg. 24504 (July 3, 1986))]; U.S. Environmental Protection Agency Notice on Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste [(53 Fed. Reg. 37045 (September 23, 1988))]; the State's recognition of possible preemption in its Hazardous Waste Management Act, Revised Code of Washington 70.105.109; the limitations of the waiver of sovereign immunity in Section 6001 of the RCRA to materials within the RCRA definition of solid waste (thereby excluding source, special nuclear, and byproduct materials); and the Tri-Party Agreement.

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged. As stated in the permit condition, the purpose of the radiation survey results is to support future closure operations. Because the dangerous waste portion and the radioactive portion of mixed waste are intimately associated, Ecology believes it is prudent to retain records in the TSD unit Operating Record that delineate the location of spills and releases and demonstrate their cleanup. The Permittees already perform such radiation surveys, so there is no added burden in the

conduct of the activity. This information is envisioned to be used in field screening activities at WRAP during closure and should prove to be extremely useful in directing any sampling activities or decontamination processes at that time. Therefore, Ecology believes that the information has the potential to simplify future closure activities. In addition, Section 6.3 of the Hanford Federal Facility Agreement and Consent Order (TPA) Action Plan states that TSD units "... will be closed with consideration of all hazardous substances, which includes radioactive constituents." The Permittees are expected to adhere to the TPA Action Plan during closure of final status operating TSD units; this requirement is not limited to closure of the site's interim status units. The Permittees and Ecology have already agreed to use radiation survey information, in part, as an indicator parameter for the presence of the dangerous component of mixed waste to satisfy closure plan performance standard requirements (see Section 1.0 of the 2401-W Waste Storage Building Closure Plan).

126. **Condition III.7.B.e.15.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-6, Line 35, after the phrase "... TSD unit" add the following: "other than WRAP."

Condition Impact Statement: N/A

Requested Action: Accept.

127. **Condition III.7.B.e.16.** **Key Comment:** exceeds delegated regulatory authority

Draft Permit conditions as proposed by the Department of Ecology: Page 4-7, Lines 43 - 44, delete the words "However," and "exempt" and after the phrase "... of mixed waste are" insert the following: "managed in accordance with all applicable regulations under the Atomic Energy Act and the Nuclear Waste Policy Act."

Condition Impact Statement: The condition would closely reflect the text of 40 CFR 264.1080(b)(6).

Requested Action: Insert the phrase *authority of* into the text so the condition reads: "... in accordance with all applicable regulations under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act".

Comment Justification: The Department of Ecology has not adopted 40 CFR 264, Subpart CC regulations and therefore does not have authority for regulating organic air emissions. This condition actually does not impose any restrictions or requirements, but simply provides information already applicable by regulation. The Permittees agree that applicable Atomic Energy Act requirements must be followed, irrespective of the text in this condition.

Ecology Response: Ecology agrees with the Requested Action. The condition is modified as requested.

128. **Condition III.7.B.e.17.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-8, Line 29, delete the phrase ", and other areas within WRAP if needed" and replace with the following: "and the low-level and TRU gloveboxes."

Condition Impact Statement: N/A

Requested Action: Accept.

129. **Condition III.7.B.e.18.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-8, Line 30, add the following: "Treatment by macroencapsulation is permitted to occur in the shipping and receiving area."

Condition Impact Statement: N/A

Requested Action: Accept.

130. **Condition III.7.B.e.19.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-8, Line 30, add the following "Refer to Appendix 3A for additional description of waste treatment at WRAP."

Condition Impact Statement: N/A

Requested Action: Accept.

131. **Condition III.7.B.e.20.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Permittees shall identify critical systems for safe management of dangerous waste and mixed waste at WRAP as required in Facility Condition II.L.2.b. of this Permit. The Permittees shall describe the location and function of each critical system identified. This information shall be submitted to Ecology within one hundred and eighty (180) days of the effective date of this Permit and, upon approval by Ecology, incorporated as a Class 1 modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would require identification/descriptions of critical systems beyond Permit Condition II.L.2.b when there is no requirement to make such determinations.

Requested Action: Delete this condition.

Comment Justification: Permit Condition II.L.2.b. is applicable only to engineering change notices and does not apply to permit applications. As a result, identification of critical systems is not required at the time of grant of final status. Identification of critical systems is required only when modifications are made to the permitted unit.

Ecology Response: Ecology disagrees with the Permittees' Requested Action. Identification of WRAP's critical systems is required. Condition II.L.2.b is not applicable only to engineering change notices. This portion of Condition II.L.2.b. should have been met sometime during construction of WRAP; however, since it was not, Ecology is requiring that identification of

WRAP critical systems be made within 180 days of the effective date of the Permit.

Line 6 of Condition II.L.2.b. specifically states: "Identification of critical systems shall be included by the Permittees in each TSD unit-specific dangerous waste Permit application, closure plan or Permit Modification, as appropriate."

The Permittees previously agreed to identify critical systems within 180 days after the effective date of the final Permit.

III.7.B.f. Chapter 6

132. Condition III.7.B.f.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-i, Line 9, at the end of the heading, add the following: "[F-1a(1)]."

Condition Impact Statement: N/A

Requested Action: Accept.

133. Condition III.7.B.f.2. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-1, Line 7, after the word ". . . personnel," add the following: "to dangerous and mixed waste."

Condition Impact Statement: N/A

Requested Action: Accept.

134. Condition III.7.B.f.3. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-1, Line 8, add the following: "Procedures to prevent hazards at WRAP will comply with all applicable federal, state, and local regulatory requirements."

Condition Impact Statement: N/A

Requested Action: Accept

135. Condition III.7.B.f.4. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-2, Line 6, add the following "The Permittees shall ensure that WRAP is maintained in accordance with WAC 173-303-630(7). The Permittees shall ensure that WRAP inspections, at a minimum, meet the requirements of WAC 173-303-320(2) and WAC 173-303-630(6)."

Condition Impact Statement: N/A

Requested Action: Accept.

136. **Condition III.7.B.f.5.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 6-2, Line 24, insert the following: "Hard copies of the log sheets are stored at WRAP. The inspections are performed by personnel adequately trained to inspect the WRAP TSD unit and operations. The log sheets will include, at a minimum, the following: Date and time of inspection, printed name and handwritten signature of the inspector, a notation of the observations made, an account of spills or discharges in accordance with WAC 173-303-145, and the date and nature of any repairs or remedial actions taken."

Condition Impact Statement: Except for the sentence pertaining to training, this condition would duplicate text already provided on page 6-2, lines 10 through 19.

Requested Action: Delete this condition. Alternately, rewrite the Draft Permit condition to state "add the following sentence to page 6-2, line 23, The inspections are performed by personnel adequately trained to inspect the WRAP TSD unit and operations".

Comment Justification: Draft Permit conditions should not duplicate text already provided in the permit application.

Ecology Response: Ecology disagrees with the Requested Action to delete the condition. Ecology does agree with the Permittees' alternative Requested Action. The condition will be revised as requested. Ecology acknowledges that the original condition contained text that already existed in Section 6.2.1.

137. **Condition III.7.B.f.6.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-3, Line 11, after the phrase "resultant liquid," add the following: "and/or contaminated material."

Condition Impact Statement: N/A

Requested Action: Accept.

138. **Condition III.7.B.f.7.** **Key Comment:** imposes potential for unnecessary compliance issues, imposes redundant or unenforceable conditions, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 6-3, Line 19, add the following: "The schedule for remedial action for problems revealed during inspection will depend on the potential risk to human health or the environment. Problems revealed during inspections will be responded to according to the following schedule:

Problems Threatening Human Health or the Environment:

Problems that pose an imminent threat to human health or the environment will be corrected immediately, but no later than twenty-four (24) hours from the time of discovery.

Problems Not Threatening Human Health of the Environment:

Problems that do not pose an imminent threat to human health or the environment are corrected or

scheduled for correction within seventy-two (72) hours of discovery.

Problems Requiring More Than Seventy-Two (72) Hours to Resolve:

If a longer time period is required to remedy the problem, the Permittees will propose a reasonable time schedule for correcting the situation. The correction schedule is subject to approval by Ecology.

Condition Impact Statement: The Permittees could be unnecessarily found in violation of the Permit, even though "best efforts" have been taken to correct problems within the specified timeframes. This condition would divert resources to remedy problems that would normally be covered under routine maintenance.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-320(3) states "the owner or operator must remedy any problems revealed by the inspection, on a schedule which prevents hazards to public health and environment. Where a hazard is imminent or has already occurred, remedial action must be taken immediately". Many problems identified during inspections actually do not present a hazard and can be corrected in a timely manner through routine maintenance. There is no basis for imposing arbitrary time limits to situations that do not pose a threat to human health or the environment. Many inspection deficiencies cannot be corrected within 72 hours, even if personnel work overtime. The Permittees request that the Department of Ecology not impose a 72-hour limit on correcting minor problems that do not threaten human health or the environment. For example, scratched floors will take longer than 72 hours to repair. The condition requires correction of problems within specified timeframes, but also acknowledges that a longer period might be necessary to correct certain problems. It is inefficient to require submittals for routine work at WRAP to maintain the facility. It is especially inappropriate to impose arbitrary time limits on situations that do not present a threat or a potential threat to human health or the environment. The Permittees request that the condition be written to reflect this fact by requiring best efforts to correct problems. If the text is not amended, the Permittees could be unnecessarily found in violation of the Permit, even though "best efforts" have been undertaken to correct problems within the specified timeframes. This approach is in accordance with Permit Condition II.X.

Ecology Response: Ecology disagrees with the Requested Action; however, Ecology will revise the condition to accommodate some of the Permittees' concerns. Ecology will delete the text requiring Ecology approval for correction schedules. Ecology will also delete some of the text regarding problems not threatening human health and the environment. Text will be added requiring the Permittee to remedy any problems revealed by facility inspections on a schedule which prevents hazards to the public and the environment as stated in WAC 173-303-320(3). Text will also be added requiring the Permittees to retain all records related to correction of problems revealed in the WRAP Operating Record for a period no less than five (5) years and to correlate inspection deficiencies with corrective measures. The condition is revised to more closely track the regulation as follows:

"Page 6-3, Line 19, add the following: "The schedule for remedial action for problems revealed during inspections will depend on the potential risk to human health and the environment. The Permittees must maintain, at the WRAP facility, a schedule for correction of problems revealed during inspections. The schedule must correlate inspection deficiencies with corrective measures. The Permittees must remedy any problems revealed by the inspection on a schedule which prevents hazards to public health and the environment. Where a hazard is imminent or has already occurred,

remedial action must be taken immediately.

The Permittees shall retain all records related to correction of problems revealed in the WRAP Operating Record for a period no less than five (5) years in accordance with WAC 173-303-380.”

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139. **Condition III.7.B.f.8.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: In addition to the items listed in the application, Section 6.2.3. shall include, at a minimum, the following categories of items:

- (a) All process line equipment
- (b) NDE/NDA equipment
- (c) Remote waste handling equipment
- (d) Waste storage equipment
- (e) Emergency equipment
- (f) Ventilation equipment detailing all portions that serve the process area, gloveboxes, and Building 2336-W
- (g) Emergency equipment, including spill cleanup supplies
- (h) Aisle space requirements
- (i) Safe storage of incompatible and ignitable wastes

For all items listed in Section 6.2.3, including the above listed items, the Permittees shall identify the types of problems to look for during inspections, as well as the frequency of inspections for each item. The frequency of inspection for specific items on the schedule should be based on the rate of possible deterioration of equipment and/or the probability of an environmental or human health incident, if the deterioration, malfunction, or operator error goes undetected between inspections. In many cases, state or federal rules specify the frequency. Be specific: "at least every thirty (30) days" or "at least every seven (7) days" rather than "weekly" or "monthly." This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would impose requirements without regulatory authority.

Requested Action: Delete this condition. Alternatively, rewrite this condition to read as follows. "In addition to the items listed in the application, Section 6.2.3. shall include, at a minimum, the following categories of items:

- (a) All process line equipment
- (b) NDE/NDA equipment
- (c) Remote waste handling equipment
- (d) Waste storage equipment
- (e) Emergency equipment
- (f) Ventilation equipment detailing all portions that serve the process area, gloveboxes, and the 2336-W Building
- (g) Emergency equipment, including spill cleanup supplies
- (h) Aisle space requirements

- (i) Safe storage of incompatible and ignitable waste.

For all items listed in Section 6.2.3, including the above items, the Permittees shall identify the types of problems to look for during inspections, as well as the frequency of inspections for each item. The frequency of inspection for specific items on the schedule should be based on the rate of possible deterioration of equipment and/or the probability of an environmental or human health incident."

Comment Justification: The information contained in the Department of Ecology's Draft Permit condition is contained in the WRAP operating record and is available to the Department of Ecology on request.

The inspection schedule terms used in the permit application are consistent with the terms (daily, weekly, and/or monthly) identified in WAC 173-303-806(4)(a)(v) and WAC 173-303-630(6) (containers). Use of terms such as "at least every thirty (30) days" or "at least every seven (7) days" are inappropriate.

Ecology Response: Ecology agrees, in part, with the Permittees' Requested Action. The condition will be modified to accommodate some of the Permittees' concerns regarding the use of weekly or monthly as opposed to seven (7) or thirty (30) days. The Permittees' alternate text will not be utilized because the Permittees' alternate text does not have a provision to provide specific inspection frequencies for each item on the inspection schedule. It also does not provide a submittal date for the information to be incorporated into the Permit. The intent of the regulation is to insure inspections will be conducted on a regular basis, such as every seven (7) days for weekly inspections, every thirty (30) days for monthly inspections, and not back to back, such as at the end of one week and at the beginning of the next week. The condition will also be revised to replace item (e) in list of items to be inspected with item (g). Emergency equipment is already covered under the broader category of item (g), "Emergency equipment, including spill cleanup supplies." The Permittees are expected to follow the inspection requirements described in WAC 173-303-806(a)(4) and WAC 173-303-320. The categories of items to be inspected are described in WAC 173-303-320(2) as follows: "The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that help prevent, detect, or respond to hazards to the public health or the environment."

The condition is revised as follows:

"In addition to the items listed in the application, Section 6.2.3. shall be revised to include, at a minimum, the following categories of items:

- (a) All process line equipment
- (b) NDE/NDA equipment
- (c) Remote waste handling equipment
- (d) Waste storage equipment
- (e) Emergency equipment, including spill cleanup supplies
- (f) Ventilation equipment detailing all portions that serve the process area, gloveboxes, and Building 2336-W
- (g) Aisle space requirements
- (h) Safe Storage of incompatible and ignitable wastes

For all items listed in Section 6.2.3, including the above listed items, the Permittees shall identify

the types of problems to look for during inspections, as well as the frequency of inspections for each item. The frequency of inspection for specific items on the schedule should be based on the rate of possible deterioration of equipment and/or the probability of an environmental or human health incident, if the deterioration, malfunction, or operator error goes undetected between inspections. In many cases, state or federal rules specify the frequency. State the frequency of inspections as, for instance, "weekly" or "monthly." This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification."

140. **Condition III.7.B.f.9.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-6, Line 41, add the following bullet: "Containers will not be stored in the shipping/receiving area in a way that would interfere with loading and unloading operations."

Condition Impact Statement: N/A

Requested Action: Accept.

141. **Condition III.7.B.f.10.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-7, Line 14, delete the word "provided" and replace with the word "provide."

Condition Impact Statement: N/A

Requested Action: Accept.

142. **Condition III.7.B.f.11.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-7, Line 36, insert the following: "WRAP systems and structures are inherently safe during power failures."

Condition Impact Statement: N/A

Requested Action: Accept.

143. **Condition III.7.B.f.12.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-8, Line 45, after the phrase "any two wastes" insert the following: "(see Appendix 3A for details)."

Condition Impact Statement: N/A

Requested Action: Accept.

144. **Condition III.7.B.f.13.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-9, Lines 2 and 3,

delete the text and replace with the following: "At least yearly, the areas where ignitable or reactive waste is stored shall be inspected in accordance with WAC 173-303-395(1)(d) by facility personnel in the presence of a professional person who is familiar with the Uniform Fire Code or in the presence of the Hanford Fire Marshal."

Condition Impact Statement: N/A

Requested Action: Accept.

145. Condition III.7.B.f.14. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-9, Lines 19 and 21, after the phrase "restricted waste management" insert the word "gloveboxes."

Condition Impact Statement: N/A

Requested Action: Accept.

146. Condition III.7.B.f.15. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-9, Line 32, after the phrase "waste containers" insert the phrase "or over-pack containers."

Condition Impact Statement: N/A

Requested Action: Accept.

147. Condition III.7.B.f.16. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 6-9, Line 41, delete the phrase "(Chapter 8.0)" and add the following: "Relevant employees will receive the required training in order to properly manage ignitable or reactive waste at WRAP, as detailed in Chapter 8.0."

Condition Impact Statement: N/A

Requested Action: Accept.

III.7.B.g. Chapter 7

148. Condition III.7.B.g.1. Key Comment: exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: The following condition supercedes any limitation stated or implied in Chapter 7 or Table 7-1: The requirements of WAC 173-303-350(3)(b) are hereby required for all damaged or unacceptable dangerous/mixed waste shipments which arrived at this TSD unit, whether from offsite (i.e., manifested) or from onsite (i.e., under shipping papers) from both generators and/or other TSD units and facilities.

Condition Impact Statement: This condition would impose requirements in a way inconsistent with the approach established in the original issuance of the Permit by the Department of Ecology.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-350(3)(b) states "The description of actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303-370(5), Manifest System, reasons for not accepting dangerous waste shipments;" The Department of Ecology is proposing to establish a permit condition that would change the regulations by imposing these requirements to onsite movements when the regulation only applies to offsite manifested waste shipments. The Permittees submit that there is no basis in the Fact Sheet or administrative record to impose such a requirement.

The Permittees and the Department of Ecology spent considerable time and effort in constructing the Permit between 1991 and 1994. The Department of Ecology is undermining the original permitting approach on the Hanford Facility by preparing TSD unit-specific conditions inconsistent with the methodology established in the original issuance of the Permit. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolved difficulties, redundancies, and inefficiencies in this approach. As a result, the Department made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility wide approach, but still provide facility wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit".

On page 145 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "As a waste tracking system already exists, it is not clear to the Department why costs, workload, laboratory support, and delays would increase. To minimize such increases, the Department crafted the Conditions around the existing system. To make the Condition more compatible with the existing system, the Department agrees to not require regulatory agency notification for onsite manifest discrepancies. Instead, the Permittees will only be required to place documentation in the operating record for the Department's review at an inspection".

The Permittees and the Department of Ecology struck a balance on the initial Permit when Conditions II.P and II.Q were established. The Permittees submit that there have been no further implementation problems discovered from 1994. It is inappropriate to construct conditions on a unit-by-unit basis regarding these types of matters when the initial Permit resolved these matters in Part II of the Permit.

The Department of Ecology has not established the basis necessary to change the regulations in a Permit. Furthermore, the Department of Ecology has not established the basis to impose requirements on a unit-by-unit basis inconsistent with Permit Conditions II.P and II.Q.

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees quoted from an agreement between the Permittees and Ecology from the second Responsiveness Summary for the Sitewide Dangerous Waste Permit to support their position that this condition would cause additional cost and implementation difficulties. The language in the second Responsiveness Summary for the Sitewide Dangerous Waste Permit actually supports the condition. The second Responsiveness Summary states: "... the Department agrees to not require regulatory agency notification for onsite manifest discrepancies. Instead, the Permittees will only be required to place documentation in the operating record for the Department's review at an inspection." (page 145 of 189). The second reference made in the comment to the discussion of waste tracking and manifest discrepancies in the second Responsiveness Summary is not related or appropriate to the issues of hazards to public health or the environment or the Contingency Plan which are addressed by this condition.

The requirement, as stated in WAC 173-303-350(3)(b), does not conflict with that statement; rather it supports it as well. WAC 173-303-350(3) says the Contingency Plan must contain the following: "(b) A description of actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to WAC 173-303-370(5), Manifest system, reasons for not accepting dangerous waste shipments."

The Permittees' argument to delete the condition contradicts previously agreed upon language in the second Responsiveness Summary for the Sitewide Dangerous Waste Permit; therefore, there is no basis for Ecology to delete the condition.

Regarding the comment that this represents a change in the regulations, Ecology believes that this condition, addressing text in the Permit Application describing the Contingency Plan, is not inconsistent with Permit Conditions II.P. and II.Q. which address "Manifest System" and "On-Site Transportation," respectively.

149. **Condition III.7.B.g.2.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Table 7-1. The first paragraph of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) and the following sections of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) are added as applicable Sections of Appendix 7A of this TSD unit-specific Chapter 7: Sections 3.1, 8.2, 8.3, 8.4, 11.0, and 12.0.

Condition Impact Statement: N/A

Requested Action: Accept.

Ecology Response: Ecology agrees with the Requested Action. However, the condition needs to be corrected and to reflect recent revisions to Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion).

Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) was revised after the Permittees submitted the latest draft; therefore, the draft Permit Application did not reflect the latest changes to Attachment 4. The following sections applicable to this condition have been

revised: Sections 1.3.2, 8.2, 8.3, 8.4, 11.0, and 12.0. The condition has been revised to correct the out-dated section numbers as follows:

“Table 7-1. The first paragraph of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) and the following sections of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) are added as applicable Sections of Appendix 7A of this TSD unit-specific Chapter 7: Sections 3.1, 7.3, 9.2, 8.4, 11.0, 12.0, and 13.0.

In addition, delete Section 1.3.2 and replace with Section 1.3.4.”

150. **Condition III.7.B.g.3.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Those portions of DOE/RL-94-02 that are not made enforceable by inclusion in the application matrix of that document are not made enforceable by reference in this document.

Condition Impact Statement: N/A

Requested Action: Accept.

III.7.B.h. **Appendix 7A**

151. **Condition III.7.B.h.1.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 5, delete the entire first paragraph, with the exception of the first sentence.

Condition Impact Statement: N/A

Requested Action: Delete this condition.

Comment Justification: The Draft Permit condition has been written to impose requirements on a section of the Building Emergency Plan that already has been determined by the Department of Ecology to be nonenforceable.

Ecology Response: Ecology agrees with the Requested Action. The condition is deleted as requested. The intent of the Permittees' statement that the "... condition has been written to impose requirements on a section . . . determined by the Department of Ecology to be nonenforceable." is not clear. Ecology maintains the position that text drafted in both an enforceable and nonenforceable portions of the Permit Application need to describe operations accurately at the subject TSD unit. In this case, Ecology found that this specific condition did not provide additional clarification to the Permit and, therefore, will delete it.

152. **Condition III.7.B.h.2.** **Key Comment:** exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 5, seventh Paragraph, insert the word "non-hazardous" between "other" and "materials."

Condition Impact Statement: This condition would impose restrictions that exceed regulatory authority provided by Revised Code of Washington 70.105.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-010 clearly delineates the purposes of the Dangerous Waste Regulations. All purposes of WAC 173-303 specifically apply to dangerous and extremely hazardous waste. This condition would impose restrictions on types of non-waste materials that could be used at WRAP. There is no basis for establishing a permit condition based on text provided in the application for informational purposes. There is no basis for limiting use of non-waste materials that should be available for legitimate use at WRAP.

In addition, the Draft Permit condition has been written to impose requirements on a section of the Building Emergency Plan that already has been determined by the Department of Ecology to be nonenforceable.

Ecology Response: Ecology disagrees with the Requested Action. However, the condition will be modified to accommodate the concerns regarding non-waste material storage outside of the WRAP building.

Even though the condition affects a nonenforceable portion of the Building Emergency Plan (BEP), operations described in the Permit shall not conflict with applicable regulations. The description of exterior storage at WRAP of materials other than empty containers in Section 1.4 of the BEP is too broad and may include waste materials. Storage of waste material in an area of WRAP not designed to store waste material, is not allowed. The condition is revised as follows:

“Page 5, seventh Paragraph, insert the word “non-waste” between “other” and “materials.”

153. **Condition III.7.B.h.3.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 5, eighth paragraph, delete the phrase "the various" and replace with the word "appropriate."

Condition Impact Statement: N/A

Requested Action: Delete this condition.

Comment Justification: The Draft Permit condition has been written to impose requirements on a section of the Building Emergency Plan that already has been determined by the Department of Ecology to be nonenforceable.

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged. Even though the condition affects a nonenforceable portion of the BEP, operations described in the Permit Application shall not conflict with applicable regulations. The draft condition provides sufficient flexibility for the decontamination activities at WRAP.

The description of decontamination of equipment and waste containers being “. . . performed throughout the various areas . . .” at WRAP is too broad. Based on this description,

decontamination of waste containers would occur in areas of WRAP not designed for such an activity. It would describe activities not allowed under the regulations. Decontamination of waste containers falls under the category of "Use and Management of Containers" as described in WAC 173-303-630. Only certain areas at WRAP are designed for such activity and comply with WAC 173-303-630. Ecology acknowledges the Permittees' concerns about the ability to decontaminate fixed equipment, as needed, such as the air emissions control system not located in areas designed to process waste containers (see Section 2.1 and Condition III.7.B.b.7). Decontamination activities shall be conducted in such a manner as to not cause a spill or release of hazardous or mixed waste.

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154. **Condition III.7.B.h.4.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 9, Section 6.1.3., delete the phrase "Examples of the gases placed" and replace with the phrase "Routinely used gases"

Condition Impact Statement: N/A

Requested Action: Delete this condition.

Comment Justification: The Draft Permit condition has been written to impose requirements on a section of the Building Emergency Plan that already has been determined by the Department of Ecology to be nonenforceable.

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged. The Permittees' intent is not clear in their statement that the condition has been written to impose requirements on a section of the BEP that already has been determined by the Department of Ecology to be nonenforceable. This condition was originally drafted with agreement from the Permittees during permitting work sessions in order to clarify Section 6.1.3 of the BEP. It does not add any regulatory burden on the Permittees.

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155. **Condition III.7.B.h.5.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 9, Section 6.1.3., delete the word "acetylene."

Condition Impact Statement: N/A

Requested Action: Delete this condition.

Comment Justification: The Draft Permit condition has been written to impose requirements on a section of the Building Emergency Plan that already has been determined by the Department of Ecology to be nonenforceable.

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged. The intent of the Permittees' statement that the condition has been written to impose requirements on a section of the BEP that already has been determined by the Department of Ecology to be nonenforceable is not clear. This condition was originally drafted with agreement from the Permittees during permitting work sessions in order to clarify Section 6.1.3 of the BEP. It

does not add any regulatory burden on the Permittees.

156. Condition III.7.B.h.6. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 15, Section 7.1.2., first paragraph, after the phrase "Take Cover Alarm" and before the phrase "is activated" insert the following: "(wavering siren)."

Condition Impact Statement: N/A

Requested Action: Accept.

157. Condition III.7.B.h.7. Key Comment: reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 16, Section 7.2.1., add a section (Section 7.2.1.1.) that details procedures to safely shut down utilities at WRAP (including, but not limited to, HVAC, fire suppression, electrical circuits, and sanitary water and/or sewer). This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would impose requirements based on a presumption that detailed procedures are required for shutdown of all the specified utilities to avoid presenting a threat to human health and the environment if an emergency arises. This condition could also force WRAP to submit a permit modification to revise operating procedures.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-806(4)(a)(viii)(D) states a permit application must consist of . . . "a description of procedure, structures, or equipment used at the facility to . . . mitigate effects of equipment failure and power outages". WRAP permit application, Appendix 7A, Section 7.2.1 contains the description to meet this requirement and is made enforceable by Draft Permit Condition III.7.A.

WAC 173-350(3)(a) states that "the contingency plan must contain the following: a description of the actions which facility personnel must take to comply with this section and WAC 173-303-360". This condition presumes that detailed procedures for utility shutdown are required to ensure safe shutdown of WRAP.

The recommended condition meets the intent of WAC 173-303-350 without including facility procedural details. The WRAP fire suppression system is locked by the fire department and cannot be isolated by facility personnel. There is no way to isolate the WRAP sewer system.

Ecology Response: Ecology disagrees with the Requested Action; however, the condition will be revised to clarify the intent of the condition. The original intent of this condition was to require that the Permittees describe the procedures necessary to safely shut down utilities, process, and operations at WRAP to prevent fires, explosions, and releases in the event that WRAP stops

operations due to an emergency or loss of utilities. As the Permittees noted in the above comment, WAC 173-303-806(4)(a)(viii)(D) requires that "a description of procedures, structures, or equipment used at the facility to: . . . mitigate effects of equipment failure and power outages." WAC 173-303-360(2)(f) states, ". . . the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers." In addition, WAC 173-303-360(2)(g) states, "If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes, or other equipment, whenever this is appropriate."

Although a description of the procedures to safely shut down WRAP was requested during previous permitting work sessions with the Permittees (refer to the May 4, 1998, comments on the Building Emergency Plan for WRAP – comment #13), such description was not submitted with the draft Permit Application. This condition was created to ensure that the Permittees are required to provide the missing information. The Permittees argue that the condition "presumes that detailed procedures for utility shutdown are required to ensure safe shutdown of WRAP," yet failed to describe why such procedures would not be needed. Because the Permittees failed to provide the following information, additional text will be necessary: (1) a sufficient description of potential problems associated with emergency shut down of WRAP utilities/processes, (2) procedures needed to safely shut down utilities/processes, to ensure that fires, explosions, and releases do not occur or spread to other dangerous/mixed waste at WRAP, (3) procedures for collecting/containing released waste, and/or removing or isolating containers, and (4) procedures describing monitoring of leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment at WRAP.

The Permittees are aware of the potential for emergency conditions such as a release from the process gloveboxes due to loss of utilities at WRAP as noted in Section 7.2.1 of the Permit Application.

The condition is revised as follows:

"Page 16, Section 7.2.1., provide additional text describing procedures to safely shut down WRAP operations in the event of loss of utilities such as electrical power, compressed air, and process ventilation. Describe measures to be taken to either shut down or maintain utilities at WRAP in order to ensure that fires, explosions, and releases do not occur or spread to other dangerous/mixed waste. Describe measures to be taken to safely shut down equipment, processes, and/or operations including, but not limited to, waste treatment operations, loading operations, process lines, automated container storage and handling equipment, computer control systems, and NDE/NDA equipment. Describe procedures for collecting/containing released waste, and/or removing or isolating containers. Describe how leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment will be monitored at WRAP.

Page 16, Section 7.2.2., provide additional text describing procedures to safely shut down WRAP operations in the event of a major process disruption/loss of plant control. Provide WRAP-specific examples of such events. Describe measures to be taken to safely shut down equipment, processes, and/or operations at WRAP in order to ensure that fires, explosions, and releases do not occur or spread to other dangerous/mixed waste. The equipment, processes and/or operations would include but not be limited to waste treatment operations, loading operations, process lines, automated container storage and handling equipment, computer control systems, and NDE/NDA equipment.

Describe procedures for collecting/containing released waste, and/or removing or isolating containers. Describe how leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment will be monitored at WRAP.

This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification."

158. Condition III.7.B.h.8. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 25, Section 7.5.3., second paragraph, after the phrase "affected WRAP" insert the word "building(s)."

Condition Impact Statement: N/A

Requested Action: Accept.

159. Condition III.7.B.h.9. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 26, Section 8.2, second bullet, delete the word "clean" and replace with the word "cleaned."

Condition Impact Statement: N/A

Requested Action: Accept.

160. Condition III.7.B.h.10. Key Comment: reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: The Permittees will submit to Ecology a revised Section 9.2 that indicates the specific location and capability of all portable fire extinguishers. This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, be incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would require location descriptions in excessive detail, such that each time WRAP needs to relocate a fire extinguisher, the Permit would first require a modification.

Requested Action: Delete the word "specific".

Comment Justification: WAC 173-303-350(3)(e) requires locations of equipment to be identified. However, because the fire extinguishers being addressed are portable, the Permittees request that flexibility be allowed in identifying their locations. It would be appropriate to specify the expected area of use for each portable fire extinguisher.

Ecology Response: Ecology disagrees with the Requested Action. However, the condition will be revised to accommodate the Permittees' concerns regarding flexibility and future modifications to the Permit.

Ecology recognizes the Permittees' need for flexibility in locating fire extinguishers at WRAP. The revised condition will require that the Permittees post diagrams indicating locations of fire extinguishers at strategic locations for each area of WRAP so that employees can easily determine the location(s) of the nearest or most accessible extinguisher(s). The Permittees are expected to revise the posted fire extinguisher location diagrams when any fire extinguisher is relocated. The condition is revised as follows:

"Section 9.2 Portable Emergency Equipment: The following text is added: "Diagrams, indicating the specific locations of fire extinguishers will be posted at strategic locations for each area of WRAP so that employees can easily determine the location(s) of the nearest or most accessible fire extinguisher(s)." These diagrams shall be posted at WRAP within thirty (30) days of the effective date of this Permit."

161. **Condition III.7.B.h.11.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The Permittees will submit to Ecology a revised Section 9.4 that enumerates the specific Personal Protective Equipment (PPE), its location, and capabilities. This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, be incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: N/A

Requested Action: Accept.

162. **Condition III.7.B.h.12.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: The Permittees will submit to Ecology a revised Section 9.5 indicating that portable spill response carts are located in the shipping/receiving area and in the process area. Show that the spill response locker is located only in the 2336-W material preparation area room (room 152) and not in the process area. Elaborate on the capability of all equipment. This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, be incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would require descriptions of equipment capability in excessive detail, such that each time WRAP needs to procure new spill equipment, the Permit would first require a modification.

Requested Action: Accept the first two sentences of this condition, and delete "Elaborate on the capability of all equipment".

Comment Justification: The condition to "Elaborate on the capability of all equipment" would hinder ability of the Permittees' to efficiently employ new spill equipment. The list of the equipment in Section 9.5 is intended to provide examples of the types of equipment that are located in spill response carts and lockers.

Ecology Response: Ecology disagrees with the Requested Action. However, the condition will be reworded to more closely reflect the language of the regulation. Specifically, WAC 173-303-350(3)(e) states that the Contingency Plan must contain "a list of all emergency equipment at the facility . . . the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities . . ." Contrary to the Permittees' statement, "The list of the equipment in Section 9.5 is intended to provide examples of the types of equipment that are located in spill response carts and lockers," the regulation requires specificity. As submitted, Section 9.5 of the WRAP BEP does not provide sufficient detail as required by the regulation. The condition is reworded as follows:

"Permittees will submit to Ecology a revised Section 9.5 stating that portable spill response carts are located in the shipping/receiving area and in the process area. Accurately describe the location of the spill response locker (i.e., that the spill response locker is located only in the 2336-W material preparation area room [room 152] and not in the process area). List the contents of the portable spill response carts and the spill response locker, that is, address the emergency equipment available. Include a physical description of each item on the list, as well as a brief outline or description of its capabilities. This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, be incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification."

163. **Condition III.7.B.h.13.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The Permittees must review and immediately amend the emergency response documentation, if necessary, whenever: (a) Applicable regulations are revised; (b) The plan fails in an emergency; (c) The unit changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste constituents, or in a way that changes the response necessary in an emergency; and (d) The list of emergency equipment changes.

Condition Impact Statement: N/A

Requested Action: Accept.

164. **Condition III.7.B.h.14.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The Permittees must note in the WRAP operating record the time, date, and details of any incident that requires implementing the Contingency Plan. Within fifteen (15) days after the incident, the Permittees must submit a written report to Ecology. The report must, at a minimum, include:

- (1) Name, address, and telephone number of the Permittees;
- (2) Name and telephone number of the TSD unit;
- (3) Date, time, and type of incident;
- (4) Name and quantity of material(s) involved;
- (5) Extent of injuries;
- (6) An assessment of actual or potential hazards to human health or the environment, where this is applicable;
- (7) Estimated quantity and disposition of recovered material that resulted from the incident;

- (8) Cause of the incident; and
- (9) Description of corrective actions taken to prevent recurrence of the incident.

Condition Impact Statement: N/A

Requested Action: Accept.

III.7.B.i. Chapter 8 (reserved)

III.7.B.j. Appendix 8A

165. Condition III.7.B.j.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1, Section 2.0, after the phrase "and/or mixed waste." Add the following: "The WRAP DWTP ensures personnel responsible for dangerous waste management are trained to perform the job duties pertinent to handling, treatment, storage, and/or disposal of dangerous waste."

Condition Impact Statement: N/A

Requested Action: Accept.

166. Condition III.7.B.j.2. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1, Section 4.0, insert the following text: "A Facility Manager for the WRAP operating organization must ensure that personnel performing the various TSD unit and TSD unit-related activities have received appropriate on-the-job training (OJT). The OJT must be provided by an individual proficient in the specific activity or activities. That individual must certify that personnel, who successfully complete their OJT, are proficient before they can be assigned to perform the activity independently (i.e., without close supervision)."

Condition Impact Statement: N/A

Requested Action: Accept.

167. Condition III.7.B.j.3. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1, Section 4.1, in the last sentence, delete the following text: "Because" and "the Facility Manager is involved in directing training."

Condition Impact Statement: N/A

Requested Action: Accept.

168. Condition III.7.B.j.4. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2, Section 4.5,

delete the phrase "WRAP and" and replace with the following: "All WRAP employees and."

Condition Impact Statement: N/A

Requested Action: Accept.

169. **Condition III.7.B.j.5.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4, Section 5.3.4., the categories of General Manager positions do not completely match the categories of General Manager positions listed in Attachment 2. Revise either Section 5.3.4, or Attachment 2, or both to match the General Manager descriptions and required training courses. The revised text shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, be incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: N/A

Requested Action: Accept.

170. **Condition III.7.B.j.6.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7, Section 5.5, delete the word "some" and replace with the word "non-facility."

Condition Impact Statement: N/A

Requested Action: Accept.

171. **Condition III.7.B.j.7.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 7, Section 5.7, delete the abbreviation "WMH" and replace with "Waste Management Hanford (WMH)."

Condition Impact Statement: This condition would refer to an organization that no longer exists.

Requested Action: Rewrite the condition to state Page 7, Section 5.7, delete the abbreviation "WMH" and replace with "Waste Management".

Comment Justification: This change accurately will reflect the title of the Waste Management training department.

Ecology Response: Ecology agrees with the Requested Action. The condition is revised as requested.

172. **Condition III.7.B.k.1.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Within sixty (60) days of the effective date of the permit, Ecology and the Permittees shall initiate meetings to establish scope and data quality objectives for a revised closure plan. No later than three hundred sixty-five (365) days after the effective date of the Permit, the Permittees shall submit a revised closure plan following all applicable Ecology regulations and guidance. The revised closure plan shall be subject to Ecology review with issuance of notice(s) of deficiency, revision by the Permittees, and issuance of Draft Permit conditions, if such conditions are necessary. The revised closure plan shall be considered a Class 3 permit modification to allow the public to comment on all aspects of the closure, including any proposed Permit conditions. The closure plan and conditions shall be issued as required by the applicable regulations, except as noted herein.

Condition Impact Statement: This condition would require submittal of a revised closure plan that would require sampling and analysis (data quality objectives process) when WRAP can be clean closed without sampling and analysis. This condition would require the revised closure plan to follow guidance documents. Lastly, this condition would subject the permit modification process to the Notice of Deficiency process and Tri-Part Agreement dispute resolution.

Requested Action: Reword draft condition to read: "No later than three hundred sixty-five (365) days after the effective date of the Permit, the Permittees shall submit a revised closure plan. The revised closure plan shall be subject to Ecology review and issuance of Draft Permit conditions, if such conditions are necessary. The revised closure plan shall be considered a Class 3 permit modification to allow the public to comment on all aspects of the closure, including any proposed Permit conditions.

Comment Justification: The Permittees agree to work with the Department of Ecology to establish a revised closure plan for WRAP. The closure plan in the permit application reflects the closure approach for Hanford Facility TSD units from the early 1990's. Submittal of the revised closure plan within 365 days is a reasonable time to complete this activity. The Permittees intend to submit a closure plan similar to the closure plan found in the permit application for CWC.

The Permittees do not agree with the Draft Permit condition language referring to data quality objectives, closure plan development based on guidance, and subjecting the revised closure plan to the notice of deficiency process. These elements need to be deleted from the Draft Permit condition.

The data quality objectives process has been used successfully in TSD unit closures on the Hanford Facility when sampling and analysis activities are involved in closure. The Permittees submit that the revised WRAP closure plan can be written without the need to discuss detailed sampling and analysis activities to achieve clean closure, just as the CWC closure plan. It is inappropriate to presume that the Permittees must use the data quality objectives process in the development of the revised WRAP closure plan. The revised WRAP closure plan would reference the need to perform sampling and analysis if certain circumstances arise during the course of closure (e.g., cracks in the concrete floor). The revised WRAP closure plan would state that if sampling and analysis were needed to achieve clean closure, a permit modification would be initiated to discuss data quality objectives with the Department of Ecology at that time.

The Draft Permit condition states the revised closure plan will be submitted "following all applicable . . . guidance." This language is inappropriate for a permit condition. The Permittees and the Department of Ecology always consider available guidance in the development of the permit application. There is no basis to require the permit application language to follow all applicable guidance.

Finally, the Draft Permit condition states that the revised closure plan will "subject to Ecology's review with issuance of notice(s) of deficiency." The notice of deficiency process mentioned in WAC 173-303-840(1)(b) is used before the Department of Ecology prepares a draft permit. The notice of deficiency process used in this manner is inconsistent with the regulations and is inconsistent with the Tri-Party Agreement. The Tri-Party Agreement uses the notice of deficiency process in the permitting of the Hanford Facility [refer to Part Two, Article VIII, Paragraph K]. After a TSD unit is incorporated into the Permit, it is inappropriate to use the notice of deficiency process to facilitate a permit modification. To facilitate a permit modification such as this, the Permittees and the Department of Ecology should follow the process used for the closure of the 616 Nonradioactive Dangerous Waste Storage Facility found elsewhere in this permit modification package. The revised closure plan for the 616 Nonradioactive Dangerous Waste Storage Facility was successfully developed through Department of Ecology review and comment without the development of Draft Permit conditions.

Ecology Response: Ecology disagrees with the Requested Action. Further, Ecology disagrees with most of the Permittees' comments; however, the condition will be modified slightly.

Ecology will not remove the DQO process from the condition. Condition II.E.5 of the Permit states that the DQO process will be used whenever data are collected for use. Ecology does not agree with the Permittees' premise that detailed discussions about sampling and analysis activities need not occur to write a closure plan. Discussions during the DQO process will include closure requirements, closure performance standards, closure contingencies, and activities that will be used to characterize possible contamination and to verify performance standards have been met. These may include field screening, sampling, and analysis as part of developing an acceptable closure plan. The Permittees also state that WRAP could be clean-closed without sampling and analysis. Whether sampling and analysis will occur, the time of closure is yet to be determined.

The Permittees' comparison to the CWC Closure Plan is not appropriate since it is not considered to be fully developed at this time. Closure of the 2401-W Building required development of a closure plan with detailed performance standards and closure activities. In addition, there are major differences in the operations conducted at WRAP that preclude such a comparison.

Ecology agrees, in part, with the Permittees' statement regarding the requirement to follow Ecology guidance and will change the text in the condition to require the Permittees to consider applicable Ecology guidance in developing a closure plan.

Ecology does not agree to remove the notice of deficiency (NOD) process from the condition. The Permittees' argument that the use of the NOD process in developing a closure plan at this stage of the permit process is inconsistent with the TPA is inappropriate, because the condition addresses development of an adequate closure plan for a Dangerous Waste Permit. The TPA did not consider the possibility that the Permittees would include an outdated closure plan with their certified permit application. The Permittees also state that the NOD process is to be used prior to issuing a final permit. Ecology agrees that normally that would be the case. However, several factors were

considered when Ecology included the NOD process in the condition. First, the Permittees were late in submitting the Part B Permit Application. Although this late submission limited Ecology's review of the Closure Plan, Ecology recognized that the Closure Plan was inadequate. Rather than write the Closure Plan for the Permittees, Ecology decided to provide another opportunity for the Permittees to provide an adequate closure plan. By the Permittees' own admission, "The closure plan in the permit application reflects the closure approach for Hanford Facility TSD units from the early 1990's." Instead of rejecting the Permit Application, Ecology decided to proceed with the permitting process and resolve the Closure Plan issues through a compliance schedule. Secondly, the informal review and comment process was used for the revised WAPs submitted for WRAP (and CWC). (The initial WAPs received notices of deficiency from both the U.S. Environmental Protection Agency and Ecology.) During this informal process, Ecology experienced a lack of responsiveness by the Permittees in addressing review comments and incorporating changes to the text. In addition, language supplied by the Permittees to revise the text through permit conditions, as agreed to during the informal review process, has been subject to attack from the Permittees during this public comment period. Therefore, this condition establishes a compliance schedule to develop an acceptable closure plan and will be subject to the NOD process. The condition is revised as follows:

"Within sixty (60) days of the effective date of the Permit, Ecology and the Permittees shall initiate meetings to establish scope and data quality objectives for a revised closure plan. No later than three hundred sixty-five (365) days after the effective date of the Permit, the Permittees shall submit a revised closure plan that follows all applicable Ecology regulations and that considers applicable Ecology guidance. The revised closure plan shall be subject to Ecology review with issuance of notice(s) of deficiency, revision by the Permittees, and issuance of draft permit conditions, if such conditions are necessary. The revised Closure Plan shall be considered a Class 3 permit modification to allow the public to comment on all aspects of the closure, including any proposed permit conditions. The Closure Plan and conditions shall be issued as required by the applicable regulations, except as noted herein."

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173. **Condition III.7.B.k.2.** **Key Comment:** hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 11-1, Line 25, delete the word "particle" and replace with the phrase "solid phase."

Condition Impact Statement: This condition would require modifications to an obsolete closure plan, despite the fact that closure will not commence before submittal to and approval by the Department of Ecology of a revised closure plan.

Requested Action: Delete this condition.

Comment Justification: The Permittees agree that the text drafted by the Department of Ecology provides clarification. However, the Permittees also believe that this condition is unnecessary because a revised closure plan will be submitted for Department of Ecology approval long before closure of WRAP (refer to Draft Permit Condition III.7.B.k.1.).

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees contend that, because a revised closure plan will be submitted prior to closure, there

is no need to alter the existing Closure Plan. WAC 173-303-806(4)(a)(xiii) requires that a closure plan be included as part of the Permit Application submittal in accordance with applicable regulatory requirements. The existing Closure Plan is required to remain in place until a revised closure plan is approved by Ecology; this plan must be as accurate as possible. This condition simply clarifies existing text in the Permit Application and adds no extra burden to the Permittees.

174. **Condition III.7.B.k.3.** **Key Comment:** hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 11-1, Line 33, delete the phrase "any contaminated soil within the TSD unit boundary (Appendix 2A details TSD unit boundary) " and replace with the following "all soil contaminated by WRAP operations in accordance with the Tri-Party Agreement approach to closure, Section 6.3, Treatment, Storage, and Disposal Closure Process."

Condition Impact Statement: This condition would require modifications to an obsolete closure plan, despite the fact that closure will not commence before submittal to and approval by the Department of Ecology of a revised closure plan.

Requested Action: Delete this condition.

Comment Justification: The condition is unnecessary because a revised closure plan will be submitted for Departmental of Ecology approval long before closure of WRAP (refer to Draft Permit Condition III.7.B.k.1.).

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees contend that, because a revised closure plan will be submitted prior to closure, there is no need to alter the existing Closure Plan. WAC 173-303-806(4)(a)(xiii) requires that a closure plan be included as part of the Permit Application submittal in accordance with applicable regulatory requirements. Errors and/or basic deficiencies in the existing Closure Plan must be corrected until a revised closure plan is reviewed by Ecology and approved. This condition corrects erroneous text in the Permit Application in order to comply with the regulatory requirements in the TPA and WAC 173-303-610. The existing text implied that WRAP would remove contaminated soil only as far as the WRAP facility boundary in order to achieve clean-closure. That is not an accurate statement. WRAP will be responsible for contamination caused by WRAP operations beyond the WRAP facility boundary.

175. **Condition III.7.B.k.4.** **Key Comment:** hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 11-1, Lines 41 through 42, delete the phrase "and disposed of accordingly." After the phrase "will be designated" add the following: "and disposed of."

Condition Impact Statement: This condition would require modifications to an obsolete closure plan, despite the fact that closure will not commence before submittal to and approval by the Department of Ecology of a revised closure plan.

Requested Action: Delete this condition.

Comment Justification: The condition is unnecessary because a revised closure plan will be submitted for Department of Ecology approval long before closure of WRAP. Nevertheless, the Permittees intend to dispose of these and all waste materials properly and in accordance with regulatory requirements (refer to Draft Permit Condition III.7.B.k.1).

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees contend that, because a revised closure plan will be submitted prior to closure, there is no need to alter the existing Closure Plan. WAC 173-303-806(4)(a)(xiii) requires that a closure plan be included as part of the Permit Application submittal in accordance with applicable regulatory requirements. Error and/or deficiencies in the existing Closure Plan must be corrected until a revised closure plan is reviewed by Ecology and approved. This condition clarifies an ambiguous statement in the Permit Application and adds no burden to the Permittees.

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176. **Condition III.7.B.k.5.** **Key Comment:** hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 11-2, Line 1, after the phrase "sampling program" add the following "subject to approval by the Department of Ecology."

Condition Impact Statement: This condition would require modifications to an obsolete closure plan, despite the fact that closure will not commence before submittal to and approval by the Department of Ecology of a revised closure plan.

Requested Action: Delete this condition.

Comment Justification: The condition is unnecessary because a revised closure plan will be submitted for Department of Ecology approval long before closure of WRAP. The Permittees request the Department of Ecology to address any concerns with sampling during review of the revised plan (refer to Draft Permit Condition III.7.B.k.1.).

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees contend that, because a revised closure plan will be submitted prior to closure, there is no need to alter the existing Closure Plan. WAC 173-303-806(4)(a)(xiii) requires that a closure plan be included as part of the Permit Application submittal in accordance with applicable regulatory requirements. This condition adds text that clarifies Ecology's role with respect to the verification sampling for closure.

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177. **Condition III.7.B.k.6.** **Key Comment:** hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 11-6, Lines 43 and 44, delete the sentence beginning with "In addition, . . . "

Condition Impact Statement: This condition would require modifications to an obsolete closure plan, despite the fact that closure will not commence before submittal to and approval by the Department of Ecology of a revised closure plan.

Requested Action: Delete this condition.

Comment Justification: The condition is unnecessary because a revised closure plan will be submitted for Department of Ecology approval long before closure of WRAP (refer to Draft Permit Condition III.7.B.k.1.).

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees contend that, because a revised closure plan will be submitted prior to closure, there is no need to alter the existing Closure Plan. WAC 173-303-806(4)(a)(xiii) requires that a closure plan be included as part of the Permit Application submittal in accordance with applicable regulatory requirements. Errors and deficiencies in the existing Closure Plan must be corrected until a revised closure plan is reviewed by Ecology and approved. This condition deletes an inaccurate description in the Closure Plan.

178. **Condition III.7.B.k.7.** **Key Comment:** hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 11-7, Line 15, revise the text to read as follows: "Within sixty (60) days of completion of closure activities, a copy of the PE . . . "

Condition Impact Statement: This condition would require modifications to an obsolete closure plan, despite the fact that closure will not commence before submittal to and approval by the Department of Ecology of a revised closure plan.

Requested Action: Delete this condition.

Comment Justification: The condition is unnecessary because a revised closure plan will be submitted for Department of Ecology approval long before closure of WRAP (refer to Draft Permit Condition III.7.B.k.1.).

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees contend that, because a revised closure plan will be submitted prior to closure, there is no need to alter the existing Closure Plan. WAC 173-303-806(4)(a)(xiii) requires a closure plan be included as part of the Permit Application submittal in accordance with applicable regulatory requirements. Errors and/or deficiencies in the existing Closure Plan must be corrected until a revised closure plan is reviewed by Ecology and approved. This condition adds text to describe a requirement clearly stated in WAC 173-303-610(6) that was missing in the existing Closure Plan.

179. **Condition III.7.B.k.8.** **Key Comment:** hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 11-7, Lines 18 through 20, delete the text beginning with "The PE is not . . . "

Condition Impact Statement: This condition would require modifications to an obsolete closure plan, despite the fact that closure will not commence before submittal to and approval by the Department of Ecology of a revised closure plan.

Requested Action: Delete this condition.

Comment Justification: The condition is unnecessary because a revised closure plan will be submitted for Department of Ecology approval long before closure of WRAP (refer to Draft Permit Condition III.7.B.k.1.).

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees contend that, because a revised closure plan will be submitted prior to closure, there is no need to alter the existing Closure Plan. WAC 173-303-806(4)(a)(xiii) requires that a closure plan be included as part of the Permit Application submittal in accordance with applicable regulatory requirements. This condition simply deletes unclear text from the existing Closure Plan.

III.7.B.1. Chapter 12

180. **Condition III.7.B.1.1** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 12-1, Line 4, delete the phrase "could be" and replace with the word "are." Also, after the phrase "Hanford Facility," delete the word "are" and replace with the word "as."

Condition Impact Statement: N/A

Requested Action: Delete the condition.

Comment Justification: The text provided in the permit application is sufficiently clear. This Draft Permit condition reduces the clarity of the text and results in an incomplete sentence.

Ecology Response: Ecology disagrees with the Requested Action to delete the condition. However, the condition will be revised to accommodate some of the Permittees' concerns as follows:

"Page 12-1, Line 4, delete the phrase "could be" and replace with the word "are." Also, after " . . . Facility are . . . " insert the word "as."

181. **Condition III.7.B.1.2.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 12-1, Lines 5 through 36, delete the text beginning with "Not all of . . . "

Condition Impact Statement: This condition would delete text from the WRAP permit application intended as a general description of reporting and recordkeeping requirements applicable to WRAP based on WAC 173-303.

Requested Action: Delete this condition.

Comment Justification: There is no basis for eliminating permit application text that correctly identifies applicable regulatory requirements from the *Hanford Facility Dangerous Waste Permit Application, General Information Portion*, DOE/RL-91-28, Table 12-1. WRAP unit-specific reporting/recordkeeping requirements are limited to those that are *applicable by regulation* (refer to the *Hanford Facility Dangerous Waste Permit Application, General Information Portion*, DOE/RL-91-28, Chapter 12.0, page 12-1, lines 32-36).

This condition would erase appropriate permit application text without proper cause. Clearly, not all of the requirements in Table 12-1 are applicable at WRAP. For example, groundwater monitoring is applicable to land-based units and therefore not applicable to WRAP, which is not land-based (refer to Chapter 5.0 of the WRAP application).

This condition would require the Permittees to waste time and effort trying to convince the Department of Ecology that its own rules allow that some reporting activities would not be applicable to WRAP activities. There is no basis for the Department of Ecology to take the position that reporting requirements be taken out of context and inappropriately applied to WRAP. There is no rationale for expecting the Permittees to justify the lack of applicability when the regulations should adequately enable one to determine scope. The Department of Ecology did not require that this approach be taken for the TSD units incorporated into Part III of the Permit through the previous modification (Revision 4A).

Ecology Response: Ecology disagrees with the Requested Action to delete the condition; however, the condition will be revised to accommodate some of the Permittees' concerns. Ecology believes that the TSD unit application needs to provide a specific list and does not agree that the records are limited to those listed in the application. Contrary to the Permittees' assertion, the Permit also identifies recordkeeping requirements. To clarify the intent, the condition is revised as follows:

"Page 12-1, Line 8, delete "... are summarized as follows": and replace with the following text: "... including, but are not limited to, the following:"

182. **Condition III.7.B.1.3.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Within thirty (30) days of the effective date of the Permit, the Permittees shall notify Ecology in writing of the locations where WRAP records are maintained. In addition, Ecology shall be notified in writing whenever the locations of WRAP records change.

Condition Impact Statement: This condition would negate flexibility to physically relocate the storage location for WRAP records without a permit modification.

Requested Action: Delete this condition.

Comment Justification: Records on the Hanford Facility are managed in accordance with WAC 173-303-380, Condition I.H and Condition II.I.1 without requiring identification of a specific physical storage location. These records can be provided to the Department of Ecology on request without requiring identification of a specific physical storage location.

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

Ecology disagrees with the comment that Permit Condition II.I.1 does not require identification of a specific physical storage location. In fact, this condition states: "A TSD unit-specific Operating Record shall be maintained for each TSD unit at a location identified in Parts III, V, and VI of this Permit. Ecology has written a TSD unit-specific condition to require the Permittees to comply with Permit Condition II.I.1."

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183. **Condition III.7.B.1.4.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 12-1, add the following "All unit-specific reporting requirements identified in Table 12-1 of the General Information Portion "DOE/RL-91-28" are applicable to the WRAP unit, except for the following: II.I.1.a., II.I.1.g., II.B.4., II.F.2.a., II.F.2.c., II.I.1.p., and II.U."

Condition Impact Statement: This condition arbitrarily would impose reporting requirements that would otherwise be self-evident when reviewing DOE/RL-91-28, Table 12-1.

Requested Action: Delete this condition.

Comment Justification: There is no regulatory basis for the random assignment of requirements from Table 12-1 to WRAP. Table 12-1 is a comprehensive list of requirements that generally are applicable on the Hanford Facility and was not submitted with the expectation that the list would be applied in its entirety as a permit condition for one unit. Some requirements listed in Table 12-1 are obviously not applicable to WRAP. For example, groundwater monitoring would not apply to WRAP because WRAP does not meet the WAC 173-303-040 definition for "regulated unit."

Ecology Response: Ecology disagrees with the Requested Action. However, upon re-examination, the following unit-specific reporting requirements listed in the condition as not applicable are deleted from the condition as follows: II.I.1.a, II.I.1.g, and II.B.4. The unit-specific requirements of Table 12-1 reflect records and reports required by the RCRA Permit and associated WAC 173-303 and 40 CFR. The condition is modified to provide a mechanism for the Permittees to present a justification as to why any unit-specific requirement from Table 12-1 is not applicable. The condition is revised as follows:

"Page 12-1, add the following: "All unit-specific reporting requirements identified in Table 12-1 of the General Information Portion (DOE/RL-91-28) are applicable to the WRAP unit, except for the following: II.F.2.a., II.F.2.c., II.I.1.p., and II.U." The Permittees shall identify requirements from Table 12-1 of the General Information Portion (DOE/RL-91-28) that are not applicable to WRAP and justify why they are not applicable. This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, be incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification."

Comments on the Proposed Modifications to Part III, Chapter 8, Central Waste Complex (CWC)

1. **III.8.A.** **Key Comment:** reflects approach inconsistent with regulatory requirement

Draft Permit conditions as proposed by the Department of Ecology:

III.8.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION

The Permittees shall comply with all requirements set forth in the Central Waste Complex (CWC) Permit Application, Rev. 1 and 1A, as found in Attachment 44, including the amendments specified in Condition III.8.B. Enforceable portions are listed below. (All subsections, figures, and tables included in these portions also are enforceable unless stated otherwise.):

Part A, Form 3, Permit Application, Revision 6, June 28, 1999

Section 2.2	Topographic Maps
Section 2.4	Release from Solid Waste Management Units (SWMU)
Chapter 3.0	Waste Analysis
Chapter 4.0	Process Information
Chapter 6.0	Procedure to Prevent Hazards
Chapter 7.0	Contingency Plan
Chapter 8.0	Personnel Training
Chapter 11.0	Closure and Post Closure Requirements
Chapter 12.0	Reporting and Recordkeeping
Appendix 2A	Topographic Maps
Appendix 3A	Waste Analysis Plan
Appendix 4A	Design Drawings
Appendix 4B	Secondary Containment Calculations
Appendix 4C	Sealant Properties
Appendix 7A	Building Emergency Plan (As applicable in Chapter 7)
Appendix 8A	Training Plan
Attachment 45	Selecting a Laboratory and Quality Assurance/Quality Control

Condition Impact Statement: This condition would make portions of the permit application enforceable that are not recognized in the Department of Ecology guidance documents.

Requested Action: Delete Section 2.4, Appendix 3A, and Attachment 45 as enforceable sections.

Comment Justification: This condition has been drafted against a portion of the permit application (Section 2.1) that the Department of Ecology previously identified as nonenforceable information in accordance with its guidance document, "Dangerous Waste Permit Application Requirements", Publication #95-402, dated 6/96. Section 2.2 contains information determined by the Department of Ecology as enforceable. The Permittees request that the Department of Ecology use the same approach taken for the Permit, Part III: Chapter 4 (Liquid Effluent Retention Facility/200 Area Effluent Treatment Facility), Chapter 5 (242-A Evaporator), and Chapter 6 (325 Hazardous Waste Treatment Units).

Refer to related comments in response to Draft Permit Condition III.8.B.d. Refer also to

Comments on the Proposed Modifications to Attachment 45, Comment Number 1.

Ecology Response: Ecology disagrees with the Requested Action. The regulatory requirements found in Section 2.4, Appendix 3A, and Attachment 45 are directly tied to WAC-173-303 requirements and the existing Permit conditions. Enforceability of these specific parts of the Permit Application may not be evident from reading Publication #95-402; however, the Dangerous Waste Regulations thoroughly addresses all three (3) parts. It is Ecology's position that enforceability of the subject parts is granted through direct application of WAC 173-303-806, final facility permits, and the existing Permit, as written².

III.8.B.a Chapter 1

2. **Condition III.8.B.a.1** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 1-1, Line 29, delete the word "seven" and replace with the word "eight."

Condition Impact Statement: This condition incorrectly would change a nonenforceable portion of the application.

Requested Action: Delete this condition.

Comment Justification: Only seven dangerous waste numbers were added to the Part A, Form 3, not eight (F006, F007, F008, F009, F010, F011, F012). In addition, this Section was not even considered enforceable in Permit Condition III.8.A.

Ecology Response: Ecology disagrees with the Requested Action.

Based on the Permittees' Requested Action, Ecology again compared Revision 5 to Revision 6 of the CWC Part A, Form 3. The following eight (8) dangerous waste numbers appear on Revision 6 that do not appear on Revision 5: F006, F007, F008, F009, F010, F011, F012, and F019. Page 1-1 is included in the Part A and, therefore, is considered an enforceable portion of the Permit. More importantly, page 1-1 must accurately reflect changes made throughout the various Part A, Form 3 revisions and, therefore, will require correction as directed by Condition III.8.B.a.1.

III.8.B.b. Chapter 2

3. **Condition III.8.B.b.1.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Section 2.4, Revise to include the following specific regulatory requirements for releases from solid waste management units: WAC 173-303-806 (4)(a)(xxiii), and -(xxiv); WAC 173-303-645 and -646; and 40 CFR 270.14d.

² Ecology notes that this publication states that EPA also invokes its omnibus authority when necessary.

Condition Impact Statement: The Permittees general comment on the enforceability of Chapter 2.0 of the CWC permit application is addressed in Comment Number 1 of this section. This comment should not be construed to imply that the Permittees believe incorporation of the Section other than Section 2.2, Topographic Map, are appropriate for Section 2.0. This condition would impose requirements that are redundant to and/or inconsistent with provisions already in the Permit.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-806(4)(a) states "Part B of the permit application consists of the general information requirements of this subsection, and the specific information requirements in (b) through (h) of this subsection as applicable to the facility . . . These information requirements are necessary in order for the department to determine compliance with WAC 173-303-600 through 173-303-670." The Department of Ecology developed the initial Permit, with the specific intent of eliminating redundancy regarding modifications to incorporate new TSD units into the permit. In accordance with that intent, many aspects of the permit application process already have been addressed thoroughly and already are covered adequately in the Permit. The corrective action process is covered adequately in the Permit such that any release from CWC already would be addressed properly in accordance with the Permit and Tri-Party Agreement. The criteria for permitting CWC as a container management unit has been met by submittal of information required by WAC 173-303-806(4)(b). The criteria for general and corrective action conditions have been met by the past submittal of information required by WAC 173-303-806(4)(a).

WAC 173-303-645(1)(a)(ii) states that "all solid waste management units must comply with the requirements of WAC 173-303-646(2)." The Permit, Hazardous and Solid Waste Modifications Portion, contains requirements for releases from solid waste management units. Additionally, the Tri-Party Agreement Action Plan, Section 7.4, addresses implementation of corrective action on the Hanford Facility. Schedules to implement corrective action for solid waste management units also are maintained in the Tri-Party Agreement. The information required by the Permit, Condition II.I.1., is maintained in *Hanford Facility Dangerous Waste Permit Application, General Information Portion*, DOE/RL-91-28, Appendix 2D. A document is issued every January (*Hanford Site Waste Management Units Report*, DOE/RL-88-30) that identifies new solid waste management units. As stated in the Foreword of the CWC Part B permit application, duplication of information is not necessary; therefore, this condition is not necessary. Reference to 40 CFR 270.14(d) is inappropriate because the Department of Ecology has received corrective action authority. Therefore, it is superseded by WAC 173-303-806(4)(a)(xxiii), which applies in lieu of 40 CFR 270.14(d). In addition, this condition has been drafted against a portion of the permit application previously identified as nonenforceable. Refer to related comment on Draft Permit Condition III.8.A.

Ecology Response: Ecology agrees with the Requested Action. The condition is deleted as requested. Corrective action conditions specific to all dangerous waste units are being added to the Permit as part of this modification. CWC will be required to follow these conditions when it becomes a final status facility as a result of the completion of Modification E of the Permit.

III.8.B.c. Chapter 3

4. Condition III.8.B.c.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Lines 5 and 31, delete the phrase "stored and treated" and replace with the word "managed."

Condition Impact Statement: N/A

Requested Action: Accept.

5. Condition III.8.B.c.2. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 6, delete the phrase "storage and treatment" and replace with the word "management."

Condition Impact Statement: N/A

Requested Action: Accept.

6. Condition III.8.B.c.3. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 12, delete the word "normally."

Condition Impact Statement: N/A

Requested Action: Accept.

7. Condition III.8.B.c.4. Key Comment: exceeds delegated regulatory authority, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: The Permittees shall prepare an attachment to the WAP which describes the waste tracking procedures specified on page 3-2, lines 26 and 27. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will be added to the text of Section 1.1.1 of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would incorporate waste tracking descriptions into the waste analysis plan instead of into Chapter 3.0 of the CWC permit application.

Requested Action: Rewrite this condition and relocate to Chapter 3.0 to read as follows: On page 3-2, line 8, insert the following text: "Information for all containers received at and shipped from CWC will be maintained consistent with WAC 173-303-380(1)(a) and (b) and Permit Conditions II.P. and II.Q."

Comment Justification: Waste tracking requirements of WAC 173-303-380(1)(a) and (b) can be met by incorporating suggested text from the Requested Action for this condition. WAC 173-303-040 provides accurate information on how to understand the regulatory meaning of the terms "facility" and "unit". As defined in WAC 173-303-040, a "facility" is "all contiguous land, and structures . . . for . . . dangerous waste". A facility could consist of several treatment, storage, and disposal units.

By definition, a facility consists of the individual units. The terms are not intended to be used interchangeably. There is no basis for applying facility requirements at the unit level. The size and complexity of the Hanford Facility was contemplated during the initial issuance of the Permit. At that time, there was no intent to interpret units as facilities. Such an approach is inconsistent with the original Permitting approach. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolved difficulties, redundancies, and inefficiencies in this approach. As a result, the Department made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing of the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility-wide approach, but still provide facility-wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit." The initial Permit addressed issues attributed by the Department of Ecology to the size and complexity of the Hanford Facility through Conditions II.P and II.Q. It is inappropriate and not cost-effective to impose conditions such as these on a unit-by-unit basis because the initial final Permit has been developed in contemplation of these matters in Part II of the Permit.

Furthermore, the Tri-Party Agreement articulates the difference between facility and units. The Tri-Party Agreement, Section 6.2. states: "The Hanford Site has been assigned a single identification number for use in State Dangerous Waste program/RCRA permitting activity. Accordingly, the Hanford Site is considered to be a single RCRA facility, although there are numerous unrelated units spread over large geographic areas on the Site".

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.c.7.

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8. **Condition III.8.B.c.5.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Waste transfers between Solid Waste Project TSD units (i.e., CWC, Waste Receiving and Processing Facility, T Plant, and the Mixed Waste Disposal Unit) do not require the development of a new waste profile because the waste has already been accepted at one of the TSD units under the original waste profile and is being transferred for waste management purposes.

Condition Impact Statement: This condition would require reprofiling waste coming from the LLBG.

Requested Action: Delete this condition and replace with: "Waste previously accepted by the Hanford Facility is not required to be reprofiled".

Comment Justification: The Permittees and the Department of Ecology have agreed to rename the LLBG to the Mixed Waste Disposal Units. Waste retrieved from Hanford Facility TSD units and the LLBG already has been accepted.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that "Waste previously accepted by the Hanford Facility" cannot be given a blanket waiver from establishing a new waste profile because waste retrieved from the LLBGs needs to be re-profiled and reevaluated in light of the waste acceptance criteria established by this Permit. Criteria in use at the Hanford Site in prior years is not necessarily adequate to allow management in this TSD unit under this Permit. Treatment may render a profile obsolete, in which case, re-profiling may be necessary. In addition, because the Permittees have not modified the Part A, Form 3, for the LLBGs as instructed by Ecology in July, 1999, or in other meetings since that time, this condition needs to be modified to delete mention of the Mixed Waste Disposal Unit.

Permit Condition III.8.B.c.5. is revised to read as follows: "Waste transfers between the Central Waste Complex, Waste Receiving and Processing Facility, and T Plant do not require the development of a new waste profile because the waste has already been accepted at one of the TSD units under the original waste profile and is being transferred for waste management purposes."

III.8.B.d. Appendix 3A

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| <p>9. Appendix 3A comments III.8.B.d.1. through II.8.B.d.85.</p> | <p>Key Comment: exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions</p> |
|---|---|

Condition Impact Statement: Draft Permit Conditions III.8.B.d.1. through II.8.B.d.85. would impose an excessive level of control and limit flexibility allowed by the regulations.

Requested Action: Delete Draft Permit Conditions III.8.B.d.1. through II.8.B.d.85., and replace with the following text:

III.8.B.d. WASTE ANALYSIS

- III.8.B.d.1. Conditions III.8.B.d.2. through II.8.B.d.9. supercede Permit Conditions II.D and II.E.
- III.8.B.d.2. All waste analyses required by this Permit shall be conducted in accordance with a written waste analysis plan (WAP), or sampling and analysis plan (SAP) developed in accordance with WAC 173-303-300. The WAP shall be submitted with the Part B permit application documentation for each individual TSD Unit. Closing TSD units, and units in post-closure, should have a SAP and, if necessary, a WAP.
- III.8.B.d.3. Until a WAP is implemented in accordance with Condition III.8.B.d.2., any unit(s) identified in Parts III, V, and/or VI of this Permit, without a unit-specific WAP, shall not treat, store, and/or dispose of dangerous waste.
- III.8.B.d.4. Each TSD unit WAP shall include:
 - (a) The parameters for which each dangerous waste will be analyzed, and the rationale for selecting these parameters [i.e., how analysis for these parameters will provide sufficient information on the waste properties to comply with WAC

- 173-303-300(1), (2), (3), and (4)];
- (b) The methods of obtaining or testing for these parameters;
 - (c) The methods for obtaining representative samples of wastes for analysis [representative sampling methods are discussed in WAC 173-303-110(2)];
 - (d) The frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current;
 - (e) The waste analyses that generators have agreed to supply;
 - (f) Where applicable, the methods for meeting the additional waste analysis requirements for specific waste management methods, as specified in WAC 173-303-140(4)(b), 173-303-395(1), 173-303-630 through 173-303-670, and 40 CFR 264.1034, 264.1063, 268.4(a), and 268.7, for final status facilities;
 - (g) For offsite facilities, the waste analysis that dangerous waste generators have agreed to supply;
 - (h) For surface impoundments exempted from Land Disposal Restrictions (LDR) under 40 CFR 268.4(a), incorporated by reference in WAC 173-303-140(2), the procedures and schedules for:
 - (i) The sampling of impoundment contents;
 - (j) The analysis of test data; and
 - (k) The annual removal of residues that are not delisted under 40 CFR 260.22, or which exhibit a characteristic of hazardous waste and either:
 - 1. Do not meet applicable treatment standards of 40 CFR Part 268, Subpart D; or
 - 2. Where no treatment standards have been established:
 - a. Such residues are prohibited from land disposal under 40 CFR 268.32, or RCRA section 3004(d); or
 - b. Such residues are prohibited from land disposal under 40 CFR 268.33(f).
 - (l) Must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:
 - 1. The procedures which will be used to determine the identity of each movement of waste managed at the facility;
 - 2. The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling; and
 - 3. The procedures that the owner or operator of an offsite landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.
- III.8.B.d.5. The Permittees shall confirm their knowledge concerning a dangerous waste before storing, treating, or disposing of the waste. The purpose for the analysis is to ensure that a dangerous waste is managed properly.
- III.8.B.d.6. The Permittees must obtain a detailed chemical, physical, and/or biological analysis

- of a dangerous waste, or nondangerous waste if applicable under WAC 173-303-610(4)(d), before storing, treating, or disposing of the waste. This analysis must contain the information necessary to manage the waste in accordance with the requirements of Chapter 173-303 WAC. The analysis could include or consist of existing published or documented data on the dangerous waste, or on waste generated from similar processes or data obtained by testing if necessary.
- III.8.B.d.7. The offsite generator must confirm, by analysis if necessary, that each dangerous waste shipped to the TSD unit matches the identity of the waste specified on the accompanying manifest.
- III.8.B.d.8. The Permittees shall develop Quality Assurance and Quality Control measures necessary to obtain samples from waste in accordance with WAC 173-303-110(2). The methods and equipment used for obtaining representative samples of a waste will vary with the type and form of the waste. The Department will consider samples collected using the following sampling methods or the most recent version of such methods for wastes with properties similar to the indicated materials, to be representative samples of the waste:
- (a) Crushed or powdered materials – ASTM Standard D346-75;
 - (b) Extremely viscous material – ASTM Standard D140-70;
 - (c) Fly ash-like material – ASTM Standard D2234-86
 - (d) Soil-like material – ASTM Standard D1452-80 (reapproved 1990);
 - (e) Soil or rock-like material – ASTM Standard D420-93;
 - (f) Containerized liquid wastes – “COLIWASA” described in SW-846, as incorporated by reference at WAC 173-303-110(3)(a), or the equivalent sampling method AC & D Liquid Sampler, as demonstrated pursuant to WAC 173-303-910(2); and
 - (g) Liquid waste in pits, ponds, lagoons, and similar reservoirs – “Pond Sampler” described in SW-846, as incorporated by reference at WAC 173-303-110(3)(a)
- III.8.B.d.9. The Permittees shall develop Quality Assurance and Quality Control measures based on test methods found in WAC 173-303-110(3) and other widely accepted analytical methods, proprietary methods, and non-standard methods including:
- (a) Analytical methods cited in WAC 173-303;
 - (b) The most recently promulgated version of Test Method for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, U.S. Environmental Protection Agency, Office of Solid Waste.
 - (c) Other current U.S. EPA methods, as applicable to the matrix under evaluation.
 - (d) Standard Methods for the Examination of Water and Wastewater, American Public Health Association (APHA), American Water Works Association, Water Environment Federation.
 - (e) Annual Book of ASTM Standards, American Society for Testing and Materials.
 - (f) AOAC Official Methods of Analysis, AOAC (Association of Official Analytical Chemists), International.
 - (g) Other widely accepted analytical methods, proprietary methods, and non-standard methods. These may be needed in special cases, e.g., to develop operational and safety related information.
- III.8.B.d.10. Documentation developed to meet Quality Assurance and Quality Control requirements shall be retained in the unit-specific operating record.

If this comment is not accepted, the comments for Draft Permit Conditions III.8.B.d.1. through

II.8.B.d.85. apply.

Comment Justification: The Permit should reflect a consistent approach for incorporation of waste analysis and quality assurance/quality control requirements. As currently structured, the Permit provides very little detail on the requirements for waste analysis plans (Permit Condition II.D.) and an extraordinary amount of detail on quality assurance/quality control (Permit Condition II.E.). It is the Permittees' experience that these two requirements inconsistently are applied to individual units incorporated into the Permit and, in many cases, lead to the imposition of requirements on individual units that exceed the requirements of the Dangerous Waste Regulations.

In the present case, the waste analysis and quality assurance/quality control requirements imposed by Permit conditions are very detailed and far exceed the requirements for such plans provided in the Dangerous Waste Regulations and corresponding Permit Conditions in Parts I and II applicable to all units. The Department of Ecology has provided insufficient justification for exceeding regulatory requirements. The Permittees would like to see the Permit modified to avoid the application of excessively detailed requirements to individual units generally, and to the units in this modification specifically.

The Permittees request that an alternative permitting approach be used for units within the Permit. This alternative approach would require modifications to Permit Conditions II.D. and II.E. The Permittees recognize that these conditions are not open for public comment or modification as the modification is currently proposed. As an alternative approach, the Permittees request that unit-specific conditions for CWC and WRAP be removed or significantly reworded to reduce the amount of Department of Ecology control to a reasonable level. The acceptable level should be provided in Part II Permit requirements to ensure consistent implementation among all permitted units. Because Permit Conditions II.D. and II.E. are not proposed for modification, comments to modify these Permit conditions are not being provided at this time. The Permittees will propose the comments as a Class 3 modification to the Part II Permit Conditions. However, to implement this approach at CWC and WRAP, the Permittees propose those similar Permit conditions be incorporated into Part III during this Permit modification. This will allow CWC and WRAP to implement this approach while the Class 3 modification Permit modification process is completed.

This approach requires revising Permit Conditions III.8.B.d. to closely parallel the regulatory requirements for waste analysis plans and quality assurance/quality control requirements. These Permit Conditions would allow the Department of Ecology to establish baseline requirements for CWC. These requirements would result in the maintenance of up-to-date waste analysis plans and quality assurance/quality control plans at CWC without the necessity of incorporating these plans into the Permit.

Currently, Permit incorporation of plans and other documents submitted during the permitting process triggers a detailed Permit modification process described in WAC 173-303-830 each time that a modification is made to such documents. Conversion of the proposed Draft Permit Conditions to the preferred alternative will allow the Department of Ecology to assure that all relevant requirements are met without triggering permit modifications each time a document is changed. It will also allow the Department of Ecology, on a real time basis, to verify that relevant requirements are being met during unit operations.

To meet the objective of performance-based requirements in the Permit while still maintaining regulatory compliance, the Permittees propose that individual requirements that must be contained in a waste analysis plan be identified as Draft Permit Condition III.7.B.d and III.8.B.d., based on

WAC 173-303-110 and -300. The waste analysis plan and associated quality assurance/quality control measures should remain separate from the Permit and contain all requirements of WAC 173-303-110 and -300. The only enforceable regulatory requirements are that a waste analysis plan be developed and that the waste analysis plan meets a number of criteria. The waste analysis plan and associated quality assurance/quality control measures are not part of the Permit, but a document that is generated by the Permittees in compliance with regulations.

WAC 173-303-806(4)(a)(iii) requires that a copy of the waste analysis plan is included in a Part B permit application. WAC 173-303-810 and -815 do not require that waste analysis plans, quality assurance/quality control measures, or other Permittee supplied documentation be incorporated in the final status Permit. The proposed Draft Permit conditions restate and expand on waste analysis and quality assurance/quality control requirements provided in the Dangerous Waste Regulations. Restatement and expansion where necessary provide clarity and are consistent with the Department of Ecology's approach in Parts I and II of the Permit, where the requirements are restated instead of referenced.

Currently, Permit incorporation of plans and other documents submitted during the permitting process triggers a detailed Permit modification process described in WAC 173-303-830 each time that a modification is made to such documents. Conversion of the proposed Draft Permit Conditions to the preferred alternative will allow the Department of Ecology to assure that all relevant requirements are met without triggering permit modifications each time a document is changed. It will also allow the Department of Ecology, on a real time basis, to verify that relevant requirements are being met during unit operations.

To meet the objective of performance-based requirements in the Permit while still maintaining regulatory compliance, the Permittees propose that individual requirements that must be contained in a waste analysis plan be identified as Draft Permit Condition III.7.B.d and III.8.B.d., based on WAC 173-303-110 and -300. The waste analysis plan and associated quality assurance/quality control measures should remain separate from the Permit and contain all requirements of WAC 173-303-110 and -300. The only enforceable regulatory requirements are that a waste analysis plan be developed and that the waste analysis plan meets a number of criteria. The waste analysis plan and associated quality assurance/quality control measures are not part of the Permit, but a document that is generated by the Permittees in compliance with regulations.

WAC 173-303-806(4)(a)(iii) requires that a copy of the waste analysis plan is included in a Part B permit application. WAC 173-303-810 and -815 do not require that waste analysis plans, quality assurance/quality control measures, or other Permittee supplied documentation be incorporated in the final status Permit. The proposed Draft Permit conditions restate and expand on waste analysis and quality assurance/quality control requirements provided in the Dangerous Waste Regulations. Restatement and expansion where necessary provide clarity and are consistent with the Department of Ecology's approach in Parts I and II of the Permit, where the requirements are restated instead of referenced.

This preferred alternative benefits the Department of Ecology by providing a clear and concise Permit that reduces the administrative effort and cost required to maintain the Permit. A clear and concise Permit improves the enforceability for the Department of Ecology compliance inspectors by providing a regulatory basis for the requirements identified in the Permit.

Ecology's Response: Ecology disagrees with the Requested Action.

This issue is presented by the Permittees in their Preamble. See Ecology's Responses to the Permittees' Preamble Comments P10, P11, and P12.

Condition III.8.B.d.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-1, Line 23, after the word "sections, " insert the phrase "and the flowchart on Page F2-1 describe the process for waste acceptance and" to read as follows: "The following sections and the flowchart on Page F2-1 describe the process for waste acceptance and the different types of information . . ."

Condition Impact Statement: N/A

Requested Action: Accept.

Condition III.8.B.d.2. Key Comment: imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 1-2, Lines 16 through 20, delete the text and replace with the following: "Verification. Verification activities include container receipt inspection, physical screening, and chemical screening. All waste shipments and containers are subject to receipt inspection during the waste shipment acceptance process. In addition, a percentage of waste containers and shipments are selected for physical screening. Containers are opened and inspected visually or verified by NDE, NDA, or dose rate profile. Of those containers subjected to physical screening, a percentage are required to be sampled for field or laboratory analysis. All information and data are evaluated to confirm that the waste matches the waste profile and container data/information supplied by the generator. Any discrepancies between . . ."

Condition Impact Statement: This condition could be misinterpreted to require that all containers must be subjected to physical and chemical screening.

Requested Action: Modify this condition to clarify that not all waste shipments and containers are subject to physical and chemical screening. Suggest changing the first sentence of the condition to read as follows: "Verification activities include container receipt inspection and also could include physical and chemical screening."

Comment Justification: The Permittees believe that not all shipments and containers should be subjected to physical and chemical screening and request that the Department of Ecology clarify its intent.

Ecology's Response: Ecology disagrees with a part of the Requested Action, but will modify the condition slightly. Ecology disagrees with the Comment Justification "that not all shipments and containers should be subjected to physical and chemical screening . . ."

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.6.

Permit Condition III.8.B.d.2. is revised to read as follows: "Page 1-2, Lines 16 through 20, delete the text and replace with the following: "Verification. Verification activities include container receipt inspection, physical screening, and chemical screening. All waste shipments and containers are subject to receipt inspection during the waste shipment acceptance process. In addition, a percentage of waste containers in each shipment is selected for physical screening. Containers are opened and inspected visually or verified by NDE, NDA, or dose rate profile. A percentage of

those containers subjected to physical screening is required to be sampled for field or laboratory analysis. All information and data are evaluated to confirm that the waste matches the waste profile and container data/information supplied by the generator. Any discrepancies between . . ."

Condition III.8.B.d.3. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-3, Line 7, delete "A PES" and insert "The Performance Evaluation System (PES)".

Condition Impact Statement: N/A

Requested Action: Accept.

Condition III.8.B.d.4. Key Comment: reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 1-3, Lines 42 through 46, delete the text beginning "The CWC operating organization . . ." and replace with the following: "Conformance reports are used to complete an evaluation of the generator and to adjust the physical screening rate as indicated. At a minimum, a quarterly evaluation according to the following criteria shall be performed and the indicated scores shall be assigned based upon severity and justification:

1. Designation conformance issues
 - Regulatory violation, 7 – 10
 - Mismanagement of waste (conditions which would or did lead to placement of waste in the wrong storage location, the wrong treatment path, etc.), 4 – 6
 - No mismanagement of waste, 1 – 3
2. Characterization conformance issues
 - Safety issue, 7 – 10
 - Mismanagement of waste (see above), 4 – 6
 - No mismanagement of waste, 1 – 3
3. Paperwork inconsistencies
 - LDR form, 1 – 3
 - Shipping papers or waste tracking forms, 1 – 3
 - Waste profile discrepancies, 1 – 3
 - Incomplete shipment and/or transfer information, 1 – 3
4. Screening conformance issues
 - Regulatory violation and/or safety issue, 7 – 10
 - Mismanagement of waste (see above), 4 – 6
 - No mismanagement of waste, 1 – 3
5. Receipt conformance issues
 - Regulatory violation and/or safety issue, 7 – 10
 - Mismanagement of waste (see above), 4 – 6
 - No mismanagement of waste, 1 – 3

A generator receiving a score of 10 or greater has demonstrated less than satisfactory performance and must be evaluated for corrective action by the CWC operating organization. The physical screening rate is increased for that generator based upon the following criteria:

- A score of 10 to 15 – the physical screening frequency is increased to a minimum of 15%.
- A score of 16 to 20 – the physical screening frequency is increased to a minimum of 50%.

A score greater than 20 – the physical screening frequency is increased to 100%.

Condition Impact Statement: This condition would specify a level of detail for adjusting physical screening rates that is unnecessary and in excess of established regulatory requirements of WAC 173-303-300.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(6) requires owners/operators to "specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper". The condition would incorporate actual procedures used into the Permit instead of specifying such procedures as required by regulation.

The existing text provides for an appropriate level of control regarding conformance reports.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.8.

Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure. If an adequate description is not provided, the permit condition, as provided for public comment, will become enforceable.

Permit Condition III.8.B.d.4. is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for using conformance reports to evaluate the generator and to adjust the physical screening rate. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 1-3, Lines 42 through 46, beginning with "The CWC . . ." of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition: "Page 1-3, Lines 42 through 46, delete the text beginning "The CWC operating organization . . ." and replace with the following: "Conformance reports are used to complete an evaluation of the generator and to adjust the physical screening rate as indicated. At a minimum, a quarterly evaluation according to the following criteria shall be performed and the indicated scores shall be assigned based upon severity and justification:

1. Designation conformance issues
 - Regulatory violation, 7 – 10
 - Mismanagement of waste (conditions which would or did lead to placement of waste in the wrong storage location, the wrong treatment path, etc.), 4 – 6
 - No mismanagement of waste, 1 – 3
2. Characterization conformance issues
 - Safety issue, 7 – 10
 - Mismanagement of waste (see above), 4 – 6
 - No mismanagement of waste, 1 – 3
3. Paperwork inconsistencies
 - LDR form, 1 – 3

- Shipping papers or waste tracking forms, 1 – 3
- Waste profile discrepancies, 1 – 3
- Incomplete shipment and/or transfer information, 1 – 3
- 4. Screening conformance issues
 - Regulatory violation and/or safety issue, 7 – 10
 - Mismanagement of waste (see above), 4 – 6
 - No mismanagement of waste, 1 – 3
- 5. Receipt conformance issues
 - Regulatory violation and/or safety issue, 7 – 10
 - Mismanagement of waste (see above), 4 – 6
 - No mismanagement of waste, 1 – 3

A generator receiving a score of 10 or greater has demonstrated less than satisfactory performance and must be evaluated for corrective action by the CWC operating organization. The physical screening rate is increased for that generator based upon the following criteria:

- A score of 10 to 15 – the physical screening frequency is increased to a minimum of 15%.
- A score of 16 to 20 – the physical screening frequency is increased to a minimum of 50%.
- A score greater than 20 – the physical screening frequency is increased to 100%.”

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12. **Condition III.8.B.d.5.** **Key Comment:** exceeds delegated regulatory authority, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Paperwork inconsistencies or improperly completed and/or incorrect information must be corrected and resolved prior to acceptance of waste for management at this TSD unit.

Condition Impact Statement: This condition would require resolution of discrepancies to be handled in a manner that exceeds regulatory authority provided by WAC 173-303-370(4) and (5).

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-370 does not deny owners/operators the opportunity to resolve paperwork inconsistencies associated with waste transfers in a reasonable manner. WAC 173-303-370(4)(b) states that "upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter". WAC 173-303-370(4) only applies to manifested waste. WAC 173-303-370(5) provides reasons why owners/operators "may decide that a dangerous shipment should not be accepted by his facility." This condition would impose requirements intended for offsite shipments to onsite transfers without regulatory authority. This condition also would be inconsistent with WAC 173-303-370(4) and (5) for receipt of waste from offsite by denying the owner/operator the ability to decide whether or not a shipment should be accepted. The Permittees require flexibility intended by regulation to resolve paperwork discrepancies. In some situations, to deny acceptance of waste might present a hazard to human health and the environment.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete the condition.

See Ecology's Response to the Permittees' comments on Condition III.8.B.d.9.

13. **Condition III.8.B.d.6.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Approved waste profiles and all supporting documentation from the initial submission through all re-evaluations must be retained in the TSD unit operating record as required by Condition II.I.1. for waste managed, i.e., stored and/or treated, at this TSD unit.

Condition Impact Statement: This condition would cause CWC to maintain an excessive level of records not otherwise required by regulation. This condition would necessitate retraining of personnel and procedure revision.

Requested Action: Delete this condition. Alternatively, modify the condition to read as follows: "Approved waste profiles will be retained in the Operating Record in accordance with Permit Condition II.I.1 and will be made available to the Department of Ecology upon request".

Comment Justification: WAC 173-303-380(1)(c) requires retention of "records and results of waste analyses . . . required by WAC 173-303-300 . . . and by 40 CFR . . . 268.4(a), and 268.7". Permit, Condition II.I.1.b. requires retention of "records and results of waste analyses required by WAC 173-303-300". There are no requirements in WAC 173-303 or the Permit to retain "supporting documentation". The Permittees proposed text more accurately reflects the requirements of WAC 173-303 and the Permit. Additionally, the revised text describing "supporting documentation" contains recordkeeping requirements in excess of standard industry practices.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete or modify the condition.

See Ecology's Response to the Permittees' comments on Condition III.8.B.d.10.

14. **Condition III.8.B.d.7.** **Key Comment:** exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Within thirty (30) days of the issuance of this Permit, the Permittees are required to submit, to Ecology for review and approval, text describing all constraints which apply to the acceptance of waste at this TSD unit for any purpose, including physical examination and temporary storage in any portion of the building or within the boundaries of the TSD unit. Subsequent to any revisions required by Ecology, the description will be added to the text of Section.1.1.3 of the WAP as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would place restrictions on waste acceptance at CWC that exceed WAC 173-303-300 requirements by incorporating all internally-imposed restrictions (including restrictions associated with the radioactive component of mixed waste) into the waste analysis plan as enforceable requirements. This condition would require submittals based on the issuance date, and would impose Permit conditions before the effective date of the Permit. The Permit conditions in this modification *will not become effective until 30 days after issuance.*

Requested Action: Delete this condition. Alternatively, replace this condition with the following text: "Dangerous and/or mixed waste with waste numbers not identified on the CWC Part A, Form 3, will not be managed at CWC".

Comment Justification: The requirements for waste analysis are provided in WAC 173-303-300. The written waste analysis plan must describe procedures used to comply with -300(1) through (3) that pertain to confirmation concerning waste through analysis. This condition would incorporate waste acceptance criteria related to the radioactive component of mixed waste into the Permit without regulatory authority. The U.S. Department of Energy must retain jurisdiction over the source, special nuclear, and byproduct material components of mixed waste in accordance with the Atomic Energy Act. This condition also would incorporate other internal waste acceptance criteria into the Permit without regulatory authority. In summary:

- This condition seeks to expand the scope of the waste analysis plan by including text regarding waste acceptance parameters, including all constraints on waste receipt for any purpose.
- Many constraints on waste acceptance are unrelated to results of waste analysis and therefore are beyond the scope of a waste analysis plan (e.g., constraints associated with CWC acceptance of mixed waste based on the radioactive component).
- There is no regulatory basis for attempting to incorporate such internal constraints into a plan that is, by regulation, intended for identification of parameters, methods, and frequency of analysis for the purpose of ensuring proper management of dangerous and/or mixed waste.
- The Permittees need to retain flexibility that allows for safe and cost-effective modification of waste acceptance criteria as allowed by regulation, without unnecessary time and cost impacts associated with excessive Permit conditions or Permit modifications.

It is inappropriate for a state to unilaterally assert authority over radioactive materials. As stated previously, source, special nuclear, and byproduct materials specifically are excluded from the definition of solid waste set forth at RCRA 42 U.S.C. § 6903(27); also refer to 42 U.S.C. § 6905(a). The Atomic Energy Act; U.S. Department of Energy's Byproduct Rule (10 CFR 962); the U.S. Environmental Protection Agency Notice Regarding State Authorization [(51 Fed. Reg. 24504 (July 3, 1986))]; U.S. Environmental Protection Agency Notice on Clarification of Interim Status Qualification Requirements for the Hazardous Components of Radioactive Mixed Waste [(53 Fed. Reg. 37045 (September 23, 1988))]; the State's recognition of possible preemption in its Hazardous Waste Management Act, Revised Code of Washington 70.105.109; the limitations of the waiver of sovereign immunity in Section 6001 of the RCRA to materials within the RCRA definition of solid waste (thereby excluding source, special nuclear, and byproduct materials); and the Tri-Party Agreement.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.8.B.d.11.

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15. **Condition III.8.B.d.8.** **Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 1-4, Line 32 through 46 and Page 1-5, Lines 1 through 5, insert the following text: "1.1.1.3.4 Process for Reducing the Physical Screening Frequency. After the initial screening frequency has been established for a generator or that frequency has been adjusted due to poor performance, the physical screening frequency can be reduced in accordance with the following:

- The physical screening frequency will be stepped down in three steps based upon the ability of the generator to implement the corrective action plan and/or demonstrate an ability to appropriately manage waste. At no time shall the physical screening frequency be reduced below 5% for onsite generators or below 10% for offsite generators.
 - Step 1) Reduce frequency by 66% the first month.
 - Step 2) Reduce frequency established in Step 1 by 50% or to the minimum allowable, whichever results in a greater frequency.
 - Step 3) Reduce frequency to the minimum allowable.
- The reduction will be determined during the periodic evaluation process; however, the following minimum criteria must be met prior to reduction of the frequency:
 - (1) Five (5) containers from the waste stream in question (defined by a single waste profile) must pass verification, and
 - (2) The TSD unit must document an acceptable evaluation of the corrective action plan or that the generator's new waste management program has been implemented and is effective.

If the screening frequency was increased based upon conformance issues at the time of waste receipt, the corrective action plan must be fully implemented before the generator may return to the minimum physical screening frequency. However, waste streams from the same generator, which did not have conformance issues upon receipt at this TSD unit, may return to the minimum verification frequency if the TSD unit operating organization determines that the specific conformance issue is unlikely to affect the generator's other waste streams."

Condition Impact Statement: This condition is difficult to understand and is ambiguous regarding key aspects of the methodology for reduction in screening frequency.

Requested Action: Delete this condition.

Comment Justification: The text provided in the permit application accurately reflects the verification program.

Ecology's Response: Ecology disagrees with the Requested Action, but will provide an opportunity for the Permittees to provide revised text for this condition.

Ecology believes the text in the permit application WAP is ambiguous and needs to be revised to be understandable.

Permit Condition III.8.B.d.8. is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for reducing the physical screening frequency for acceptance of waste at this TSD unit. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 1-4, Lines 32 through 46 and Page 1-5, Lines 1 through 5, of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition: "Lines 32 through 46 and Page 1-5, Lines 1 through 5, insert the following text: "1.1.1.3.4 Process for Reducing the Physical Screening Frequency. After the initial screening frequency has been established for a generator or that frequency has been adjusted due to poor performance, the physical screening frequency can be reduced in accordance with the

following:

- The physical screening frequency will be stepped down in three steps based upon the ability of the generator to implement the corrective action plan and/or demonstrate an ability to appropriately manage waste. At no time shall the physical screening frequency be reduced below 5% for onsite generators or below 10% for offsite generators.
 - Step 1) Reduce frequency by 66% the first month.
 - Step 2) Reduce frequency established in Step 1 by 50% or to the minimum allowable, whichever results in a greater frequency.
 - Step 3) Reduce frequency to the minimum allowable.
- The reduction will be determined during the periodic evaluation process; however, the following minimum criteria must be met prior to reduction of the frequency:
 - (1) Five (5) containers from the waste stream in question (defined by a single waste profile) must pass verification, and
 - (2) The TSD unit must document an acceptable evaluation of the corrective action plan or that the generator's new waste management program has been implemented and is effective.

If the screening frequency was increased based upon conformance issues at the time of waste receipt, the corrective action plan must be fully implemented before the generator may return to the minimum physical screening frequency. However, waste streams from the same generator, which did not have conformance issues upon receipt at this TSD unit, may return to the minimum verification frequency if the TSD unit operating organization determines that the specific conformance issue is unlikely to affect the generator's other waste streams."

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16. **Condition III.8.B.d.9.** **Key Comment:** exceeds delegated regulatory authority, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 1-5, Lines 28 through 32, add the following waste types to the list of wastes prohibited from management at this TSD unit:

- "Bulk solids in trucks or roll-off boxes."

Condition Impact Statement: This condition arbitrarily would limit methods of transporting or transferring waste to CWC that could be transported safely in accordance with WAC 173-303-190 and -240 and managed properly in accordance with WAC 173-303-630.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-190(1) states that "the generator must package all dangerous waste for transport in accordance with U.S. DOT regulations on packaging, 49 CFR Parts 173, 178, and 179". WAC 173-303-240 (2) states that "any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when such dangerous waste is required to be manifested by WAC 173-303-180". WAC 173-303-240(4) states that "these requirements do not apply to onsite (as defined in WAC 173-303-040) transportation of dangerous waste by generators, or by owners/operators of

permitted TSD facilities". These requirements allow for transport of offsite shipments if the shipments meet U.S. Department of Transportation regulations. These requirements exempt onsite transport activities from regulatory control. WAC 173-303-630 does not impose any requirements regarding transport of waste to TSD facilities.

This condition would prohibit acceptance of bulk solids in trucks or roll-off boxes and has no regulatory basis. Flexibility must be retained to allow CWC to manage waste in a safe and cost-effective manner without unnecessary restrictions.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.13.

17. **Condition III.8.B.d.10.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 1-5, Line 28, replace the phrase "Bulk liquid waste" with the following: "Bulk liquid waste in tankers or drums."

Condition Impact Statement: This condition arbitrarily would limit methods of transporting or transferring waste to CWC that could be transported safely in accordance with WAC 173-303-190 and -240 and managed properly in accordance with WAC 173-303-630.

Requested Action: Delete this condition. Alternatively, rewrite the condition as follows: Page 1-5, line 28, replace the phrase "Bulk liquid waste" with the following: "Bulk liquid waste in tankers"

Comment Justification: WAC 173-303-190(1) states that "the generator must package all dangerous waste for transport in accordance with U.S. DOT regulations on packaging, 49 CFR Parts 173, 178, and 179". WAC 173-303-240 (2) states that "any person who transports a dangerous waste must comply with the requirements of WAC 173-303-240 through 173-303-270, when such dangerous waste is required to be manifested by WAC 173-303-180". WAC 173-303-240(4) states that "these requirements do not apply to onsite (as defined in WAC 173-303-040) transportation of dangerous waste by generators, or by owners/operators of permitted TSD facilities". These requirements allow for transport of offsite shipments if the shipments meet U.S. Department of Transportation regulations. These requirements exempt onsite transport activities from regulatory control. WAC 173-303-630 does not impose any requirements regarding transport of waste to TSD facilities.

This condition would establish a definition of bulk material inconsistent with the intent of the regulations and has no regulatory basis. Flexibility must be retained to allow CWC to manage waste in a safe and cost-effective manner without unnecessary restrictions.

Ecology's Response: Ecology agrees with the alternate Requested Action and will revise Condition III.8.B.d.10 as requested. Ecology acknowledges that CWC is permitted to manage drummed liquids.

18. **Condition III.8.B.d.11.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1-6, Lines 12 through 45, delete the text regarding Alternative Waste Management Plan.

Condition Impact Statement: N/A

Requested Action: Accept.

19. **Condition III.8.B.d.12. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-1, Lines 3 through 13, delete the text beginning with "The requirement . . ."

Condition Impact Statement: N/A

Requested Action: Accept.

20. **Condition III.8.B.d.13. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-2, Lines 39 through 40, delete "or its representative."

Condition Impact Statement: N/A

Requested Action: Accept.

21. **Condition III.8.B.d.14. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-2, Line 46, delete the phrase "the information is accurate" and replace with: "the waste to be shipped to CWC is as described by the waste profile."

Condition Impact Statement: N/A

Requested Action: Accept.

22. **Condition III.8.B.d.15. Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 2-3, Lines 8 through 33, delete the text and replace with text that is adequate to describe how containers are chosen for physical and chemical screening. Within thirty (30) days of the effective date of this Permit, a description of this procedure must be submitted to Ecology for review and approval; subsequent to any revisions required by Ecology, the description will be added to the text of Section 2.1.2 of this WAP as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would require submittal of information already contained in the waste analysis plan.

Requested Action: Delete this condition.

Comment Justification: There is no need for this condition. The Permittees believe that Figure 2-1, Waste Acceptance Process, provides the appropriate level of detail regarding the verification program and the selection of containers. Additional text regarding how containers are chosen for physical and chemical screening is unnecessary because the requested description already is

provided in Figure 2-1.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.19.

23. **Condition III.8.B.d.16.** **Key Comment:** exceeds delegated regulatory authority, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-4, Lines 4 through 7, delete the text and replace with the following: "When the available information does not qualify as acceptable knowledge or is not sufficient to characterize a waste for management, the sampling and testing methods outlined in WAC 173-303-110 must be used by the generator to determine whether a waste designates as ignitable, corrosive, reactive, and/or toxic and whether the waste contains free liquids. If the analysis is performed to complete characterization after acceptance of the waste by the TSD unit, then this Permit governs the sampling and testing requirements."

Condition Impact Statement: This condition would contradict the exemption from permitting at WAC 173-303-600(3)(d), which allows generator activities to occur under self-implementing provisions.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-600(3)(d) provides that "final facility standards do not apply to: . . . a generator accumulating waste onsite in accordance with WAC 173-303-200." There is no basis for imposing sampling and analysis permit conditions on generator activities.

The text in the waste analysis plan on page 2-4, lines 7-10 is a proper description regarding the use of acceptable knowledge for characterization and is consistent with Section 1.5 of the U.S. Environmental Protection Agency's Office of Solid Waste Emergency Response 9938.4-03, dated April 1994, entitled, "*Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes*". WAC 173-303-110(1) "sets forth the testing methods to be used to comply with the requirements of this chapter". WAC 173-303-070(3)(c) states "for the purpose of determining if a solid waste is a dangerous waste . . . a person must either: (i) Test the waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110; or (ii) Apply knowledge of the waste in light of the materials or the process used, when: (A) Such knowledge can be demonstrated to be sufficient for determining whether or not it designated and/or designated properly; and (B) All data and records supporting this determination in accordance with WAC 173-303-210(3) are retained onsite". WAC 173-303-110 applies in situations where WAC 173-303 specifically calls for testing. WAC 173-303-070(3)(c) allows generators to use knowledge to designate. The Permittees intend to use methods of WAC 173-303-110 for TSD confirmation of knowledge when available information does not constitute acceptable knowledge. WAC 173-303-070(3)(c) clearly provides regulatory flexibility for generators in designating waste. It is inappropriate to preclude such flexibility by attempting to regulate generator activities through permit conditions.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.20.

24. **Condition III.8.B.d.17. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-4, Line 26, and Page 2-5, Line 3, correct the WAC citations to read as follows: "173-303-380(1) (j), -(k), -(n), and -(o)."

Condition Impact Statement: N/A

Requested Action: Accept.

25. **Condition III.8.B.d.18. Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 2-4, Lines 31 through 44, delete the text beginning with the following: "In some situations . . ." Replace it with: "The following waste knowledge exceptions apply to waste accepted for management at the CWC TSD unit:

- Hazardous debris as defined in WAC 173-303-040 that is managed in accordance with 40 CFR 268.45 (the "Debris Rule") is not required to be sampled. Management of debris in this manner is not dependent on the quantification of constituents to be federal and State-only LDR regulations.
- Wastes generated onsite may be shipped to the CWC TSD unit provided the waste has been characterized for storage and a representative sample has been taken to characterize the waste for treatment and/or disposal.
- Waste that was previously disposed and then retrieved may be transferred to the CWC TSD unit with only the necessary information to properly manage the waste at the storage unit.
- Waste received prior to the implementation of this guidance and has been characterized for storage only may be transferred between CWC and permitted storage units without re-characterization; however, the pre-shipment review and verification requirements must be met. On-site generators may ship waste (that cannot be sampled by the generator) to the CWC TSD unit for completion of characterization provided that the waste is characterized for storage"

Condition Impact Statement: This condition is ambiguous and difficult to understand.

Requested Action: Delete this condition.

Comment Justification: The existing text and WAC 173-303-300 contains adequate requirements for waste analysis. Specifically, WAC 173-303-300(2) states:

"The owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats, or disposes of it. This analysis must contain the information necessary to manage the waste in accordance with the requirements of this chapter 173-303 WAC. The analysis could include or consist of existing published or documented data on the dangerous waste, or on waste generated from similar processes, or data obtained by testing, if necessary."

The Permittees believe WAC 173-303-300(2) is intended to require the following.

- Detailed analyses are required before treating, storing, or disposing of waste.
- These analyses must be sufficient to manage the waste in accordance with WAC 173-303.

- Analyses required for treatment or disposal typically are more extensive than analyses for storage.
- Although ideal, analyses do not *necessarily* have to be obtained through direct testing of the waste being analyzed.

Direct testing before storage in CWC might not be appropriate for some waste. The U.S. Environmental Protection Agency provides guidance regarding the use of acceptable knowledge for waste managed at TSD facilities in Section 1.5 of Office of Solid Waste Emergency Response 9938.4-03, dated April 1994, entitled, "*Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes*". Specifically, one situation identified by the U.S. Environmental Protection Agency in which it might be appropriate to apply acceptable knowledge is when "health and safety risks to personnel would not justify sampling and analysis (e.g., mixed waste)." Waste where sufficient information exists to ensure safe storage should not be subject to testing before such storage. Testing for such waste subsequently will be performed to ensure proper treatment and/or disposal as appropriate in accordance with the land disposal restrictions of WAC 173-303-140 and treatment unit waste acceptance criteria. The Permittees must retain the flexibility to obtain treatment and disposal information on a schedule that allows for safe and efficient management of mixed waste.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete this condition.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.22.

26. **Condition III.8.B.d.19.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-5, Lines 41 through 46 and Page 2-6, Lines 1 through 2 (Section 2.2.1), delete the text and replace with the following: "... 100 percent of each shipment (including onsite transfers) are inspected at the TSD unit for possible damage or leaks, complete labeling, intact tamper seals (if waste has been subjected to physical or chemical screening at another location), and piece count. This is to ensure that the shipment: (1) is received in good condition, (2) is the waste indicated on the manifest or shipping papers, (3) has not been opened after physical and/or chemical screening was performed, and (4) is complete. Any issue resolution, including correction of document discrepancies, re-labeling, overpacking of leaking or deteriorated drums, must occur before verification activities may continue. Documentation of issue resolutions must be maintained in the TSD unit operating record. The container receipt inspection is performed by the CWC operating organization at CWC. It must be completed within 24 hours of receipt of the shipment and the shipment must be moved to storage or, if discrepancies exist, into a temporary holding area within the next 24 hours. Action must be taken to overpack any leaking or damaged containers immediately upon discovery. Any paperwork discrepancies for shipments from both offsite and onsite generators must be resolved as required by WAC 173-303-370(4)."

Condition Impact Statement: This condition would exceed regulatory requirements of WAC 173-303-370 for receipt of waste and would increase the scope of WAC 173-303-395(4) for loading and unloading areas.

Requested Action: Delete this condition.

Comment Justification: The existing text is sufficient. WAC 173-303-370(4) requires that if "the [significant] discrepancy is not resolved within fifteen days after receiving the waste, the owner or operator must immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue."

WAC 173-303-370(5) states that "the owner or operator may decide that a dangerous shipment should not be accepted by his facility". WAC 173-303-370(5) does not specify when a shipment cannot be accepted, but does give permission to the owner or operator to deny a shipment based on his own discretion regarding discrepancies. By regulation, WAC 173-303-370(5)(a)(ii) allows the owner/operator to determine whether or not significant discrepancies between waste and documentation result in the need for rejecting the shipment.

This condition would deny the opportunity to resolve paperwork inconsistencies regarding waste transfers in a reasonable manner. WAC 173-303-370 does not require halting verification activities at CWC because of minor paperwork problems. Additionally, there is no basis for extending any requirements of WAC 173-303-370 to receipt of waste from onsite.

This condition would impose requirements for onsite transfers that are inconsistent with WAC 173-303-370. There are no requirements in WAC 173-303-370 that impose container receipt inspections on onsite transfers as a condition of the permit. Container receipt inspections should be allowed anywhere within the Hanford Facility boundaries as long as proper controls are instituted to ensure no tampering has been done to the shipment.

Additionally, there is no basis for requiring container receipt inspection and movement to permanent or temporary storage within 24 hours of waste arrival at CWC for any waste received. Although efforts are made to perform these functions within 24 hours of arrival, the Permittees believe that it is unreasonable to mandate the time limit as a permit condition subject to enforcement. WAC 173-303-395(4) imposes restrictions on TSD loading and unloading areas that are protective of human health and the environment. WAC 173-303-395(4) imposes requirements to contain/clean spills and prevent release, but does not include 24-hour limits on such areas. Depending on the situation, additional time might be necessary to correct discrepancies or arrange for relocation of waste.

Ecology's Response: Ecology disagrees with the Requested Action, but will modify the condition.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.23.

Permit Condition III.8.B.d.19. will be revised to read as follows: "Page 2-5, Lines 41 through 46 and Page 2-6, Lines 1 through 2 (Section 2.2.1), delete the text and replace with the following: ". . . 100 percent of each shipment (including onsite transfers) are inspected at the TSD unit for possible damage or leaks, complete labeling, intact tamper seals (if waste has been subjected to physical or chemical screening at another location), and piece count. This is to ensure that the shipment: (1) is received at the TSD unit in good condition, (2) is the waste indicated on the manifest or shipping papers, (3) has not been opened after physical and/or chemical screening was performed, and (4) is complete. Any issue resolution, including correction of document discrepancies, re-labeling, overpacking of leaking or deteriorated drums, must occur before verification activities may continue. Documentation of issue resolutions must be maintained in the TSD unit operating record. Any paperwork discrepancies for shipments from both offsite and

onsite generators must be resolved as required by WAC 173-303-370(4)."

27. **Condition III.8.B.d.20.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: For waste in storage at CWC, Ecology recognizes that the generator may hire the WRAP operating organization to treat waste, including sorting and repackaging, and thereby correct discrepancies and problems identified during the CWC waste acceptance process. If correction of these discrepancies and problems are not accomplished within two (2) months of receipt of the waste shipment at CWC, the Permittees shall contact Ecology (specifically the Ecology Project Manager). Ecology will establish a compliance schedule for treatment of the waste shipment.

Condition Impact Statement: This condition would exceed and expand on the regulatory requirements of WAC 173-303-370, which apply only to waste received from offsite.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-370 does not contain any requirements that restrict owners/operators from receiving waste that they determine can be taken from offsite at their facilities. The Permittees are committed to resolving significant discrepancies as required by WAC 173-303-370(4). However, there is no regulatory basis for imposing this time limit on all discrepancies identified during waste acceptance. The Permittees do not believe that the "(2) months of receipt" time limit is appropriate for resolving discrepancies, provided that the waste is managed properly. Refer to related comment on Draft Permit Condition III.8.B.d.19.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.B.d.24.

28. **Condition III.8.B.d.21.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Lines 8 through 10 (Section 2.2.2), delete the text and replace with the following: "as a verification activity. Physical screening by visual inspection or NDE could be performed by the CWC operating organization before the waste is shipped to CWC. In this case, the visual inspection is performed by observation of the generator filling empty containers with waste or examining the contained contents at the location. NDE is performed using mobile equipment which meets the performance requirements identified in this permit. When visual inspection or NDE is performed at a location other than CWC, at least one tamper-resistant seal is applied to each container examined and verified as acceptable, so that the container may not be reopened unless the seal is broken. These seals are the same as custody seals and are subject to the same evidentiary requirements as custody seals. The seals must be placed by the observer/verifier before the container leaves his/her sight on the day the observation occurs. The seal must be uniquely identified and controlled, e.g., signed and dated or uniquely numbered and tracked in a logbook. In addition, the seal must be easily differentiated from tamper-resistant seals used for other purposes. The verification must be documented in the paperwork that accompanies the waste shipment to CWC and that paperwork must be placed in the TSD unit operating record. Also, the transfer documentation must identify whether the container required verification and the result of that verification. As long as the

tamper-resistant seal remains intact, those containers of waste may be moved within the Hanford Solid Waste Complex without further physical screening, although container receipt inspections are required for all waste shipments, including transfers. The waste may still be subject to chemical screening."

Condition Impact Statement: This condition would impose an excessive level of control by stipulating requirements in extensive detail and has no regulatory basis.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(5) requires owners/operators to "develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements . . ." The text originally submitted in the CWC permit application is consistent with the requirements of WAC 173-303-300 and provides adequate description of physical screening. This condition would delete that text and replace it with excessive detail regarding the physical screening process.

Ecology's Response: Ecology disagrees with the Requested Action.

This issue was identified in review comments prior to submission of the initial certified permit application. See Ecology's Response to the Permittees' Preamble Comment P5. Ecology believes that the existing text in the WAP does not address this activity adequately. This condition was addressed in Ecology's Response to the Permittees' Comment 10 on the Fact Sheet.

Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure. If an adequate description is not provided, the permit condition, as provided for public comment, will become enforceable.

Permit Condition III.8.B.d.21 is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for performing physical screening by visual inspection or NDE before waste is sent to the TSD unit. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 2-6, Lines 8 through 10 (Section 2.2.2) of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition:

"Page 2-6, Lines 8 through 10 (Section 2.2.2), delete the text and replace with the following: "as a verification activity. Physical screening by visual inspection or NDE could be performed by the CWC operating organization before the waste is shipped to CWC. In this case, the visual inspection is performed by observation of the generator filling empty containers with waste or examining the contained contents at the location. NDE is performed using mobile equipment which meets the performance requirements identified in this permit. When visual inspection or NDE is performed at a location other than CWC, at least one tamper-resistant seal is applied to each container examined and verified as acceptable, so that the container may not be reopened unless the seal is broken. These seals are the same as custody seals and are subject to the same evidentiary requirements as custody seals. The seals must be placed by the observer/verifier before the container leaves his/her sight on the day the observation occurs. The seal must be uniquely identified and controlled, e.g., signed and dated or uniquely numbered and tracked in a logbook. In

addition, the seal must be easily differentiated from tamper-resistant seals used for other purposes. The verification must be documented in the paperwork that accompanies the waste shipment to CWC and that paperwork must be placed in the TSD unit operating record. Also, the transfer documentation must identify whether the container required verification and the result of that verification. As long as the tamper-resistant seal remains intact, those containers of waste may be moved within the Hanford Solid Waste Complex without further physical screening, although container receipt inspections are required for all waste shipments, including transfers. The waste may still be subject to chemical screening."

29. **Condition III.8.B.d.22.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Add the following text to Section 2.2.2: "Selection and interpretation of the appropriate physical screening method(s) are conducted by personnel who are qualified as described in the Training Plan (Appendix 8A) as amended by any Permit conditions. Each physical screening method is performed by qualified personnel."

Condition Impact Statement: N/A

Requested Action: Accept.

30. **Condition III.8.B.d.23.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Line 14, add a reference to the text to read as follows: "(See Section 3.1 for the criteria for choosing a physical screening method.)"

Condition Impact Statement: N/A

Requested Action: Accept.

31. **Condition III.8.B.d.24.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Line 26, insert the phrase "The minimum" at the beginning of the sentence, so that the sentence reads as follows: "The minimum physical screening frequency is 5 percent for onsite generating units, . . . "

Condition Impact Statement: N/A

Requested Action: Accept.

32. **Condition III.8.B.d.25.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Line 36, add a reference to Section 1.1.1.3. to the sentence, so the sentence reads as follows: "All failed containers and shipments are dispositioned via the PES, as described in Section 1.1.1.3. of this WAP."

Condition Impact Statement: N/A

Requested Action: Accept.

33. **Condition III.8.B.d.26.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 9, delete "authorized independent agent are" and replace with "is."

Condition Impact Statement: N/A

Requested Action: Accept.

34. **Condition III.8.B.d.27. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-6, Lines 12 and 13, delete "or Pacific Northwest National Laboratory (PNNL) packaged waste that is transferred to PNNL operated TSD units]".

Condition Impact Statement: N/A

Requested Action: Accept.

35. **Condition III.8.B.d.28. Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Lines 19 through 21, delete the text and replace with the following: "frequency, and exceptions for chemical screening. Chemical screening may be performed by the CWC operating organization before the waste is shipped to CWC. After chemical screening is done, tamper-resistant seals are applied over the container opening on each outer container screened. The requirements described for tamper-resistant seals used for visual examination apply for chemical screening, as well. Any requirement of this Permit related to chemical screening also applies for chemical screening performed before the waste is received at CWC."

Condition Impact Statement: The last sentence of the condition does not make sense and cannot be implemented.

Requested Action: Delete the condition. Alternatively, delete the last sentence of the condition.

Comment Justification: This condition would have CWC implementing chemical screening criteria while performing chemical screening.

Ecology's Response: Ecology disagrees with the Requested Action and will not delete the condition. However, Ecology will revise the condition to address the text in the last sentence of the condition. Ecology's intent is that any requirement located elsewhere in the WAP, or in specific permit conditions, also applies to chemical screening performed at locations remote from the TSD unit.

Permit Condition III.8.B.d.28. is revised to read as follows: "Page 2-7, Lines 19 through 21, delete the text and replace with the following: "frequency, and exceptions for chemical screening. Chemical screening may be performed by the CWC operating organization before the waste is shipped to CWC. After chemical screening is done, tamper-resistant seals are applied over the container opening on each outer container screened. The requirements described for tamper-resistant seals used for visual examination apply for chemical screening, as well. Any requirement elsewhere in this Waste Analysis Plan or Permit related to chemical screening also applies for chemical screening performed before the waste is received at CWC."

36. Condition III.8.B.d.29. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 23, delete the first sentence and replace with the following text: "Selection and interpretation of the appropriate chemical screening method(s) are conducted by personnel who are qualified as described in the Training Plan (Appendix 8A) as amended by any Permit conditions. Each chemical screening method is performed by qualified personnel."

Condition Impact Statement: N/A

Requested Action: Accept.

37. Condition III.8.B.d.30. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Lines 24 through 25, delete the text which reads "The objective . . . documentation." and replace with the following: "The objective of chemical screening is to obtain reasonable assurance that the waste received by the TSD unit is consistent with the description of the waste on the waste profile and to provide information that will be used to safely manage the waste at the TSD unit."

Condition Impact Statement: N/A

Requested Action: Accept.

38. Condition III.8.B.d.31. Key Comment: reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Lines 25 through 28, delete the text that begins with: "The following tests are selected . . ." This text is replaced with the following: "All of the listed screening tests are required to be conducted on all samples collected for chemical screening, unless a technical justification is documented describing the reason for not performing the chemical screening test. The justification may be provided by a procedure, noted in the special instructions to the waste profile at the time of approval, or documented in the verification record, i.e., a logbook notation why a test is not appropriate to the sample or matrix."

Condition Impact Statement: This condition would impose an excessive level of control by dictating screening tests and rationales for screening tests in far greater detail than intended by WAC 173-303-300.

Requested Action: Delete this condition

Comment Justification: WAC 173-303-300(5)(a) states "The owner or operator must develop and follow a written waste analysis plan which describes the procedures . . . and the plan must contain at least: (a) The parameters for which each dangerous waste . . . will be analyzed, and the rationale for selecting these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsections (1) through (4) of this section)". WAC 173-303-300 contains adequate requirements for waste analysis. This condition would impose requirements that exceed WAC 173-303-300 for chemical screening activities. There is no need to require technical justifications as to why a given chemical screening parameter

was not performed on a given sample. In addition, the time and effort to document a technical justification is not cost effective and does not allow management efficiency in chemical screening. The Permittees believe that the language contained on page 2-7, lines 25 through 28 is appropriate and should remain in the waste analysis plan. The selection of these three parameters (peroxide, oxidizer, and water reactivity) is based on defensible safety principles for all waste.

Ecology's Response: Ecology accepts the Requested Action to delete the condition. Ecology has reexamined the text of the WAP and agrees that the language is appropriate and sufficient.

39. **Condition III.8.B.d.32. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 40, delete "Headspace testing" and replace with "Ignitability/headspace screening for volatile compounds."

Condition Impact Statement: N/A

Requested Action: Accept.

40. **Condition III.8.B.d.33. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 43, delete "Paint filter" and replace with "Paint Filter Liquids Test."

Condition Impact Statement: N/A

Requested Action: Accept.

41. **Condition III.8.B.d.34. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-7, Line 45, correct the reference to read as follows: "Section 2.2.5.2."

Condition Impact Statement: N/A

Requested Action: Accept.

42. **Condition III.8.B.d.35. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-8, Line 24, delete ", etc."

Condition Impact Statement: N/A

Requested Action: Accept.

43. **Condition III.8.B.d.36. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-8, Line 37, delete "special-case" and replace with: "special cases."

Condition Impact Statement: N/A

Requested Action: Accept.

44. **Condition III.8.B.d.37. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-8, Lines 41 through 44, delete all text to the word "contamination" and replace with: "Sampling is performed in accordance with WAC 173-303-110(2). A representative sample is obtained for chemical screening."

Condition Impact Statement: N/A

Requested Action: Accept.

45. **Condition III.8.B.d.38. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 2-9, Line 8, delete the phrase "shipping documentation" and replace with "waste profile."

Condition Impact Statement: N/A

Requested Action: Accept.

46. **Condition III.8.B.d.39. Key Comment: imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions**

Draft Permit conditions as proposed by the Department of Ecology: Add the following paragraph describing quality assurance to Section 2.2.5: "All confirmation activities shall be governed by TSD unit-specific governing documentation and performed in a consistent manner. Confirmation records are kept in a traceable, defensible manner. Records must be maintained in a protective manner, e.g., protected from fire, water, access and/or tampering by unauthorized personnel. In addition, electronic records must be protected from electromagnetic damage."

Condition Impact Statement: This condition would incorporate redundant recordkeeping requirements in excessive detail as part of the waste analysis plan.

Requested Action: Delete this condition. Alternatively, strike all language following the first sentence so the condition reads as follows:

Add the following text to Section 2.2.5. "All confirmation activities will be performed in accordance with TSD unit-specific governing documentation and performed in a consistent manner. Confirmation records will be kept in accordance with Permit Condition II.I.1.b".

Comment Justification: WAC 173-303-380 states "the owner or operator of a facility must keep a written operating record at their facility". WAC 173-303-380 does not require specific format for recordkeeping. This condition incorporates redundant recordkeeping requirements in excessive detail. Permit, Condition II.I.1.b. requires retention of all records required by WAC 173-303-300, which includes records associated with confirmation activities, but does not specify detailed procedures for recordkeeping.

Ecology's Response: See Ecology's Response to the Permittees' comments on Condition

III.7.B.d.43. The nature of the comment does identify that the condition needs to be modified to clarify that these records are part of the TSD unit-specific Operating Record and to require the location to be identified. The condition will also be modified so that it is no longer an insertion of text into the WAP.

Permit Condition III.8.B.d.39. is revised to read as follows: "All confirmation activities shall be governed by TSD unit-specific controlling documentation and performed in a consistent manner. Confirmation records shall be kept in a traceable, defensible manner. Records shall be maintained in a protective manner (e.g., protected from fire, water, access and/or tampering by unauthorized personnel). In addition, electronic records must be protected from electromagnetic damage. A modification to the WAP must be submitted within thirty (30) days following the effective date of this Permit, to identify the location WAP components of the TSD unit-specific Operating Record. Upon approval by Ecology, this information shall be incorporated as a Class 1 permit modification or, if necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification."

47. **Condition III.8.B.d.40. Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: If a false negative occurs as described in line 21, page 2-9, the corrective actions mentioned in line 23 must include the re-evaluation of all affected video tapes/records since the previous acceptable QC check. If any results are questionable, those affected drums must be reevaluated and handled appropriately."

Condition Impact Statement: This condition should be rewritten to properly address quality control for all physical screening parameters used.

Requested Action: Rewrite this condition to replace Section 2.2.5.1 of the WAP with the following text: "2.2.5.1 Physical Screening Quality Control. This section describes the QC used by the CWC operating organization to ensure that quality data are obtained when performing physical screening methods identified in Section 2.2.2, except visual inspection. Visual inspection does not consist of the use of instrumentation or chemical tests. Therefore, QC for visual inspection depends on appropriate training for the individual(s) performing the test. For the remaining physical screening tools (NDE, NDA, and Dose Rate Profile), quality controls for these methods will be incorporated in accordance with manufacturer's instructions or site-specific protocols. If any results are questionable, those affected drums must be re-evaluated and handled appropriately".

Comment Justification: This condition would address an excessive level of detail for quality control and would only apply to one physical screening tool. The Permittees are committed to applying quality control in physical screening activities and intend to resolve issues associated with false negatives; therefore, the Permittees request that the text provided be incorporated into the Permit.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.44.

48. **Condition III.8.B.d.41. Key Comment:** imposes potential for unnecessary compliance issues

Draft Permit conditions as proposed by the Department of Ecology: Page 2-9, in Section 2.2.5.1, note that quality control has not been presented for non-destructive analysis or for dose rate profile. Until such time that text describing those physical screening options is provided

to Ecology for review and approval, the required revisions are made, the public comment conducted, and the text becomes an enforceable condition of this WAP, all physical screening must be by visual observation and NDE only, subject to other enforceable conditions of this Permit.

Condition Impact Statement: This condition would deny the use of legitimate physical screening tools until the Department of Ecology reviews and approves quality control efforts.

Requested Action: Delete this condition. The text provided in the Requested Action for Draft Permit Condition III.8.B.d.40 provides a comprehensive approach to physical screening quality control.

Comment Justification: WAC 173-303-300(5)(b) requires waste analysis plans to include "the methods of obtaining or testing for these parameters". WAC 173-303-110(1) states "Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation". The requirements of WAC 173-303-300 are not intended to require such prescriptive conditions in permits. WAC 173-303-110 imposes quality control procedures on designation activities when testing is used in accordance with WAC 173-303-070(3)(c)(i), but does not require quality control procedures to be incorporated into permits or waste analysis plans. This condition would limit the ability to use legitimate physical screening options without the Department of Ecology-approved quality control procedures. Refer to related response to Draft Permit Condition III.8.B.d.40.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.45.

Ecology noted that the term "analysis" had been incorrectly used in the draft condition when the term used should have been "assay," as in "non-destructive assay." Permit Condition III.8.B.d.41. has been revised to correct this error. The condition now reads as follows: "Page 2-9, in Section 2.2.5.1, note that quality control has not been presented for non-destructive assay (NDA) or for dose rate profile. Until such time that text describing those physical screening options is provided to Ecology for review and approval, the required revisions are made, the public comment conducted, and the text becomes an enforceable condition of this WAP, all physical screening must be by visual observation and NDE only, subject to other enforceable conditions of this Permit."

49. **Condition III.8.B.d.42. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: The equipment requirements of Table 4-1, as amended by any Permit conditions, apply to sampling for chemical screening. In addition, the following sampling equipment may be used in sampling for chemical screening: (1) For liquids and slurries – dip, tank, bomb, and bailer samplers, as well as tube-type samplers (e.g., thin-walled Shelby tubes, split spoons, probes); and (2) For sludges and solids – Tube-type samplers (as above) and augers; for small containers, a spoon may be used in place of a scoop.

Condition Impact Statement: N/A

Requested Action: Accept.

50. **Condition III.8.B.d.43. Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues,

hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-9, Lines 27 through 46 and Page 2-10, Lines 1 through 2, delete the text and replace with the following: "The required chemical screening quality control includes, but is not limited to, the following:

- Containers and equipment of the appropriate size and that are chemically compatible with the waste and all testing reagents will be used.
- A documented source of reagent water will be used.
- All chemicals and test kits shall be identified in the logbook/records by manufacturer; lot number(s) or, if no lot number is present, by date of manufacture; date of receipt; and expiration date (if none provided or not applicable, so indicate). All chemicals and test kits must be labeled so that they are traceable to the logbook/records.
- All chemical preparations, i.e., chemical mixtures or solutions, shall be documented in logbook/records by the method of preparation, e.g., weight or volume of chemical(s), identity of solute, volume or weight of solute, final concentration, as well as the name of the preparer, preparation date, expiration date. They must be labeled completely and traceable to the preparation records.
- For each sampler, once each quarter, at a minimum, one sample shall be sampled in duplicate and analyzed.
- One in 20 analyses at a minimum will be performed in duplicate. The duplicate sample shall not be the sampling duplicate.
- The results of quality control checks for each test kit lot or periodic testing and for daily quality control checks including equipment calibration will be recorded in a defensible manner."

Condition Impact Statement: The condition would impose an excessive and unnecessary level of control by incorporating extensive detail into the permit regarding chemical screening activities.

Requested Action: Rewrite the condition to read as follows: "Delete lines 27 through 46 on page 2-9, and lines 1 through 7 on page 2-10. Add the following text to line 29: "**2.2.5.2 Chemical Screening Quality Control.** This section describes the QC used by the CWC operating organization to ensure that appropriate data are obtained when performing chemical screening methods identified in Section 2.2.3.

For all chemical screening parameters:

- Each lot will be evaluated to determine that the lot is usable. Unstable reagents will be accounted for when determining the usability of the lot.
- For each lot, the source, concentration, date of receipt, lot number, and manufacturer/preparer (as applicable) will be maintained in a logbook.
- For individual chemical screening parameters, QC checks will be performed in accordance with manufacturer's instructions or site-specific protocols.

Comment Justification: WAC 173-303-300(5)(b) requires waste analysis plans to include "the methods of obtaining or testing for these parameters". WAC 173-303-110(1) states "Quality control procedures specified by the testing method or an approved equivalent method must be followed for the analytical result to be considered valid for designation". The requirements of WAC 173-303-300 are not intended to require such prescriptive conditions in permits. WAC 173-303-110 imposes quality control procedures on designation activities when testing is used in accordance with WAC 173-303-070(3)(c)(i), but does not require quality control procedures to be

incorporated into permits or waste analysis plans. WAC 173-303-300 requires written waste analysis plans to include the methods of testing used, but does not require development of extensive permit conditions regarding quality control. The Permittees perform chemical screening analyses according to manufacturer's instructions or appropriate site-specific protocols.

The text originally provided in the CWC permit application requires revision to accurately reflect the use of chemical screening parameters in the verification program. Subsequent efforts to provide appropriate information regarding chemical screening have resulted in the development of a condition that would require the Permittees to make changes to the existing chemical screening quality control system. Therefore, the Permittees recommend incorporation of the suggested text to replace the information originally provided in Section 2.2.5.2, page 2-9, lines 27 through 46 and page 2-10, lines 1 through 7. The suggested text provides for a condition that more accurately reflects chemical screening quality control. Refer to comment on Draft Permit Condition III.8.B.d.41.

Furthermore, the fifth bullet of the Draft Permit condition cannot be met if there are no samples taken during the quarter. The intent of the sixth bullet, last sentence is not clear.

Ecology's Response: Ecology disagrees with the Requested Action.

General Permit Condition II.E. requires the Permittees to include a QA/QC plan, or equivalent, with all WAPs required by the Permit. The condition also includes items that are to be addressed. By comparison to this condition, Ecology has determined that the quality control measures for sampling and chemical screening, as provided by the Permittees, are inadequate. The Permittees state that, "they perform chemical screening analyses according to manufacturer's instructions or appropriate site-specific protocols," but failed to provide adequate descriptions of the quality control procedures in the WAP and also did not provide that information in their comment. Ecology believes the quality control measures specified in this condition are reasonable because they reflect standard practice (see U.S. EPA, SW-846, "Test Methods for Evaluating Solid Waste") and address items in Condition II.E.

Ecology has revised this condition so that it is a statement of requirements and is no longer an insertion of text into the WAP. In addition, Ecology has deleted the fifth bulleted item and revised some of the wording.

Permit Condition III.8.B.d.43. is revised to read as follows: "The required quality control for chemical screening includes, but is not limited to, the following:

- Containers and equipment of the appropriate size and that are chemically compatible with the waste and all testing reagents shall be used.
- A documented source of reagent water shall be used.
- All chemicals and test kits shall be identified in the logbook/records by manufacturer; lot number(s) or, if no lot number is present, by date of manufacture; date of receipt; and expiration date (if none provided or not applicable, so indicate). All chemicals and test kits must be labeled so that they are traceable to the logbook/records.
- All chemical preparations, i.e., chemical mixtures or solutions, shall be documented in logbook/records by the method of preparation, e.g., weight or volume of chemical(s), identity of solute, volume or weight of solute, final concentration, as well as the name of the preparer, preparation date, expiration

date. They must be labeled completely and traceable to the preparation records.

- One in 20 analyses at a minimum shall be performed in duplicate.

The results of quality control checks for each test kit lot or periodic testing and for daily quality control checks including equipment calibration shall be recorded in a defensible manner.”

51. **Condition III.8.B.d.44.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 2-10, Lines 4 through 7, delete the text and insert the following under a new bulleted heading "Equipment and Quality Control Checks": "The CWC operating organization will perform the following quality control checks on each new test kit or reagent lot to be followed by rechecks on at least a six-month interval, unless a more frequent period is specified in the test kit instructions or the quality control check method.

- (a) **Ignitability/Headspace Screening for Volatile Organic Compounds:** Headspace screening equipment shall be calibrated using known standard in accordance with the manufacturer's instructions. In addition, the equipment will be quality control checked on each day of use by sampling the headspace of a reagent containing hexane. If it does not perform as expected, the equipment will be recalibrated.
- (b) **Peroxide Screening:** The quality control check for the peroxide test paper is as follows: (1) Moisten the test paper with water. Add two drops of 3% hydrogen peroxide solution to the test paper. The test paper should turn blue. If it does not, replace the test paper or reject the lot. (2) Add a drop of potassium dichromate solution to approximately ½-inch of water in a test tube. Place the peroxide test paper in the solution. The test paper should not turn blue. If it changes color, replace the test paper or reject the lot. (3) Add one drop of nitric acid to the test paper. The paper should turn yellow. If it does not, replace the test paper or reject the lot.
- (c) **Paint Filter Liquids Test:** The quality control check consists of visually inspecting each filter, prior to performing each test, to ensure that it is in good condition and is not torn or ripped. If it is damaged, the filter shall be replaced.
- (d) **PH Screen:** The quality control check for the pH test paper is as follows: (1) Place a drop of concentrated hydrochloric acid onto the test paper; the pH should be 0 ± 1 . (2) Place a drop of acetic acid onto the test paper; the pH should be 2 to 3 ± 1 . (3) Place a drop of reagent water onto the test paper; the pH should be 7 ± 1 . (4) Place a drop of ammonium hydroxide onto the test paper; the pH should be 11 to 12 ± 1 . (5) Place a drop of sodium hydroxide onto the test paper; the pH should be 14 ± 1 . If the pH on most of these tests is not as specified, replace or reject the pH paper. If only one or two test produce results that are different than stated, check or replace the reagents. The most important check is the reagent water, although it frequently will have a slightly acidic pH. All of the stated pH checks also may be performed using pH buffer solutions.
- (e) **Oxidizer Screen:** The quality control check for the oxidizer test paper is as follows: Moisten the test paper with 3M hydrochloric acid. Add two drops of potassium dichromate solution to the paper. The paper should turn black. If the test is negative, replace the paper or reject the lot.

- (f) **Water Reactivity Screen:** The quality control check consists of testing the pH of the reagent water. If the pH is not 7 ± 1 , the reagent water shall be replaced. Note that this check may be performed as part of the pH quality control check.
- (g) **Cyanide Screen:** The ferrous ammonium citrate reagent is the most unstable reagent used in this test. The ferrous ion will oxidize to ferric upon standing for even a short period of time. If the reagent has a thick opaque color or if there are particulates floating in the solution, the reagent should be replaced. To check the ferrous ammonium citrate, perform both of the following tests: (1) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube. Add a drop of 1,10-phenanthroline to the test tube. The solution should turn blood red. (2) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube (this is solution 1). Add a small amount of potassium ferrocyanide to a test tube of water (this is solution 2). Add a small amount of solution 1 to solution 2 to form solution 3. Add a $\frac{1}{4}$ -inch of 3 Normal (i.e., 3N or 3M) hydrochloric acid to solution 3. The solution should turn dark blue. If either test is negative, replace the reagent or reject the lot.
- (h) **Sulfide Screen:** The quality control check for the sulfide test paper is as follows: (1) Add 1 to 2 drops of reagent water to the sulfide test paper. (2) Add two drops of 3 Normal (3N or 3M) hydrochloric acid to two sodium sulfide flakes in a disposable watch glass or weighing boat. (3) Touch the sulfide test paper to the flakes. The test paper should turn brown, black, or silvery. If the test is negative, then replace the test paper or reject the lot.
- (i) **HOC Screen:** The quality control check is to perform the test according to the test kit instruction on a reagent containing approximately 50 ppm of a chlorinated organic compound. If the test does not indicate a positive result, replace or reject the lot. If two or more test kit lots do not indicate a positive result, replace and/or test the reagent and retest the test kit lots."

Condition Impact Statement: This condition would impose an excessive level of control by incorporating detailed requirements regarding chemical screening control.

Requested Action: Delete this condition.

Comment Justification: The CWC permit application contains an adequate level of detail regarding waste analysis and is consistent with the intent of WAC 173-303-300. The Requested Action in response to Draft Permit Condition III.8.B.d.43 provides a comprehensive approach to chemical screening quality control. This condition would create ambiguity regarding enforceable conditions of chemical screening activities.

Ecology's Response: Ecology disagrees with the Requested Action.

General Permit Condition II.E. requires the Permittees to include a QA/QC plan, or equivalent with all WAPs required by the Permit. The condition also includes items that are to be addressed. By comparison to this condition, Ecology has determined that the description of quality control for chemical screening, as provided in the WAP, is inadequate.

The text of this draft permit condition was provided by the Permittees. See Ecology's Response to the Permittees' Preamble Comment P5. Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure for each chemical screening parameter/procedure. If an adequate description is not provided, the permit

condition, as provided for public comment, will become enforceable.

Permit Condition III.8.B.d.44. is revised to read as follows: "The Permittees shall provide an adequate description of quality control for chemical screening. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 2-10, Lines 4 through 7, under a new bulleted heading "Equipment and Quality Control Checks" of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification. If said adequate description is not provided as specified herein, the following text shall be an enforceable condition: "Page 2-10, Lines 4 through 7, delete the text and insert the following under a new bulleted heading "Equipment and Quality Control Checks": "The CWC operating organization will perform the following quality control checks on each new test kit or reagent lot to be followed by rechecks on at least a six-month interval, unless a more frequent period is specified in the test kit instructions or the quality control check method.

- (a) **Ignitability/Headspace Screening for Volatile Organic Compounds:** Headspace screening equipment shall be calibrated using known standards in accordance with the manufacturer's instructions. In addition, the equipment will be quality control checked on each day of use by sampling the headspace of a reagent containing hexane. If it does not perform as expected, the equipment will be recalibrated.
- (b) **Peroxide Screening:** The quality control check for the peroxide test paper is as follows: (1) Moisten the test paper with water. Add two drops of 3% hydrogen peroxide solution to the test paper. The test paper should turn blue. If it does not, replace the test paper or reject the lot. (2) Add a drop of potassium dichromate solution to approximately ½-inch of water in a test tube. Place the peroxide test paper in the solution. The test paper should not turn blue. If it changes color, replace the test paper or reject the lot. (3) Add one drop of nitric acid to the test paper. The paper should turn yellow. If it does not, replace the test paper or reject the lot.
- (c) **Paint Filter Liquids Test:** The quality control check consists of visually inspecting each filter, prior to performing each test, to ensure that it is in good condition and is not torn or ripped. If it is damaged, the filter shall be replaced.
- (d) **pH Screen:** The quality control check for the pH test paper is as follows: (1) Place a drop of concentrated hydrochloric acid onto the test paper; the pH should be 0 ± 1 . (2) Place a drop of acetic acid onto the test paper; the pH should be 2 to 3 ± 1 . (3) Place a drop of reagent water onto the test paper; the pH should be 7 ± 1 . (4) Place a drop of ammonium hydroxide onto the test paper; the pH should be 11 to 12 ± 1 . (5) Place a drop of sodium hydroxide onto the test paper; the pH should be 14 ± 1 . If the pH on most of these tests is not as specified, replace or reject the pH paper. If only one or two tests produce results that are different than stated, check or replace the reagents. The most important check is the reagent water, although it frequently will have a slightly acidic pH. All of the stated pH checks also may be performed using pH buffer solutions.

- (e) Oxidizer Screen: The quality control check for the oxidizer test paper is as follows: Moisten the test paper with 3M hydrochloric acid. Add two drops of potassium dichromate solution to the paper. The paper should turn black. If the test is negative, replace the paper or reject the lot.
- (f) Water Reactivity Screen: The quality control check consists of testing the pH of the reagent water. If the pH is not 7 ± 1 , the reagent water shall be replaced. Note that this check may be performed as part of the pH quality control check.
- (g) Cyanide Screen: The ferrous ammonium citrate reagent is the most unstable reagent used in this test. The ferrous ion will oxidize to ferric upon standing for even a short period of time. If the reagent has a thick opaque color or if there are particulates floating in the solution, the reagent should be replaced. To check the ferrous ammonium citrate, perform both of the following tests: (1) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube. Add a drop of 1,10-phenanthroline to the test tube. The solution should turn blood red. (2) Add a pinch of ferrous ammonium sulfate to $\frac{1}{4}$ -inch of the ferrous ammonium citrate reagent in a test tube (this is solution 1). Add a small amount of potassium ferrocyanide to a test tube of water (this is solution 2). Add a small amount of solution 1 to solution 2 to form solution 3. Add a $\frac{1}{4}$ -inch of 3 Normal (i.e., 3N or 3M) hydrochloric acid to solution 3. The solution should turn dark blue. If either test is negative, replace the reagent or reject the lot.
- (h) Sulfide Screen: The quality control check for the sulfide test paper is as follows: (1) Add 1 to 2 drops of reagent water to the sulfide test paper. (2) Add two drops of 3 Normal (3N or 3M) hydrochloric acid to two sodium sulfide flakes in a disposable watch glass or weighing boat. (3) Touch the sulfide test paper to the flakes. The test paper should turn brown, black, or silvery. If the test is negative, then replace the test paper or reject the lot.
- (i) HOC Screen: The quality control check is to perform the test according to the test kit instruction on a reagent containing approximately 50 ppm of a chlorinated organic compound. If the test does not indicate a positive result, replace or reject the lot. If two or more test kit lots do not indicate a positive result, replace and/or test the reagent and retest the test kit lots."

52. **Condition III.8.B.d.45.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: The phrase "shipping documentation" is used throughout Section 3.0. The Permit requires that the shipping documentation be evaluated against the "waste profile" so that only approved waste is received by the TSD unit. Therefore, ultimately each physical and chemical screening result must be in agreement with the waste profile to determine the acceptability of the result and, thereby, whether or not the container fails.

Condition Impact Statement: N/A

Requested Action: Accept.

53. **Condition III.8.B.d.46.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: The result of failure (i.e., "a container fails . . .") as described in Section 3.1, Physical Screening Parameters, under the heading "Failure Criteria" may be a return to the generator, a re-profiling of the waste stream, or treatment (processing or reprocessing) at a permitted TSD unit. The result of failure for chemical screening (e.g., failing the test, constitutes failure), as described in Section 3.2, Chemical Screening Parameters, under the heading "Tolerance" may be the same outcomes as for physical screening. In addition, a failure of the chemical screening may be the expected outcome of the test, dependent upon the waste profile.

Condition Impact Statement: N/A

Requested Action: Delete this condition.

Comment Justification: This condition is redundant to the text of Section 1.1.1.3.3. of the waste analysis plan, which comprehensively addresses resolution of conformance issues. The condition is confusing and does not provide a clear, enforceable condition. This condition becomes more confusing when compared to the final sentence of Draft Permit Condition III.8.B.d.59., which seems to indicate that failure of a waste means that the waste will be returned to the generating unit.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.50.

54. **Condition III.8.B.d.47.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Lines 2 and 3, delete the text and replace with the following: "Physical and chemical screening parameters for verification must be chosen from those in Sections 3.1 and 3.2. Parameters for waste designation and to meet LDR requirements are addressed in Section 3.3."

Condition Impact Statement: The condition includes reference to generator activities, which is inconsistent with regulations that exempt generator activities from permitting requirements per WAC 173-303-600(3)(d).

Requested Action: Delete the second sentence of this condition. Alternatively, reword the last sentence of the condition to read: "Other sampling and analysis parameters are addressed in Section 3.3."

Comment Justification: WAC 173-303-600(3)(d) provides that "final facility standards do not apply to: . . . a generator accumulating waste onsite in accordance with WAC 173-303-200." There is no basis for imposing sampling and analysis permit conditions on generator activities (refer to comment response to Draft Permit Condition III.8.B.d.16.).

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.51.

55. **Condition III.8.B.d.48. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 7, replace the phrase "could be used to perform" with the phrase "are approved for use in performing" so that the sentence reads as follows: "The following methods are approved for use in performing physical screening."

Condition Impact Statement: N/A

Requested Action: Accept.

56. **Condition III.8.B.d.49. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Line 17, replace the phrase "could be" with the word "are" so that the sentence reads as follows: "Homogenous loose solids are probed to determine the presence of material not documented . . . "

Condition Impact Statement: N/A

Requested Action: Accept.

57. **Condition III.8.B.d.50. Key Comment:** reflects approach inconsistent with regulatory requirement, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-1, Lines 35 through 38, delete the text and replace with the following text: "The container is scanned top-to-bottom and side-to-side with a non-destructive examination (NDE) system according to documented and approved procedures. At a minimum, the lifts, conveyors rotators, and manipulators for the real-time imaging systems shall be capable of handling drums up to 85-gallons in size and up to 1000 pounds in weight and boxes up to 7000 pounds in weight. The minimum image quality, X-ray system performance, and system operator requirements shall be in accordance with the documented specifications for operating the NDE system. The X-ray components shall include the following: (1) a nine-inch (diagonal) entrance field image intensifier, or equivalent, (2) a twelve-inch, high resolution video display monitor, (3) a video printer, and (4) a high-performance, broadcast quality, S-VHS/VHS recorder/player. Quality assurance measures that indicate X-ray imaging quality shall be utilized and documented during equipment startup. For verification activities by NDE, data are observed on a video monitor and captured on video tape to provide a record. Personnel experienced in the interpretation of NDE imagery will record their observations. These observations are then compared to the inventory of container contents on the shipping documentation and also must be in agreement with the waste profile."

Condition Impact Statement: This condition would impose an excessive level of control by incorporating extensive detail regarding nondestructive examination activities in excess of WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300 contains adequate requirements for testing of waste without specifying the need for the level of detail that this condition would require. Nondestructive examination is performed to applicable manufacturer's instructions or site-specific protocols. WAC 173-303-300 does not require incorporation of such detail as a permit condition. The Permittees believe that the description provided in the deleted text is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.54.

58. **Condition III.8.B.d.51. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-2, Line 43, replace the phrase "could be used to perform" with the phrase "are approved for use in performing" so that the sentence reads as follows: "The following methods are approved for use in performing chemical screening."

Condition Impact Statement: N/A

Requested Action: Accept.

59. **Condition III.8.B.d.52. Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-3, Lines 28 and 29, in addition to the text provided, the following condition applies: The required method for the Paint Filter Liquids Test is Method 9095 in the U.S. Environmental Protection Agency (EPA), SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (the most recently promulgated version).

Condition Impact Statement: N/A

Requested Action: Accept.

60. **Condition III.8.B.d.53. Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-3, Lines 41 through 44, delete the text and replace with the following: "Method: Full range pH paper with a stated precision of 1.0 pH unit and a corresponding color chart is used for testing. For aqueous samples, a representative test portion of the sample is introduced onto the strip of pH paper. For solids, sludges, and non-aqueous liquids, a representative test portion is mixed with an approximately equal amount of water. The aqueous portion (extractant) of this mixture is then introduced onto the strip of pH paper. The paper is compared visually to the color chart to determine the best color match. The pH is recorded to the nearest whole pH unit."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: This condition would impose a level of detail for pH paper that is overly prescriptive. The Permittees believe that the description originally submitted in the CWC permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.57.

61. **Condition III.8.B.d.54.** **Key Comment:** reflects approach inconsistent with regulatory requirement, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 7 and 8, delete the text and replace with the following: "Method: Potassium iodide (KI) starch test paper is used for testing. KI oxidizes to iodine (I₂) in the presence of starch to yield a dark blue-black coloration on the test paper. A representative test portion of the sample is placed on a disposable watch dish or weighing boat. The KI test paper strip is acidified with 3M hydrochloric acid (HCl) and placed in contact with the test portion. A darkening of the test paper is a positive indication of the oxidizing properties of the sample."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the oxidizer screen that is overly prescriptive. The Permittees believe that the description originally submitted in the CWC permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.57.

62. **Condition III.8.B.d.55.** **Key Comment:** reflects approach inconsistent with regulatory requirement, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 19 through 21, delete the text and replace with the following: "Method: Water reactivity of waste is determined by adding a representative test portion to an approximately equal volume of water in a disposable watch glass or weighing boat. The mixture is observed for positive indications of water reactivity such as temperature change (increase or decrease), gas evolution, gelling or polymerization."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the water reactivity screen that is overly prescriptive. The Permittees believe that the description originally submitted in the CWC permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.57.

63.

Condition III.8.B.d.56. **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 32 through 35, delete the text and replace with the following: "Method: A ferrous ammonium citrate solution is used as a colorimetric indicator of free cyanides and some complex cyanides. The reagent turns a dark Prussian blue color due to the formation of blue iron ferrocyanide in the presence of cyanide under acidic conditions. A representative test portion is placed on a disposable watch glass or weighing boat. An approximately equal amount of water is added to solid matrices. The ferrous ammonium citrate solution is added and mixed into the test portion. The mixture is then acidified with 3M hydrochloric acid (HCl). A dark blue color, if present, indicates the presence of cyanides."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the cyanide screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally submitted in the CWC permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.57.

64. **Condition III.8.B.d.57.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-4, Lines 46 through 49, delete the text and replace with the following: "Method: Lead acetate test paper strips are used for testing. Under acidic conditions, sulfide compounds release hydrogen sulfide (H₂S) and, in the presence of this H₂S, the lead acetate paper changes to a silvery brown or black color due to the formation of lead sulfide (PbS). A representative test portion is placed on a disposable watch glass or weighing boat. The test portion is acidified with 3M hydrochloric acid (HCl). A lead acetate test paper strip is dampened with water and placed near the acidified test portion. A darkening of the test paper is a positive indication of the presence of sulfides in the test portion."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the sulfide screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally submitted in the CWC permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.57.

65. **Condition III.8.B.d.58.** **Key Comment:** reflects approach inconsistent with regulatory requirement, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Lines 11 through 14, delete the text and replace with the following: "Method: A precise amount of oil (i.e., the test portion) is placed into the first of two disposable test tubes provided with the test kit. An ampule containing a colorless catalyst is broken and the contents are mixed thoroughly with the test portion. A second ampule containing metallic sodium is broken and the sodium, activated by the catalyst, strips chlorine from any chlorinated organic compounds present to form sodium chloride. An aqueous buffer solution is added to the test portion. This neutralizes the excess sodium and extracts the sodium chloride into the water. The water layer is then separated from the oil and decanted into the second test tube. An ampule containing a precise amount of reagent is broken and the contents mixed with the water. An ampule containing an indicator is then broken and the contents mixed with the water. The color of the mixture is dependent on the amount of chlorinated organic compounds in the original test portion of oil."

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the halogenated organic carbon screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally submitted in the CWC permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.57.

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66. **Condition III.8.B.d.59.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Lines 16 through 17, delete the text and replace with the following: "Tolerance: The presence of halogenated organic compounds (HOCs) in the waste requires that either (1) the generator must supply laboratory data obtained by the SW-846 Method 8082 for the waste in the specific container, or (2) the specific container of the waste stream must be sampled by the TSD unit and the waste analyzed by SW-846 Method 8082 to determine if the waste contains polychlorinated biphenyls (PCBs). If the waste does contain PCBs, the waste profile must be re-evaluated to determine if the waste is TSCA-regulated and, if the waste is not TSCA-regulated, then the quantitative analytical data must be useable to verify that the concentration of PCBs in the waste is less than 50 ppm. The waste fails if the waste stream is TSCA-regulated or the concentration of PCBs is equal to or greater than 50 ppm. The TSD unit may fail the waste (i.e., return it to the generator) without obtaining the quantitative analytical data.

Condition Impact Statement: This condition would impose an excessive level of control regarding procedures to meet WAC 173-303-300 requirements and would impose requirements on TSCA waste for which the Department of Ecology has no legal authority to regulate.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(2) states that "the owner or operator must obtain a detailed chemical, physical, and/or biological analysis of a dangerous waste . . . before he stores, treats or disposes of it". WAC 173-303-300(5) states "the owner or operator must develop and follow a written waste analysis plan which describes the procedures he will use to comply with the waste analysis requirements of subsections (1), (2), (3), and (4) of this section". WAC 173-303-300(5) requires descriptions of procedures for waste analysis, but does not require that actual procedures be incorporated into the permit. This condition would impose a level of detail for the

halogenated organic carbon screen that is overly prescriptive for incorporation into the permit. The Permittees believe that the description originally provided in the CWC permit application is adequate and contains the appropriate level of detail for a waste analysis plan.

WAC 173-303-071(3)(k) specifically excludes TSCA-managed polychlorinated biphenyls from the Dangerous Waste Regulations.

WAC 173-303-100(6) allows generators to designate halogenated organic carbons based on existing knowledge and also allows for the identity and concentration to be determined by applying either knowledge or by testing. This condition would impose specific laboratory testing on the generating unit for any waste that contains halogenated organic carbons or testing by CWC in search of polychlorinated biphenyls, both without regulatory authority. In addition, WAC 173-303-600(3)(d) specifically excludes generators who are accumulating waste from final facility standards. Refer to comments on Draft Permit Condition III.8.B.d.16.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the original text of the WAP did not provide an adequate description of "Tolerance" for the HOC chemical screening in that the outcome of "failure" is not described. This description is needed to clarify the text of the WAP. Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of "Tolerance" for this procedure.

Contrary to the comment which states: "In addition, WAC 173-303-600(3)(d) specifically excludes generators who are accumulating waste from final facility standards.," Ecology emphasizes that it is appropriate to address generator requirements in the WAP, as supported by WAC 173-303-300(5)(e). The regulation states "Waste analysis plan . . . the plan must contain at least: . . . The waste analyses which generators have agreed to supply." At the Permittees' request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address the subject of "waste analyses which generators have agreed to supply" on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303-300(5)(e) in each TSD unit's WAP.

Note that the draft text with specific references to analyte concentrations regulated by the TSCA has been removed from the condition.

Permit Condition III.8.B.d.59. is revised to read as follows: "The Permittees shall prepare an adequate description of "Tolerance" for the HOC chemical screening. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will replace the text on Page 3-5, Lines 16 through 17 of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification."

67. **Condition III.8.B.d.60.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Line 20, delete the phrase "Sample and."

Condition Impact Statement: N/A

Requested Action: Accept.

68. **Condition III.8.B.d.61.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 3-5, Lines 21 and 22, delete the text and replace with the following: "Parameters needed to meet designation, characterization, and LDR requirements for waste stored at and/or treated for CWC are identified in Appendix A of this WAP."

Condition Impact Statement: This condition would contradict the WAC 173-303-600(3)(d) exemption for generators by incorporating requirements into the permit that apply to generators.

Requested Action: Rewrite this condition to read:

"Delete the text on page 3-5, lines 21 and 22 and replace it with the following: "Parameters needed to meet other waste characterization needs for waste stored and/or treated at CWC are identified in Appendix A."

Comment Justification: WAC 173-303-600(3)(d) specifically excludes generator accumulation from the final facility standards. It is inappropriate for the Department to attempt to regulate generator activities through a RCRA permit (refer to comment response to Draft Permit Condition III.8.B.d.16.).

Ecology's Response: Ecology disagrees with the Requested Action.

According to the Dangerous Waste Regulations, it is appropriate to address generator requirements in the WAP, as supported by WAC 173-303-300(5)(e). The regulation states "Waste analysis plan . . . the plan must contain at least: . . . The waste analyses which generators have agreed to supply." These parameters apply to generators and to the TSD unit. At the Permittees request, Ecology did not pursue the original request for a single facility WAP. The lack of a facility WAP makes it necessary to address the subject of "waste analyses which generators have agreed to supply" on a TSD unit-specific basis and to cover the requirements set forth in WAC 173-303-300(5)(e) in each TSD unit's WAP.

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69. **Condition III.8.B.d.62.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Delete the title of Section 4.0 and replace it with the following: "Selecting Sampling Procedures." The content of this section, as amended, applies to all sampling that is done by or at the direction of the TSD unit for (1) characterization of waste after processing, (2) LDR of treated waste, or (3) additional characterization, if needed, for treatment or disposal.

Condition Impact Statement: N/A

Requested Action: Accept.

70. **Condition III.8.B.d.63.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Lines 9 through 10, delete the text beginning with "or other approved sample preservation method in accordance with 62 FR 62079" and replace it with the following: "except as amended by the Permit."

Condition Impact Statement: This condition contains provisions that are inconsistent with SW-846.

Requested Action: Rewrite the condition to read as follows:

Delete the text in lines 13 and 14 on page 4-2 and replace it with the following: "Sample preservation and holding times follow SW-846 protocol."

Comment Justification: Preservation and holding times will be applied appropriately to ensure accuracy and precision of testing data in accordance with SW-846. For data to be legally defensible, preservation must be consistent with authoritative sources.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.67.

71. **Condition III.8.B.d.64.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: The following condition applies for the preservation and holding times for samples and for laboratory extracts of the samples. Waste samples are treated and preserved as necessary to protect the sample. Tables 2-36 and 4-1 in SW-846 contains recommended treatment/preservative and holding times. Not all samples require preservation and placing a holding time on a sample may not always be appropriate. Samples with a high concentration of the analyte or non-LDR samples may not require preservation, whereas aqueous samples and samples with low concentrations of the analyte or LDR samples require preservation. If the required preservation interferes with some of the analytes requested, then multiple aliquots of sample may need to be obtained for analysis. Samples taken for analysis of a persistent constituent or non-biologically degradable constituent may not require a holding time. For example, a sample for PCB analysis does not require a holding time (although the laboratory extractant is subject to a holding time). The recommended holding time and preservation for hexavalent chromium (Cr+6) listed in the Tables are required for all sample matrices unless the hexavalent chromium concentration is assumed to be represented by the total chromium in the sample. The recommended preservation and holding time for mercury (Hg) is required in all sample matrices. For the laboratory-prepared organic extracts (e.g., semi-volatile organic analysis and PCBs) the holding times listed in the Tables are required to be met for each extract.

Condition Impact Statement: This condition contains provisions that are inconsistent with SW-846.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-110 (1) states "All methods and publications listed in this section are incorporated by reference," (i.e., WAC 173-303-110(3)(a) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication, SW-846 [Third Edition (November 1986) as amended by Updates . . . and III (December 1996)]". The Permittees believe that WAC 173-303-110, through incorporation of SW-846, Update III, by reference, is adequate for

establishing appropriate preservation and holding times for samples and laboratory extracts. This condition would be inconsistent with SW-846.

The Requested Action, coupled with the response to Draft Permit Condition III.8.B.d.63, contains an appropriate level of detail for a permit condition and a waste analysis plan.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.67.

72. Condition III.8.B.d.65. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Line 13, delete the title of Section 4.5 and replace with the following: "Establishing Quality Assurance and Quality Control Procedures for Sampling."

Condition Impact Statement: N/A

Requested Action: Accept.

73. Condition III.8.B.d.66. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Line 21, the phrase "appropriate personnel" is defined as the sampler or a person who is directed by the sampler.

Condition Impact Statement: N/A

Requested Action: Accept.

74. Condition III.8.B.d.67. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Line 22, insert the following after the sentence: "If sampling is conducted in a posted radiological zone, then the logbook entries may be made by a person who is outside the zone or by the sampler immediately after the sampling is completed"

Condition Impact Statement: N/A

Requested Action: Accept.

75. Condition III.8.B.d.68. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Line 22 through 23, delete the phrase "or copies of logs are maintained by the appropriate personnel after completion of sampling activities" and replace with: "are permanent records of the TSD unit and must be retained in the TSD unit operating record"

Condition Impact Statement: N/A

Requested Action: Accept.

76. Condition III.8.B.d.69. Key Comment: reflects approach inconsistent with regulatory

requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, insert the following text after line 23 as a new paragraph: "The log of sampling activities is kept in an inventoried, uniquely numbered, bound logbook with sequentially numbered pages. Any affixed information, e.g., pictures, copies of chain-of-custody documentation, shall be permanently attached to a logbook page and initialed and dated across the edge of the attached material onto the logbook page so that removal or tampering with the attachment(s) can be identified. No affixed material may be placed over any other affixed items or written entries. The requirements for defensible data recording apply, including correction of entries by single line cross-out, initial and date, and give reason for the change. A signature is required rather than initials if the correction is made by someone other than the original recorder. No entries shall be obliterated, e.g., "white out" must not be used. The identity of the person who is initialing the record must be easily determined."

Condition Impact Statement: This condition would impose excessive detail on the CWC operating organization regarding how sampling logs are maintained.

Requested Action: Delete this condition. Alternatively, replace this condition with one that reads as follows: "The log of sampling activities described on page 4-2, lines 16 through 23 shall be kept in accordance with standard industrial data recording practices."

Comment Justification: WAC 173-303-380(1) states "the owner or operator of a facility must keep a written operating record at their facility". WAC 173-303-380 does not specify procedures for recordkeeping as this condition would. WAC 173-303-380 and Permit, Condition II.I.1. require various records to be retained and maintained, but not to the level of specificity that would be incorporated through this condition. This condition would require recordkeeping of sampling activities to a level of detail that is inconsistent with regulatory requirements of WAC 173-303-380, and other permits issued by the Department of Ecology.

Ecology's Response: Ecology partly agrees with the Requested Action and will revise the draft permit condition.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.73.

Permit Condition III.8.B.d.69. is revised to read as follows: "The Permittees shall prepare an adequate procedural description of recordkeeping for sampling. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revisions required by Ecology, the description will be inserted on Page 4-2 after Line 23 as a new paragraph of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification. If adequate description is not provided as specified herein, the following text shall be an enforceable condition: "Page 4-2, insert the following text after line 23 as a new paragraph: "The log of sampling activities is kept in an inventoried, uniquely numbered, bound logbook with sequentially numbered pages. Any affixed information (e.g., pictures, copies of chain-of-custody documentation) shall be permanently attached to a logbook page and initialed and dated across the edge of the attached material onto the logbook page so that removal or tampering with the attachment(s) can be identified. No affixed material may be placed over any other affixed items or written entries. The requirements for defensible data recording apply,

including correction of entries by single line cross-out, initial and date, and give reason for the change. A signature is required rather than initials if the correction is made by someone other than the original recorder. No entries shall be obliterated (e.g., "white out" must not be used). The identity of the person who is initialing the record must be easily determined."

77. **Condition III.8.B.d.70.** **Key Comment:** reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 4-2, Lines 25 through 28, delete the text and replace with the following: "Chain of custody and chain-of-custody documentation are maintained at all times for samples collected by or for CWC. The chain-of-custody documentation includes, but may not be limited to, the following information: the container from which the sample originated, the unique sample number assigned, date and time of collection, sample type, sample location, method(s) of transfer to the laboratory, identity of the sample collector, identity of all subsequent custodians. The chain-of-custody form is originated by the sample collector and includes all transfers of custody. The chain-of-custody form travels with each sample to the laboratory."

Condition Impact Statement: This condition would specify an excessive level of detail regarding chain-of-custody activities that are used to ensure sample integrity.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-300(1) "requires the facility owner or operator to confirm his knowledge concerning a dangerous waste before he stores, treats, or disposes of it". Chain of custody protocols are used by owners and operators to ensure that information obtained for compliance with WAC 173-303-300 is not compromised by inadvertent or intentional tampering. However, there are no provisions in WAC 173-303-300 and WAC 173-303-110 that allow for incorporation of specific chain-of-custody procedures into permits. This condition would specify excessive controls regarding chain-of-custody procedures. The Permittees believe that the level of detail that describes chain-of-custody procedures on page 4-2, lines 25 through 28 is appropriate and meets the intent of WAC 173-303-300 and 173-303-110. This condition would not enhance protection of human health or the environment, but would hinder management efficiency and cost effectiveness at CWC.

Furthermore, the Draft Permit condition does not describe properly how the data management system (DMS) and solid waste information tracking system (SWITS) communicate. Chain-of-custody information does not transfer from DMS to SWITS. Finally, information from DMS is not transferred to SWITS daily.

Ecology's Response: Ecology disagrees with the Requested Action.

Ecology believes that the original text of the WAP did not provide an adequate description of the chain of custody procedure for the TSD unit, as required by Condition II.E.2.d. The Permittees state in their comment that "the Draft Permit condition does not describe properly how the data management system (DMS) and solid waste information tracking system (SWITS) communicate. Chain-of-custody information does not transfer from DMS to SWITS." Note that the condition, as presented by Ecology, makes no mention of the data management system (DMS) or of the solid

waste information tracking system (SWITS). Unfortunately, the Permittees do not provide the correct information in their comment. Therefore, Ecology will revise the permit condition to give the Permittees another opportunity to provide an adequate description of this procedure.

Permit Condition III.8.B.d.70. is revised to read as follows: "The Permittees shall prepare an adequate description of the procedure for chain of custody for this TSD unit. This text shall be submitted to Ecology for review and approval within thirty (30) days of the effective date of this Permit. Subsequent to any revision required by Ecology, the description will replace the text on Page 4-2, Lines 25 through 28 of the Waste Analysis Plan (WAP), also identified as Appendix 3A, as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification. If adequate description is not provided as specified herein, the following text shall be an enforceable condition: "Page 4-2, Lines 25 through 28, delete the text and replace with the following: "Chain of custody and chain-of-custody documentation are maintained at all times for samples collected by or for CWC. The chain-of-custody documentation includes, but may not be limited to, the following information: the container from which the sample originated, the unique sample number assigned, date and time of collection, sample type, sample location, method(s) of transfer to the laboratory, identity of the sample collector, identity of all subsequent custodians. The chain of custody form is originated by the sample collector and includes all transfers of custody. The chain-of-custody form travels with each sample to the laboratory."

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78. **Condition III.8.B.d.71.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Section 5.0 is deleted in entirety and replaced by the text of Attachment 45.

Condition Impact Statement: This condition would impose a level of control regarding selection of laboratory and analytical methods that exceeds the regulatory requirements of WAC 173-303-300 and WAC 173-303-110.

Requested Action: Rewrite the condition to read as follows: "Section 5.0 is deleted in entirety and replaced by the following text:

5.0 Selecting a Laboratory, Laboratory Testing, and Analytical Methods.

QC shall be applied in implementing both sampling and analytical techniques. Specific performance standards for QA and QC procedures for individual sampling and analysis activities are dynamic and shall be revised as warranted to reflect technological advances in available, appropriate techniques. These performance standards shall be described in policies maintained and used at CWC and shall be available for review by the Department of Ecology on request.

5.1 Sampling Program

Sampling procedures for CWC operations are described in Section 2.2.4. The selection of sample collection devices shall depend on the type of sample, the sample container, the sampling location, and the nature and distribution of regulated constituents in the waste. In general, the methodologies used correspond to those referenced by 40 CFR 261, Appendix I. The selection and use of the sample collection device shall be supervised or performed by a person who is thoroughly familiar with sampling protocols.

Sampling equipment shall be constructed of materials that are nonreactive with the waste being sampled. Materials such as glass, PVC plastic, aluminum, or stainless steel could be used. Care

shall be taken in the selection and use of the sample collection device to prevent contamination of the sample and to ensure compatibility with waste being sampled. Individual container samples that are related and compatible could be composited before analysis.

5.2 Analytical Program

A program of analytical QC practices and procedures has been developed on the Hanford Site to ensure that precision and accuracy are maintained throughout the laboratories. Good laboratory practices that encompass sampling, sample handling, housekeeping, and safety are maintained at onsite laboratories.

5.3 Conclusion

The aforementioned sampling and analytical quality practices help ensure that the data obtained are precise and accurate for the waste stream being sampled. The analytical results are used by operations management to decide whether or not to accept a particular waste and, on acceptance, to determine the appropriate method of TSD. Results also are important to ensure that the waste is managed properly and that incompatible waste is not combined inadvertently. Just as these results are important, so is the quality of these results."

Comment Justification: WAC 173-303-300 provides adequate requirements for waste analysis. The text suggested by the Permittees in the Requested Action contains a level of detail appropriate for inclusion as a permit condition and accurately reflects the Permittees' approach to selecting a laboratory, performance of laboratory testing, and use of analytical methods. This condition would impose overly prescriptive requirements by incorporating a detailed document (Attachment 45) into the permit. The Permittees insist that the suggested text is more appropriate. Refer to Comment 1 in the Comments on the Proposed Modifications to Attachment 45.

The Permittees recommend incorporation of the suggested text to replace the information originally provided in Section 5.0 of the waste analysis plan. The suggested text ensures an appropriate level of precision and accuracy for data obtained from waste in accordance with the waste analysis program, and for selection of laboratory testing and use of analytical methods.

The text offered by the Permittees in lieu of the condition contains a level of detail consistent with that contained in the U.S. Environmental Protection Agency, Region 10, Arlington, Oregon RCRA permit.

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' Comment 1 on Attachment 45.

79. Condition III.8.B.d.72. Key Comment: imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: The preparative method for the toxicity characteristic is EPA, SW-846 Method 1311, Toxicity Characteristic Leaching Procedure (TCLP). To ensure that the test portion is representative of the waste, a test portion of 50 grams or more is preferred. If a test portion of 50 grams or more is used for the determination, then only a single extraction is required. However, if the test portion is less than 50 grams, each material to be tested must be extracted in duplicate or multiple replicates so that the precision of the extraction can be determined and evaluated. A relative standard deviation of 25% or lower between extractions for the analytes must be obtained for the analytical data to be useable for waste designation. All routine and quality control data associated with the TCLP and subsequent

determinative methods is required to be maintained in the TSD unit operating record.

Condition Impact Statement: This condition is redundant to provisions of WAC 173-303-110 and SW-846.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-110(3)(a) and -045(1)(a) incorporate the Third Update of SW-846 into WAC 173-303 by reference. SW-846, Method 1311, Section 7.2, states that "a minimum sample size of 100 grams (solid and liquid phases) is recommended. SW-846, Section 2.1, states that "if an alternative analytical procedure is employed, then EPA expects the laboratory to demonstrate and document that the procedure of providing appropriate performance for its intended application". In addition, 62 Fed. Reg. 62084 (November 20, 1997) states, "for mixed waste testing, sample sizes of less than 100 grams can be used, if the analyst can demonstrate that the test is still sufficiently sensitive to measure the constituents of interest at the regulatory levels specified in the TCLP and representative of the waste stream being tested . . . Use of a sample size of less than 100 grams is highly recommended for mixed wastes with concentrations of radionuclides that could present serious radiation exposure hazards". These references place the burden on the regulated community to ensure adequacy of test methods. Therefore, based on the sources cited herein, this condition is unnecessary and redundant.

Ecology's Response: Ecology agrees to delete this condition.

Ecology is aware of the references cited by the Permittees in the Comment Justification. However, for most wastes, Ecology believes that a 50-gram minimum test portion is of sufficient size to be representative. This test portion size was previously stated as a requirement in the SW-846, Method 1311, but has since been removed. Ecology agrees that the burden of providing acceptable data lies with the regulated community. It must be noted that the nature of the TCLP method is such that results usually are not replicated with precision like those for total metals.

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80. **Condition III.8.B.d.73.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Instead of performing the TCLP as described above, a material may be analyzed for the total concentration of the Toxic Characteristic (TC) constituents. For this approach, solids and sludges must undergo a digestion procedure for metals or an extraction procedure for organics. Then, based on the assumption that the analytes are 100% (totally) leachable from the waste, the resulting data are evaluated against the TC criteria allowing for the 20-fold dilution that is inherent in the TCLP extraction for solids and sludges (Note that the dilution factor does not apply for liquids). That is, for each toxic characteristic metal and organic compound, if the analyte concentration is less than 20 times the TC limits, then the waste is not considered to possess the characteristic of toxicity for that constituent. If the totals are more than 20 times the TC limits, then a TCLP must be performed (or, if undergoing stabilization, the waste may be retreated before performing another screening).

Condition Impact Statement: This condition would establish a condition allowing totals analysis but would prohibit its use for assuming a waste exceeds the toxicity characteristic leaching procedure or land disposal restriction threshold, even though regulatory intent allows such use.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-110(3)(a) and -045(1)(a) incorporate the Third Update of SW-846 into WAC 173-303 by reference. SW-846, Method 1311, Section 1.2 states, "if a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run." 62 Fed. Reg. 62084 (November 20, 1997) states, "the grinding or milling step in the TCLP has raised ALARA concerns for individuals who test mixed waste. The use of total constituent analysis, instead of the TCLP, also might minimize the generation of secondary mixed or radioactive waste through the use of smaller sample sizes and reduction, or elimination, of high dilution volume leaching procedures." The cited references allow for appropriate use of totals analysis without unnecessary additional requirements.

The condition discusses a provision already available to the regulated community in SW-846. The provision does not need to be repeated as a permit condition. This condition would impose unnecessary restrictions and expenditures on the Permittees with respect to totals analyses and with the potential to cause ALARA concerns. The Permittees can comply with existing regulations that allow the approach requested.

Ecology's Response: Ecology agrees to delete this condition.

Ecology is aware of the references cited by the Permittees in the Comment Justification.

81. **Condition III.8.B.d.74. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 6-1, Lines 2 through 10, delete the text and replace with the following: "The frequency to re-evaluate the waste profile and supporting data and documentation is each twelve (12) months, at a minimum, or more often if the generator has informed the TSD unit of a change in the waste generation process or if the TSD unit has identified that the waste received at the TSD unit or the description on the manifest or shipping papers does not match the waste profile. If the generator has informed the TSD unit of a change in the waste generation process, the waste re-enters the waste stream approval process described in Section 2.1.1 as amended by any Permit conditions. The TSD unit will evaluate verification data against the waste profile to identify any waste streams for which a change in waste generation process is suspect. If a waste stream is suspect, that waste stream also will re-enter the approval process described in Section 2.1.1 as amended by any Permit condition."

Condition Impact Statement: N/A

Requested Action: Accept.

82. **Condition III.8.B.d.75. Key Comment: N/A**

Draft Permit conditions as proposed by the Department of Ecology: Page 7-1, Lines 7 and 8, delete the sentence beginning with "Differences include . . ." and replace with the following: "Differences include, but are not limited to, the following: (1) physical and chemical screening frequencies for verification (minimum percentages of 5% for waste from onsite generator units and 10% for waste from offsite generators (note that chemical screening frequency is dependent upon the physical screening frequency); (2) shipping documentation (Uniform Hazardous Waste Manifests are used for waste from offsite generators and waste tracking forms are used for waste from onsite generator units); and (3) LDR documentation requirements (notification for waste from offsite generators and the information contained in the notice for waste from onsite generator

units)."

Condition Impact Statement: N/A

Requested Action: Accept.

83. **Condition III.8.B.d.76.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-1, Line 41, delete the phrase "and not per Section 1.1.1.1."

Condition Impact Statement: N/A

Requested Action: Accept.

84. **Condition III.8.B.d.77.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-2, Line 1, correct the WAC citation to read as follows: "WAC 173-303-380(1)(j), -(k), -(l), -(m), -(n), or -(o)."

Condition Impact Statement: N/A

Requested Action: Accept.

85. **Condition III.8.B.d.78.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 19, delete the word "an" and replace with the phrase "that a federal."

Condition Impact Statement: N/A

Requested Action: Accept.

86. **Condition III.8.B.d.79.** Key Comment: exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 20, delete the phrase "or equivalent."

Condition Impact Statement: This condition would eliminate the flexibility for method selection provided in 40 CFR 268.40(b). This condition is inconsistent with 62 Fed. Reg. 62079, at 62084 (November 20, 1997) *Joint NRC/EPA Guidance on Testing Requirements for Mixed Radioactive and Hazardous Waste*.

Requested Action: Delete this condition.

Comment Justification: The Department of Ecology is eliminating an alternate methods available through regulations to the regulated community. Therefore, the Department of Ecology is treating the U.S. Department of Energy differently than the rest of the regulated community, in violation of the sovereign immunity waiver's requirement that Federal agencies comply "in the same manner, and to the same extent, as any person".

Ecology's Response: Ecology disagrees with the Requested Action.

See Ecology's Response to the Permittees' comments on Condition III.7.B.d.83.

87. **Condition III.8.B.d.80.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 21, delete the phrase "or any other reliable method allowed by regulations."

Condition Impact Statement: This condition denies the Permittees the ability to use methods allowed by regulations.

Requested Action: Delete this condition

Comment Justification: WAC 173-303-110 allows for use of SW-846 and other methods to meet the requirements of WAC 173-303. WAC 173-303-110(5) provide the process by which "any person may request the department to approve an equivalent testing method . . ." This condition would unnecessarily limit options available to the Permittees for compliance with testing requirements of WAC 173-303-110.

Ecology's Response: Ecology disagrees with the Requested Action.

The comment would be appropriate if this text of the WAP were related to general waste analysis methods. However, the specified text of the WAP addresses analysis of waste to meet LDR requirements. Therefore, this condition deletes an inappropriate phrase from text concerned with analysis to meet the requirements of the federal LDR requirements, as stated in 40 CFR 268.40(b), and the State of Washington LDR as stated in WAC 173-303-140(4). See Response to Comment on Condition III.7.B.d.83.

88. **Condition III.8.B.d.81.** **Key Comment:** reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 25, delete the phrase "or any other method allowed by regulations" and replace with the phrase "WAC 173-303-110, or this Permit."

Condition Impact Statement: This condition arbitrarily would restrict the Permittees' ability to use reliable test methods that may be approved via an equivalent testing method petition as allowed by WAC 173-303-110.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-110 allows for use of SW-846 and other methods to meet the requirements of WAC 173-303. WAC 173-303-110(5) provides the process by which "any person may request the department to approve an equivalent testing method . . ." This condition would unnecessarily limit options available to the Permittees for compliance with testing requirements of WAC 173-303-110.

Ecology's Response: Ecology disagrees with the Requested Action.

Contrary to the Comment Justification provided, this condition specifically allows the use of an equivalent method approved according to the requirements of the Dangerous Waste Regulations (WAC 173-303-110) and also allows for methods to be chosen from the sources listed in Attachment 45 which is part of this Permit.

89. **Condition III.8.B.d.82.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 30, delete the word "sample" and replace with the word "analytical."

Condition Impact Statement: N/A

Requested Action: Accept.

90. **Condition III.8.B.d.83.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 33, add the following text: "A copy of the certification is placed in the CWC operating record."

Condition Impact Statement: N/A

Requested Action: Accept.

91. **Condition III.8.B.d.84.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 35, delete the word "Where" and replace with the word "When."

Condition Impact Statement: N/A

Requested Action: Accept.

92. **Condition III.8.B.d.85.** Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 7-3, Line 38, correct the WAC citation to read as follows: "WAC 173-303-380(l)(k), -(n), -(o)."

Condition Impact Statement: N/A

Requested Action: Accept.

III.8.B.e. Chapter 4

93. **Condition III.8.B.e.1.** Key Comment: exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: With the exception of spill materials (those spill materials which are specifically generated within the CWC TSD unit boundary) waste treatment by CWC must be approved by Ecology prior to execution. In the event

that waste treatment at CWC is a consideration, the following actions must take place: (1) The Permittees must revise pertinent Part B Permit application chapters and appendices (including, but not limited to, waste analysis, process information, WAP, and BEP) and submit them to Ecology for review and approval **sixty (60) days** before treatment is scheduled to begin, and (2) upon approval, the revised information will be incorporated into the Permit through a Class 3 permit modification.

Condition Impact Statement: This condition would restrict the Permittees from treating waste as allowed by WAC 173-303-630 and the CWC Part A, Form 3.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-630 contains adequate standards for storage, and/or treatment of waste in containers. WAC 173-303 does not contain any restrictions requiring permitted facilities to request permission on a case-by-case basis before treatment. This condition exceeds the regulatory requirements of WAC 173-303 and the provisions of interim status as applied at CWC. All final status permits for container management are issued in accordance with the same standards, irrespective of whether the containers are used for storage or treatment. Generators are allowed by regulation to treat waste without securing a case-by-case approval from the Department of Ecology. WAC 173-303-600(3)(m) states, "the final facility standards do not apply to . . . Generators treating dangerous waste onsite in tanks, containers, or containment buildings that are used for the accumulation of such wastes provided the generator complies with WAC 173-303-170(3)." CWC currently is allowed to treat waste in accordance with WAC 173-303-805 and its Part A, Form 3. There is no justification for arbitrarily removing this flexibility.

This condition would impose unnecessary cost and would limit the ability of the Permittees to treat waste as allowed by WAC 173-303. The Permittees retain flexibility that allows for safe and cost-effective management of waste without unnecessary time and expenditure in seeking permit revisions.

Ecology Response: Ecology disagrees with the Requested Action. The Part B Permit Application, as written, fails to define how and when treatment will take place at the TSD. Therefore, the proposed Condition III.8.B.e.1., remains as written.

The type of treatment that is described within the CWC Part B Permit Application is not considered by Ecology as "treatment by generator." All treatment activities that are identified in the CWC Part A, Form 3, Revision 6 will be classified as permitted treatment activities at a final status TSD. For example, "solidification of free liquids, neutralization of corrosive materials, etc.," does not pertain to waste that would necessarily be generated by activities at the CWC. Treatment in this case applies mostly to waste coming from all areas of Hanford (different generators), as well as, possible off-Hanford waste. The Hanford Site contractor that originally generated the waste remains the waste generator even though the subject waste is being stored at a different TSD than from which it was originally generated.

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94. **Condition III.8.B.e.2.** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Permittees shall identify critical systems for safe management of dangerous waste and mixed waste at CWC as required in

Facility Condition II.L.2.b. of this Permit. The Permittees shall describe the location and function of each critical system identified. This information shall be submitted to Ecology within one hundred and eighty (180) days of the effective date of this Permit and, upon approval by Ecology, incorporated as a Class 1 modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would require identification/descriptions of critical systems beyond Permit Condition II.L.2.b when there is no requirement to make such determinations.

Requested Action: Delete this condition.

Comment Justification: Permit Condition II.L.2.b. is applicable only to engineering change notices and does not apply to permit applications. As a result, identification of critical systems is not required at the time of grant of final status. Identification of critical systems is required only when modifications are made to the permitted unit.

Ecology Response: Ecology disagrees with the Requested Action. Identification of CWC's critical systems is required. Condition II.L.2.b is *not* applicable only to engineering change notices. This portion of Condition II.L.2.b. should have been met sometime during the construction of the CWC; however, since it was not, Ecology is requiring that identification of CWC critical systems be made within one hundred and eighty (180) days of the effective date of the Permit.

In addition, as stated in proposed Condition III.8.B.e.2., Line 6 of the Condition II.L.2.b. specifically states, "Identification of critical systems shall be included by the Permittees in each TSD unit-specific dangerous waste Permit application, closure plan or Permit Modification, as appropriate."

III.8.B.f. Chapter 7

95. **Condition III.8.B.f.1.** **Key Comment:** exceeds delegated regulatory authority, reflects approach inconsistent with regulatory requirements, hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: The following condition supercedes any limitation stated or implied in Chapter 7 and Table 7-1: The requirements of WAC 173-303-350(3)(b) are hereby required for all damaged or unacceptable dangerous/mixed waste shipments which arrive at this TSD unit, whether from offsite (i.e., manifested) or from onsite (i.e., under shipping papers) from both generators and/or other TSD units or facilities.

Condition Impact Statement: This condition would impose requirements in a way inconsistent with the approach established in the original issuance of the Permit by the Department of Ecology.

Requested Action: Delete this condition.

Comment Justification: WAC 173-303-350(3)(b) states "The description of actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the

owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303-370(5), Manifest System, reasons for not accepting dangerous waste shipments." The Department of Ecology is proposing to establish a Permit condition that would change the regulations by imposing these requirements to onsite movements when the regulation only applies to offsite manifested waste shipments. The Permittees submit that there is no basis in the Fact Sheet or administrative record to impose such a requirement.

The Permittees and the Department of Ecology spent considerable time and effort in constructing the Permit between 1991 and 1994. The Department of Ecology is undermining the original Permitting approach on the Hanford Facility by preparing TSD unit-specific conditions inconsistent with the methodology established in the original issuance of the Permit. On page 32 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "The Department has spent a considerable amount of time meeting and corresponding with the Permittees to identify and resolved difficulties, redundancies, and inefficiencies in this approach. As a result, the Department made significant changes in the second Draft Permit (refer to the Initial Responsiveness Summary and Revised Fact Sheet dated February 9, 1994.) and has refined additional conditions from the second Draft Permit in writing the final Permit. These changes were intended to alleviate cost and implementation difficulties associated with the facility wide approach, but still provide facility wide standards and protection of human health and the environment. Nonetheless, further implementation problems could be discovered at a later time. If so, the Department can make further changes through the Permit modification process to continue creating a meaningful Permit."

On page 145 of 189 of the second responsiveness summary to the Permit, the Department of Ecology states: "As a waste tracking system already exists, it is not clear to the Department why costs, workload, laboratory support, and delays would increase. To minimize such increases, the Department crafted the Conditions around the existing system. To make the Condition more compatible with the existing system, the Department agrees to not require regulatory agency notification for onsite manifest discrepancies. Instead, the Permittees will only be required to place documentation in the operating record for the Department's review at an inspection."

The Permittees and the Department of Ecology struck a balance on the initial Permit when Conditions II.P and II.Q were established. The Permittees submit that there have been no further implementation problems discovered from 1994. It is inappropriate to construct conditions on a unit-by-unit basis regarding these types of matters when the initial Permit resolved these matters in Part II of the Permit. The Department of Ecology has not established the basis necessary to change the regulations in a Permit. Furthermore, the Department of Ecology has not established the basis to impose requirements on a unit-by-unit basis inconsistent with Permit Conditions II.P and II.Q.

Ecology Response: Ecology disagrees with the Requested Action. The condition remains unchanged.

The Permittees quoted from page 33 of 189 of an agreement between the Permittees and Ecology from the second Responsiveness Summary for the Sitewide Dangerous Waste Permit to support their position that this condition would cause additional cost and implementation difficulties. The language in the second Responsiveness Summary for the Sitewide Dangerous Waste Permit actually supports the condition. The second Responsiveness Summary states: "... the Department agrees to not require regulatory agency notification for onsite manifest discrepancies. Instead, the Permittees will only be required to place documentation in the operating record for the Department's review at an inspection." (page 145 of 189) The second reference made in the

comment to the discussion of waste tracking and manifest discrepancies in the second Responsiveness Summary is not related or appropriate to the issues of hazards to public health or the environment or the Contingency Plan which are addressed by this condition.

The requirement, as stated in WAC 173-303-350(3)(b), does not conflict with that statement; rather it supports it as well. WAC 173-303-350(3) says the Contingency Plan must contain the following: "(b) A description of actions which will be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported, pursuant to WAC 173-303-370(5), Manifest system, reasons for not accepting dangerous waste shipments."

The Permittees' argument to delete the condition contradicts previously agreed upon language in the second Responsiveness Summary for the Sitewide Dangerous Waste Permit; therefore, there is no basis for Ecology to delete the condition.

Regarding the comment that this represents a change in the regulations, Ecology believes that this condition, addressing text in the Permit Application describing the Contingency Plan, is not inconsistent with Permit Conditions II.P. and II.Q. which address "Manifest System" and "On-Site Transportation," respectively.

96. **Condition III.8.B.f.2.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Table 7-1. The first paragraph of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) and the following sections of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) are added as enforceable sections of Appendix 7A: Sections 3.1, 8.2, 8.3, 8.4, 11.0, and 12.0.

Condition Impact Statement: N/A

Requested Action: Accept.

Ecology Response: Ecology agrees with the Requested Action. However, the condition needs to be corrected and needs to reflect recent revisions to Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion).

Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) was revised after the Permittees submitted the latest draft; therefore, the draft Permit Application did not reflect the latest changes to Attachment 4. The following sections applicable to this condition have been revised: Sections 1.3.2, 8.2, 8.3, 8.4, 11.0, and 12.0. The condition has been revised to correct the out-dated section numbers as follows:

"Table 7-1. The first paragraph of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) and the following sections of Attachment 4 to the Hanford Facility RCRA Permit (Dangerous Waste Portion) are added as applicable Sections of Appendix 7A of this TSD unit-specific Chapter 7: Sections 3.1, 7.3, 9.2, 8.4, 11.0, 12.0, and 13.0.

In addition, delete Section 1.3.2 and replace with Section 1.3.4."

97. **Condition III.8.B.f.3.** **Key Comment:** N/A

Draft Permit conditions as proposed by the Department of Ecology: Those portions of DOE/RL-94-02 which are not made enforceable by inclusion in the application matrix of that document are not made enforceable by reference in this document.

Condition Impact Statement: N/A

Requested Action: Accept.

III.8.B.g. Appendix 7A

98. Condition III.8.B.g.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: The Permittees must review and immediately amend the emergency response documentation, if necessary, whenever: (a) Applicable regulations are revised, (b) The plan fails in an emergency, (c) The unit changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste constituents, or in a way that changes the response necessary in an emergency, and (d) The list of emergency equipment changes.

Condition Impact Statement: N/A

Requested Action: Accept.

99. Condition III.8.B.g.2. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: The Permittees must note, in the CWC operating record, the time, date, and details of any incident that requires implementing the Contingency Plan. Within fifteen (15) days after the incident, the Permittees must submit a written report to Ecology. The report must, at a minimum, include:

- (1) Name, address, and telephone number of the Permittees;
- (2) Name and telephone number of the TSD unit;
- (3) Date, time, and type of incident;
- (4) Name and quantity of material(s) involved;
- (5) Extent of injuries;
- (6) An assessment of actual or potential hazards to human health or the Environment, where this is applicable;
- (7) Estimated quantity and disposition of recovered material that resulted from the incident;
- (8) Cause of the incident; and
- (9) Description of corrective actions taken to prevent reoccurrence of the incident.

Condition Impact Statement: N/A

Requested Action: Accept.

III.8.B.h. Chapter 8 (Reserved)

III.8.B.i. Appendix 8A

100. Condition III.8.B.i.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Page 1, Section 4.0, insert the following text: "A Facility Manager for the CWC operating organization must ensure that personnel performing the various TSD unit and TSD unit-related activities have received appropriate on-the-job training (OJT). The OJT must be provided by an individual proficient in the specific activity or activities. That individual must sign-off that personnel who successfully complete the OJT are proficient before personnel may be assigned to perform the activity independently (i.e., without close supervision)."

Condition Impact Statement: N/A

Requested Action: Accept.

III.8.B.j. Chapter 11

101. Condition III.8.B.j.1. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Section 11.1.2. shall be revised to include the following language: "Any sampling and analysis activities to support partial or full closure of the TSD unit will require approval from Ecology. Closure activities at a minimum must meet requirements stipulated in WAC-173-303-610." The list of closure activities in Revision 1 of the certified permit application can be used as an example of such activities, but not as a comprehensive list."

Condition Impact Statement: N/A

Requested Action: Accept.

102. Condition III.8.B.j.2. Key Comment: N/A

Draft Permit conditions as proposed by the Department of Ecology: Section 11.1.4.5. shall be revised to include the following language: "Decontamination of the waste storage pad may require determination of the presence of chemical contamination. Appropriate closure activities will be performed to address chemical contamination if deemed necessary."

Condition Impact Statement: N/A

Requested Action: Accept.

III.8.B.k. Chapter 12

103. Condition III.8.B.k.1. Key Comment: hinders cost effectiveness without added protection , imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 12-1, Line 37, add the following text "The Permittees will produce and place as-built drawings in the CWC operating record within six (6) months of issuance of this Permit. In addition, the referenced as-built drawings will be revised at least every twelve (12) months to incorporate all outstanding engineering change notices (ECNs) and Non-Conformance Reports (NCRs)."

Condition Impact Statement: This condition would impose redundant requirements on the Permittees and would require modifications to drawings in accordance with an arbitrary schedule.

Requested Action: Delete this condition,

Comment Justification: The first sentence of this condition is unnecessary because as-builts drawings were provided with the CWC permit application, a copy of which will be maintained in the CWC operating record as specified in Chapter 12.0 of the CWC permit application and Chapter 12.0 of *Hanford Facility Dangerous Waste Permit Application, General Information Portion*, DOE/RL-91-28. The second sentence of the Draft Permit condition is unnecessary because the Permittees already are obligated to provide engineering change notices to the Department of Ecology quarterly in accordance with Permit Condition I.C.3. These engineering change notices constitute revisions to the as-built drawings are updated periodically, not based on an arbitrary schedule, but based on the number and type of changes that amend a particular drawing. There is no basis in WAC 173-303-810 or 830 or elsewhere for requiring revision of drawings as would be imposed by this condition.

The engineering change notices and revised drawings are placed in the CWC operating record in accordance with Chapter 12.0 of the CWC permit application. Permit Condition II.L.2.d. requires placement of as-built drawings that incorporate modifications for completed projects in the operating record within 12 months of completion. The condition would require that as-builts must be amended every 12 months to incorporate engineering change notices and nonconformance report. Proper documentation is maintained and the Department of Ecology receives timely notification in accordance with Condition II.L.2.d. Therefore, this condition is unnecessary.

Ecology Response: Ecology agrees, in part, with the Requested Action.

Based on the April 2, 1998, letter from Michael Wilson (Ecology) to James Rassmussen (USDOE-RL) the proposed Condition III.8.B.k.1. shall be revised as follows: "Page 12-1, Line 37, add the following text: "The Permittees will produce and place as-built drawings in the CWC operating record within six (6) months of issuance of this Permit. This requirement pertains to the following design elements: Secondary Containment, Structural Integrity of the Base, and Management of Certain Reactive Wastes in Containers. In addition, the referenced as-built drawings will be revised at least every twelve (12) months to incorporate all outstanding engineering change notices (ECNs) and Non-Conformance Reports (NCRs)." These requirements are pursuant to WAC 173-303-806(4)(b)(i) and (iv) and -630(7), and Condition II.L.2.d.

104. **Condition III.8.B.k.2.** **Key Comment:** imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: Page 12-1, add the following text "All unit specific reporting requirements identified in Table 12-1 of the General Information Portion "DOE/RL-91-28" are applicable to the CWC unit."

Condition Impact Statement: This condition arbitrarily would impose reporting requirement that

have no relevance to CWC activities.

Requested Action: Delete this condition.

Comment Justification: There are no provisions in WAC 173-303 that allow for regulations that are not relevant to a facility's activities to be enforced through a permit. This condition (in conjunction with the condition following this one) would require unnecessary expenditure to interpret regulations for the Department of Ecology without any benefit to public health or the environment.

There is no regulatory basis for the random assignment of requirements from Table 12-1 to CWC. Table 12-1 is a comprehensive list of requirements that generally are applicable on the Hanford Facility and it was not submitted with the expectation that the list would be applied in its entirety as a permit condition for one unit. Some requirements listed in Table 12-1 obviously are not applicable to CWC. For example, groundwater monitoring would not apply to CWC because CWC does not meet the WAC 173-303-040 definition for "regulated unit." This condition would be inconsistent with regulatory requirements.

Ecology Response: Ecology disagrees with the Requested Action.

Ecology agrees that the unit specific requirement "ground water monitoring records" (i.e., II.F.2.a.) may not necessarily apply to CWC. However, the remaining requirements under the unit-specific column are applicable to CWC. The unit-specific requirements of Table 12-1 reflect records and reports required by the RCRA Permit and applicable WAC 173-303 and 40 CFR. In addition, Condition III.8.B.k.3., below, was written to provide a mechanism for Permittees to present justification as to why any unit-specific requirement from Table 12-1 is not applicable.

105. **Condition III.8.B.k.3.**

Key Comment: reflects approach inconsistent with regulatory requirements, imposes potential for unnecessary compliance issues, hinders cost effectiveness without added protection, imposes redundant or unenforceable conditions

Draft Permit conditions as proposed by the Department of Ecology: The Permittees shall identify requirements from Table 12-1 of the General Information Portion "DOE/RL-91-28" that are not applicable to CWC and provide justification as to why they are not applicable. This information shall be submitted to Ecology within thirty (30) days of the effective date of this Permit and, upon approval by Ecology, incorporated as a Class 1 permit modification. If necessary, Ecology will amend the requirements through a Class 2 or 3 permit modification.

Condition Impact Statement: This condition would require the Permittees to perform a regulatory interpretation for the Department of Ecology to justify that certain self-explanatory regulations are not relevant to CWC operations.

Requested Action: Delete this condition.

Comment Justification: This condition, in conjunction with Draft Permit Condition III.8.B.k.2. would require the Permittees to waste time and effort trying to convince the Department of Ecology that its own rules allow that some reporting activities would not be applicable to CWC activities. There is no basis for the Department of Ecology to take the position that reporting requirements be taken out of context and inappropriately applied to CWC. There is no rationale for expecting the

Permittees to justify the lack of applicability when the regulations adequately should enable one to determine scope. The Department of Ecology did not require that this approach be taken for the TSD units incorporated into Part III of the Permit through the previous modification (Revision 4A).

Ecology Response: Ecology disagrees with the Requested Action. See response to Condition III.8.B.k.2. above. This condition was written to provide a mechanism for the Permittees to present justification as to why any unit-specific condition from Table 12-1 is not applicable.

Comments on the Proposed Modifications to Part V, Chapter 20, 300 Area Waste Acid Treatment Facility (300 Area WATS)

1. **Condition V.20. Preamble** **Key Comment:** reflects approach inconsistent with regulatory requirements

Draft Permit conditions as proposed by the Department of Ecology: Part V, Chapter 20, third paragraph erroneously states: This unit has been modified closed to the performance standards of the Dangerous Waste Regulations, Washington Administrative Code (WAC) 173-303-610 and 640 with respect to all dangerous waste, materials, and media (i.e., soil) contaminated from RCRA operations of the WATS unit.

Condition Impact Statement: The public could misconstrue this statement to mean that the modified closure of the 300 Area WATS is complete when it is not.

Requested Action: Revise the preamble text as follows: "This unit is undergoing modified closure to the performance standards of *Dangerous Waste Regulations*, Washington Administrative Code (WAC) 173-303-610, 173-303-640, and Permit Condition II.K [no change hereafter] . . . "

Comment Justification: WATS closure activities for aboveground structures and components have been completed under this closure plan that has "modified" closure as a final closure option for the remaining unclosed soils. However, modified closure cannot be claimed as complete (not "modified closed") until soil cleanup levels in accordance with Permit Condition II.K and are confirmed by future sampling.

Ecology Response: Ecology agrees with the Requested Action. The text is revised as requested.

2. **Condition V.20.B.a.** **Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Phases one (1), two (2), and three (3), Decontamination and Inspection Plans shall be added in their entirety to the approved Closure Plan (DOE/RL-90-11, Revision 2, dated May 1999)

Condition Impact Statement: This condition would duplicate incorporation of information into the Permit.

Requested Action: Delete condition V.20.B.a.

Comment Justification: Inclusion of the Decontamination and Inspection Plans (DIP) for closure Phases 1, 2, and 3 in their entirety is unnecessary. All DIPs already are incorporated into the

closure plan by reference. Permit Condition V.20.A, recognizes that signed-off phase-specific documents generated in accordance with the DIPs (i.e., inspection checklists, PE certification of DIP activities) either are already in the closure plan (as with completed Phases 1 and 2) as Enforceable Appendix 6A or must be added as an Addendum to Appendix 6A on completion (as with in-progress Phase 3).

Ecology Response: Ecology disagrees that this condition would be a duplicate incorporation of information into the Permit. Ecology prefers to attach text in entirety to ensure that the DIPs are not modified without Ecology approval through the permit modification process. Condition V.20.B.a. remains as written.

Comments on the Proposed Modifications to Part V, Chapter 21, 2401-W Waste Storage Building

1. **Condition V.21** **Key Comment:** hinders cost effectiveness without added protection

Draft Permit conditions as proposed by the Department of Ecology: Comment pertains to entire chapter.

Condition Impact Statement: The proposed action to include the 2401-W Waste Storage Building Closure Plan into Chapter V.21 would undermine the permitting structure for operating units established in the Permit. The proposed action would lead to case-by-case permitting discussions for closures taking place within operating TSD unit boundaries. The proposed action would also be inconsistent with the definition of "Unit" found in the Permit Definitions and would be inconsistent with the language found in the Permit Introduction paragraph for Part V units. Finally, this action would be inconsistent the proposed changes to the Introduction, Part III paragraph of the Permit.

Requested Action: Delete Part V, Chapter 21, and the 2401-W Waste Storage Building Closure Plan from the Permit.

Comment Justification: The definition of "Unit" states: "A TSD unit, for the purposes of this Permit, is a subgroup of the Facility which has been identified in a Hanford Facility Dangerous Waste Permit Application Part A, Form 3." The 2401-W Waste Storage Building does not meet this definition, because the 2401-W Waste Storage Building is part of the CWC Part A, Form 3. Chapters in Part III, V, and VI are used for TSD units that have a Part A, Form 3. The Permit Introduction, Part V paragraph, clearly states that Part V is for TSD units. The following sentence from the Permit Introduction articulates this point "Requirements for each TSD unit undergoing closure are found in a Chapter dedicated to that TSD unit."

Refer to Comment 1 on "Comments on the Proposed Modifications to the Introduction" relating to the effect of this proposed action to the text in the Permit Introduction.

The 2401-W Waste Storage Building was developed from the CWC Closure Plan contained in Chapter 11, of the *Hanford Facility Dangerous Waste Permit Application, Central Waste Complex* (DOE/RL-91-16). The content of the 2401-W Waste Storage Building Closure Plan is a subset of the steps applicable to this building in the CWC Closure Plan. Each step described in the 2401-W Waste Storage Building Closure Plan can be found in the CWC Closure Plan and in the same sequence of events to achieve clean closure. It is reasonable to conclude that the 2401-W Waste Storage Building Closure Plan is a subset of the CWC Closure Plan. Because the 2401-W Waste

Storage Building Closure Plan is a subset of the CWC Closure Plan, the two plans are "consistent". Looking at the two documents from this point of view, there are no differences in these two documents. The Department of Ecology has asserted in a letter from Ted Wooley to James E. Rasmussen dated October 18, 1999, that there are significant differences. The Department of Ecology's assertion is and has no regulatory basis and has no facts to support such a misconception.

The 2401-W Waste Storage Building Closure Plan was developed at the request of the Department of Ecology when the Permittees believed the CWC Closure Plan sufficed to facilitate closure of the 2401-W Waste Storage Building. The Permittees believe that the Department of Ecology is unnecessary requiring development of the 2401-W Waste Storage Building Closure Plan that hinders cost effectiveness with added protection. The Permittees constructed the CWC Closure Plan so that: (1) the Department of Ecology would be notified of an intent to begin partial closure activities occurring within the CWC TSD unit boundary, and (2) completed field documentation and professional engineer certification would be submitted to Ecology when partial closure activities have been completed in accordance with WAC 173-303-610(6). This information would be transmitted via letter and incorporated into the CWC permit application as an appendix to the closure plan. For the 2401-W Waste Storage Building, the letter from James E Rasmussen to Moses N. Jaraysi, March 29, 1999, transmitted this information. After the Department of Ecology's acceptance of the documentation submitted to facilitate partial closure of a building within the CWC, the Permittees would initiate a modification to the Permit, Part III, Chapter 8, CWC to indicate clean closure of a building and incorporate the closure documentation.

After reluctantly developing the 2401-W Waste Storage Building closure plan, the Permittees transmitted the plan to the Department of Ecology on July 29, 1999, in a letter from James E. Rasmussen to R. J. Julian. The Permittees were reluctant to develop the 2401-W Waste Storage Building closure plan because this document was viewed in conjunction with the CWC Closure Plan and public comment occurred during Modification D of the Permit. In the July 29, 1999, transmittal letter, the Permittees stated "The public comment will be separate from, but may be coordinated with, the upcoming public comment period for the [Permit]." The Permittees were shocked to hear in the September 1999 Permit Steering Committee Meeting that the Department of Ecology's intent was to incorporate the 2401-W Waste Storage Building Closure Plan into Part V of the Permit. The Permittees understood an agreement was reached with the Department of Ecology as stated in the July 29, 1999 letter. The Department's Waste Management Project Manager following a monthly interface meeting the Permittees wanted to ensure that the agreement accurately was described before transmitting the letter approved a draft of this letter.

Therefore, the proper permitting process for this closure activity is to amend the CWC permit application to incorporate the field documentation and professional engineer's certification as Appendix 11A. This action will occur after either CWC transitions from interim status to final status or the final status permitting actions are delayed. If CWC operations transition to final status, a permit modification will be initiated once the final status action is effective to reflect clean closure of the 2401-W Waste Storage Building. Relevant chapters will be modified and Appendix 11A will be created for inclusion in the Permit, Part III, Chapter 8, and CWC. If the permitting action for CWC is delayed, the permit application for CWC will be revised in accordance with WAC 173-303-810(14)(h) to reflect clean closure of the 2401-W Waste Storage Building before the next submittal for final status.

The Department of Ecology has suggested a methodology for addressing the 2401-W Waste Storage Building closure activities in the letter from Ted Wooley to James E Rasmussen dated

October 18, 1999. The Permittees believe that this suggested approach and the Department of Ecology's responsiveness summary prepared August 29, 1994 on the second draft of the Permit directly conflict. During the second draft of the Permit, the Permittees submitted permit application updates for the 616 Nonradioactive Dangerous Waste Storage Facility and the 305-B Storage Facility. The Department of Ecology rejected these updates because the updates were submitted during the middle of the permitting cycle. The Department stated on page 160 of 189 and page 168 of 189 that "The requested page changes, while not substantially changing the Permit, have not been reviewed by the public as required." From the initial issuance of the Permit, the Permittees have not suggested modifications to the permit application during a permit modification. The Department of Ecology's letter, dated October 18, 1999, undermines this approach established in 1994 by suggesting that the modified permit application documentation (e.g., CWC Part A, Form 3, Chapter 1 of the CWC Permit Application) be submitted in the middle of a permit modification.

The Requested Action allows for the clean closure of the 2401-W Waste Storage Building. Clean closure will be accomplished when CWC is incorporated into the Permit and the final certification of closure is submitted to the Department of Ecology in accordance with WAC 173-303-610(6). The Permittees will prepare a Permit modification to incorporate the field documentation and the professional engineer's certification as Appendix 11A to the CWC permit application. Other chapters of the CWC unit-specific portion of the Permit effected by this closure action will be modified. Future partial closures at the CWC need to be accomplished under the CWC closure plan without development of a separate closure plan.

Ecology Response: Ecology disagrees with the Requested Action.

Ecology cannot support deletion of Part V, Chapter 21, and the 2401-W Waste Storage Building Closure Plan from the Permit because closure of 2401-W is being performed prior to closure of CWC.

Ecology disagrees with the comment justification provided above. USDOE's comment justification has been divided into four (4) main issues that Ecology addresses below:

1. The definition of "Unit" states: "A TSD unit, for the purposes of this Permit, is a subgroup of the Facility which has been identified in a Hanford Facility Dangerous Waste Permit Application Part A, Form 3." The 2401-W Waste Storage Building does not meet this definition, because the 2401-W Waste Storage Building is part of the CWC Part A, Form 3. Chapters in Part III, V, and VI are used for TSD units that have a Part A, Form 3. The Permit Introduction, Part V paragraph, clearly states that Part V is for TSD units. The following sentence from the Permit Introduction articulates this point, "Requirements for each TSD unit undergoing closure are found in a Chapter dedicated to that TSD unit."

Ecology Response: Ecology agrees that since 2401-W does not have its own Part A, Form 3, it may, by definition, be excluded from Part V (Unit Specific Conditions for Units Undergoing Closure) of the Sitewide Permit. Closure of 2401-W, however, is being handled separately from closure of the rest of CWC, making it unique with respect to how permitting is currently handled under the Sitewide Permit. Part V is a better regulatory approach because, in this case, the Permittees' objective is to administratively separate 2401-W from CWC. Part III of the Permit is for final status operating TSDs; Part V is for closures. Partial closure of CWC was never taken into consideration when the Permit was originally adopted; therefore, discussion of how to handle this scenario more efficiently can be addressed in future modifications to the Permit.

2. "The Department of Ecology has asserted in a letter from Ted Wooley to James E. Rasmussen dated October 18, 1999, that there are significant differences. The Department of Ecology's assertion is and has no regulatory basis and has no facts to support such a misconception."

Ecology Response: Chapter 11 of the CWC Part B Permit Application was not written specific enough to sufficiently address closure performance standards as stipulated in WAC-173-303-610. Elements of TSD closure, such as an approved sampling and analysis plan, cannot be appropriately prepared years in advance of the actual closure. Because the expectation is that there will be a significant time lag between establishing final CWC Permit conditions and when actual TSD closure would occur, Ecology approved the very general performance standards for CWC that are currently found in Chapter 11. Physical parameters, such as spill history and condition of the particular building (or sub-unit) at the time of closure, may require a different set of performance standards than what was specified in the Permit Application. It is, therefore, likely that each CWC sub-unit will require a separate partial closure plan based on the specifics of the sub-unit being closed and the current regulatory requirements. In the case of 2401-W, the spill history, sampling grid, and a specific approach for addressing dangerous waste were not defined in Chapter 11 of the CWC Part B Permit Application. This is why Ecology required a separate closure plan to be written and taken out for public review.

3. "If CWC operations transition to final status, a permit modification will be initiated once the final status action is effective to reflect clean closure of the 2401-W Waste Storage Building. Relevant chapters will be modified and Appendix 11A will be created for inclusion in the Permit, Part III, Chapter 8, CWC."

Ecology Response: Part III is reserved for units applying for final status operation. It is the Permittees' intent through the clean closure process to exclude 2401-W from the CWC Permit and to revise the Part A, Form 3, to exclude 2401-W from the TSD boundary. Final status operation for CWC does not apply in any way to 2401-W; therefore, Ecology does not agree with this approach.

4. "The Requested Action allows for the clean closure of the 2401-W Waste Storage Building. Clean closure will be accomplished when CWC is incorporated into the Permit and the final certification of closure is submitted to the Department of Ecology in accordance with WAC 173-303-610(6). The Permittees will prepare a Permit modification to incorporate the field documentation and the professional engineer's certification as Appendix 11A to the CWC permit application. Other chapters of the CWC unit-specific portion of the Permit effected by this closure action will be modified. Future partial closures at the CWC need to be accomplished under the CWC closure plan without development of a separate closure plan."

Ecology Response: Chapter 11 of the CWC Part B Permit Application was not written specific enough to sufficiently address closure performance standards as stipulated in WAC-173-303-610. Elements of TSD closure, such as an approved sampling and analysis plan, cannot be appropriately prepared years in advance of the actual closure as the situations that would drive specific closure requirements have not taken place (e.g., spills, releases). Because the expectation is that there will be a significant time lag between establishing final CWC Permit conditions and when actual TSD closure would occur, Ecology approved the very

Permit Modification Responsiveness Summary

Permit Number: WA 7890008967

February 28, 2001

Page 250 of 250

general performance standards for CWC that are currently found in chapter 11. Physical parameters, such as spill history and condition of the particular building or (sub-unit) at the time of closure, may require a different set of performance standards than what was specified in the Permit Application. It is, therefore, likely that each CWC sub-unit will require a separate partial closure plan based on the specifics of the sub-unit being closed. In the case of 2401-W, the spill history, sampling grid, and a specific approach for addressing dangerous waste were not defined in Chapter 11 of the CWC Part B Permit Application. This is why Ecology required a separate closure plan to be written and taken out for public review.

Partial closure of CWC was never taken into consideration when the Permit was originally adopted. This unusual "piece-meal" approach to TSD closure by USDOE/contractors will drive future discussions with Ecology with regard to how the Permit will be modified.

Appendix 1

**to the Responsiveness Summary for the
Hanford Facility Resource Conservation and
Recovery Act Permit for the Treatment, Storage, and
Disposal of Dangerous Waste, Revision 7**

Hanford Facility Comments on the Modification Package Issued for Public Comment on October 4, 1999, for the Dangerous Waste Portion of the Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste, No. WA7890008967

PREAMBLE

Introduction

These comments were prepared by the U.S. Department of Energy, Richland Operations Office, Fluor Daniel Hanford, Inc., Bechtel Hanford Company, Inc., Pacific Northwest National Laboratory, and Lockheed Martin Hanford Corporation (hereinafter referred to as the Permittees) in response to the Draft Permit conditions contained in Modification E of the Hanford Facility Resource Conservation and Recovery Act Permit (RCRA) issued for public comment by the Washington State Department of Ecology (Department of Ecology) on October 4, 1999.

The attached comments are specific to conditions proposed by the Department of Ecology for the Fact Sheet; Attachment 3, Permit Applicability Matrix; Attachment 27, Permit Modification Schedule; Attachment 45, Selecting a Laboratory and Quality Assurance/Control; 616 Nonradioactive Dangerous Waste Storage Facility; Waste Receiving and Processing Facility; Central Waste Complex; 300 Area Waste Acid Treatment System; and the 2401-W Waste Storage Building. The Permittees believe some of these Draft Permit conditions either should be deleted or significantly amended before the issuance of the Permit. The Permittees' comments are based on a review of the Department of Ecology's *Dangerous Waste Regulations* [Washington State Administrative Code (WAC) 173-303] and associated guidance and interpretative documents.

Four Comment Criteria were established as a basis for defining five Key Comment Areas. The comment package is organized by condition, with each comment containing a reference to one or more of the Key Comment Areas. The Permittees believe that final Permit conditions meeting the Comment Criteria are critical to the achievement of an effective, yet efficient final Permit. The Permittees look forward to working with the Department of Ecology to obtain final Permit conditions that will ensure compliance with the final status standards, satisfy the criteria used to prepare these comments, allow for efficient operations, and allow completion of cleanup milestones on the Hanford Facility. Because the Modification E package issued for public comment significantly departs from these Comment Criteria, the Permittees believe there is a need to restate these criteria in this Preamble.

Comment Criteria

The underlying basis for the Comment Criteria is the need to protect human health and the environment in a manner that is as cost effective as possible so that cleanup dollars are used most efficiently. WAC 173-303 is based on, yet more stringent and has a broader scope of coverage than, the corresponding federal regulations. The Permittees believe that WAC 173-303 provides sufficient protection of human health and the environment. Thus, the Permittees request that any Draft Permit conditions that go beyond regulatory requirements carefully be re-evaluated in the interest of management efficiency.

The following Comment Criteria form the basis for the Key Comment Areas.

Achieve Consistency with the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement)

The Permit must be consistent with the Tri-Party Agreement, because the Tri-Party Agreement is the governing document for all RCRA/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cleanups and for all RCRA permitting on the Hanford Site. The Tri-Party Agreement is binding on the Department of Ecology, the U.S. Environmental Protection Agency, and the U.S. Department of Energy, Richland Operations Office. Permit conditions developed by the Department of Ecology must be compatible with the provisions of the Tri-Party Agreement. All schedules of compliance must be maintained and controlled in the Tri-Party Agreement to ensure consistency and proper prioritization of work. The Permit conditions must not place the U.S. Department of Energy, Richland Operations Office or its

contractors in a position where the conditions of the Permit only can be met by a failure to comply with the Tri-Party Agreement.

Regulate Within the Scope of Regulatory Authority and Achieve Responsible Interpretation of Requirements

The Permit Conditions must be based on clear regulatory authority. Federal and state environmental regulations are comprehensive and complex. While the regulated community has an obligation to comply with applicable environmental requirements, enforcement agencies such as the Department of Ecology also have an obligation to regulate within the bounds of their authority in accordance with the federal Administrative Procedures Act and its implementing regulations.

The following general principles apply to administrative agencies:

- Administrative agencies inherently do not have authority, but are instead only allowed to act pursuant to authority delegated to the agencies through statutes enacted by legislative bodies. Any actions by an administrative agency that exceed the scope of its delegated authority are illegal and void.
- Administrative agencies must follow the procedures specified in the applicable enabling legislation. If such procedures do not exist, agencies must comply with the Administrative Procedures Act.
- Agencies are required by law to act in accordance with their own rules and regulations. If agencies do not comply with such rules, their actions are invalid.
- Agencies must maintain an official record that supports actions taken and there must be evidence in the record that supports agency actions. Agencies must not take actions that are 'arbitrary and capricious'.

40 Code of Federal Regulations (CFR), Part 271.4, requires that a State program "must be consistent with the Federal program". In 1988, Washington State passed its own Administrative Procedures Act, Revised Code of Washington 34.05, which contains rules that administrative agencies in Washington must follow. Specific excerpts are provided in the following.

- Revised Code of Washington 34.05.220(1) allows agencies to adopt rules and requires agencies to adopt as a rule "a description of its organization, stating the general course and method of its operations and the methods whereby the public may obtain information and make submissions or requests". The rule also provides that "no person may be required to comply with agency procedure not adopted, as a rule as herein required".
- Agency interpretive and policy statements are governed by Revised Code of Washington 34.05.230. In the absence of specific rules, agencies are encouraged to "advise the public of its current opinions, approaches, and likely courses of action by means of interpretive or policy statements". Pursuant to Revised Code of Washington 34.05.230(1), "current interpretive and policy statements are advisory only".
- Statements describing the subject matter of interpretive and policy statements must be submitted to the code reviser for publication in the Washington State Register in accordance with Revised Code of Washington 34.05.230(4).

Additional requirements applicable to Washington State Administrative Agencies can be found in the Regulatory Reform Act of 1995, Chapter 403(2)(a), and (b). Therein, the authority of the legislature is affirmed by stating that:

- "(a) Unless otherwise authorized, substantial policy decisions affecting the public be made by those directly accountable to the public, namely the legislature, and that state agencies not use their administrative authority to create or amend regulatory programs.
- (b) When an agency is authorized to adopt rules imposing obligations on the public, that it do so responsibly: The rules it adopts should be justifiable and reasonable, with the agency having determined, based on common sense criteria established by the legislature, that the obligations are truly in the public interest".

The Department of Ecology is required to administer its program within certain parameters. The Department of Ecology does not have the authority to create or amend existing requirements without specific delegation from the legislature. The legislature is directly responsible for authorizing others or personally making substantial policy decisions affecting the public.

Achieve Consistency with Existing Regulatory Requirements

The Permit must be consistent with regulatory requirements that form the basis for permitting. WAC 173-303 contains comprehensive U.S. Environmental Protection Agency-approved requirements for applying for RCRA permits. WAC 173-303 also contains additional requirements imposed by Washington State pursuant to state law. Specifically, WAC 173-303-600 contains sufficient final status standards, and WAC 173-303-800 contains sufficient criteria for issuance of permits. These regulations have been proposed properly before the public, and promulgated after response to public comments. The Department of Ecology should ensure that permits do not impose excessively prescriptive or ambiguous conditions. Such conditions present unnecessary compliance issues and drive costs up and have no basis. The Department of Ecology must act in accordance with the requirements of the Administrative Procedures Act in establishing permit conditions. The Department of Ecology cannot legally impose restrictions that go beyond the regulations. Substantial shifts in policy from existing regulatory programs must be accomplished through legislation. The Department of Ecology cannot create new or amend existing permit programs without following Administrative Procedures Act procedures. Any interpretive or policy statements must be in accordance with Revised Code of Washington 34.05.230 and 'are advisory only'.

The Permit should be consistent with other RCRA permits. Often, permits are issued with specific provisions for unique situations that might exist at a given site. Nevertheless, the Department of Ecology arbitrarily should not impose conditions on the Hanford Facility without legitimate basis. The Department of Ecology cannot establish unique conditions without substantive justification in responsiveness summaries and fact sheets in accordance with WAC 173-303-840. The Permittees believe that although an extensive Fact Sheet was prepared for the initial Permit in September 1994, many of the conditions proposed in Modification E warrant extensive justification in accordance with WAC 173-303-840. Specifically:

- WAC 173-303-840(2)(e) states "a fact sheet that is supported by administrative record and made available for public comment must accompany all draft permits." These Draft Permit conditions have been proposed without being supported by information in the administrative record.
- WAC 173-303-840(2)(f)(i) states "A fact sheet will be prepared for every draft permit for a major dangerous waste management facility, and for every draft permit which the department finds is the subject of wide-spread public interest or raises major issues." The Hanford Facility is a major dangerous waste management facility in Washington State, and is the subject of widespread public interest. Furthermore, many of the Draft Permit conditions in this modification raise major issues because these conditions are not firmly rooted in regulation.
- WAC 173-303-840(2)(f)(iii)(C) states "The fact sheet will include, where applicable: A brief summary of the basis for the draft permit conditions including supporting references." Many of the Draft Permit conditions have not been provided with a legitimate basis, including supporting references.
- WAC 173-303-840(2)(f)(iv) states "The department will prepare a statement of basis for every draft permit for which a fact sheet is not prepared. The statement of basis will briefly describe the derivation of the conditions of the draft permit and the reasons for them...". The Fact Sheet does not describe the derivation of many of the Draft Permit conditions of Modification E or provide legal reasons for them.

Support Safe, Cost Effective, and Efficient Management

The Permittees are committed to ensuring that all waste management activities are performed in a safe and cost-effective manner. To maximize efficient management in implementation of the Permit, the Permit conditions must adhere closely to the specific applicable governing regulations. The governing regulations for permits repeatedly have been subjected to the rulemaking process and the existing standards are by law adequate for protection of human health and the environment. The Permittees believe that overly restrictive conditions only should be imposed when backed by the retention of supporting information in the Department of Ecology's administrative record, which is available to the public for inspection.

Five Key Comment Areas

Five Key Comment Areas have been developed through application of the aforementioned Comment Criteria. The five resulting Key Comment Areas are as follows: (1) exceeds delegated regulatory authority, (2) reflects approach inconsistent with regulations, (3) imposes potential for unnecessary compliance issues, (4) hinders cost effectiveness without added protection, and (5) imposes redundant or unenforceable conditions. These Key Comment Areas are based on one or more of the Comment Criteria.

- 1. Exceeds Delegated Regulatory Authority:** Some Draft Permit conditions include requirements and restrictions that exceed statutory authority. The Department of Ecology arbitrarily cannot conclude that WAC 173-303 is insufficient for permitting of the Hanford Facility. If the Department of Ecology believes that special rules are needed to issue and enforce the Permit, such rules must be promulgated and must be consistent with the authority delegated by the legislature. This Key Comment Area is used to identify Draft Permit conditions that appear to have been developed without statutory or regulatory authority.
- 2. Reflects Approach Inconsistent with Regulatory Requirements:** Some Draft Permit conditions include requirements and restrictions that contradict or expand on regulatory intent. This Key Comment Area is used to identify Draft Permit conditions that have been developed in a manner that are inconsistent with or expand on applicable regulations.
- 3. Imposes Potential for Unnecessary Compliance Issues:** Some Draft Permit conditions include requirements and restrictions that excessively are detailed and/or ambiguous. This Key Comment Area is used to identify Draft Permit conditions that are overly detailed without basis, present compliance issues because of ambiguity regarding interpretation, or that might be subject to disagreement by the Permittees regarding intent and/or consistency with applicable laws and regulations.
- 4. Hinders Cost Effectiveness without Added Protection:** Some Draft Permit conditions include requirements that impose unnecessary activities. Such conditions would add costs to compliance efforts and have no regulatory basis or benefit to protection of human health and the environment. This Key Comment Area is used to identify Draft Permit conditions that would hinder the Permittees' ability to manage waste in a cost-effective manner.
- 5. Imposes Redundant or Unenforceable Conditions:** Some Draft Permit conditions include requirements and restrictions that are redundant to existing requirements in the Permit. Some Draft Permit conditions impose requirements that have been met through submittal of the permit applications. Other Draft Permit conditions are written in a manner that do not impose requirements at all. This Key Comment Area is used to identify Draft Permit conditions that would have no substantial impact on the operation of the Hanford Facility or would create controversy regarding intent and/or implementation.

Summary of Approach

The Permittees believe that in addition to being protective of human health and the environment, the Permit should be based firmly on legitimate regulatory authority with appropriate consideration given to meeting the Comment Criteria presented as the basis for these comments. The Permittees believe that the five Key Comment Areas used to categorize these comments will be useful in determining resolution to the significant issues identified. Although all comments are provided in the interest of safe and cost-effective Permit implementation, the Permittees particularly are concerned with Draft Permit conditions related to waste analysis, recordkeeping, and closure because of the excessive level of detail in these conditions, and the associated unnecessary costs in implementing the conditions.

In summary, these comments are provided to help ensure that an appropriate level of control is established in the final Permit. The Permittees request the following from the Department of Ecology:

- Examine the basis for its authority and ensure that its position in this Permit modification is consistent with, and does not exceed, the authority that has been delegated by the legislature.

- Evaluate its position on these Draft Permit conditions, and on final Permit issuance, ensure that such conditions are consistent with the regulatory intent of the applicable rule(s) and impose reasonable requirements that are enforceable.
- Ensure that the Permit provides protection of human health and the environment and facilitates cost-effective operations and cleanup on the Hanford Facility to the extent allowed by regulation.

Preferred Alternative for Waste Analysis, Waste Analysis Plans, and Quality Assurance/Quality Control

Currently in the Hanford Facility RCRA Permit and Modification E, waste analysis and quality assurance/quality control requirements and permit conditions are very detailed and far exceed the requirements for such plans provided in the Dangerous Waste Regulations and corresponding Permit Conditions in Parts I and II applicable to all units. The Permittees request that the Permit be modified to avoid excessively detailed requirements for individual units generally, and for the units in this modification specifically. In the context of the Permit, the philosophy of the preferred alternative is to provide performance-based standards based on written regulatory requirements instead of detailed individual requirements. This approach will provide flexibility for the Permittees while still meeting all the regulatory requirements.

Waste analysis and waste analysis plan requirements are located in several sections of the Permit: generally in Part II.D. and specifically in the unit-specific Draft Permit Conditions III.7., III.8., and associated appendices. These unit-specific sections of the Permit contain many conditions that are not regulation-based. The comment table for WRAP and CWC identify the Draft Permit conditions for which this Preferred Alternative for Waste Analysis, Waste Analysis Plans, Quality Assurance/Quality Control apply.

Similar to waste analysis, quality assurance and quality control measures also are located throughout the Permit and in Draft Permit conditions. Many of the Draft Permit conditions are lengthy and well beyond the scope of regulatory basis, giving rise to overly restrictive requirements and conflicting procedures. Quality assurance/quality control language can be found in the Permit, Part II.E. and specifically in the unit-specific Draft Permit Conditions III.7, III.8, and Attachment 45.

The Permit should reflect a consistent approach for incorporation of waste analysis and quality assurance/quality control requirements. As currently structured, the Permit provides very little detail on the requirements for waste analysis plans (Permit Condition II.D.) and an extraordinary amount of detail on quality assurance/quality control (Permit Condition II.E.). It is the Permittees' experience that these two conditions are applied inconsistently to individual units incorporated into the Permit and, in many cases, leads to the imposition of requirements on individual units that exceed the requirements of the Dangerous Waste Regulations.

The Permittees request that an alternative permitting approach be used for units within the Permit. This alternative approach would require modifications to Permit Conditions II.D. and II.E. The Permittees recognize that these conditions are not open for public comment or modification as the modification currently is proposed. As an alternative approach, the Permittees request that unit-specific conditions for WRAP and CWC be removed or significantly reworded to reduce the amount of Department of Ecology oversight to a reasonable level. The acceptable level should be provided in Part II Permit conditions to ensure consistent implementation for all permitted units. However, to implement this approach at CWC and WRAP, the Permittees propose similar Permit Conditions be incorporated into Part III during this Permit modification. This will allow WRAP and CWC to implement this approach while a Class 3 Permit modification process is completed for Permit Conditions II.D. and II.E. It is the Permittees intention to request a modification to incorporate the suggested language into Conditions II.D. and II.E. as soon as possible.

This approach requires revising Permit Conditions III.7.B.d. and III.8.B.d. to closely parallel the regulatory requirements for waste analysis plans and quality assurance/quality control. These Permit Conditions would allow the Department of Ecology to establish baseline requirements for WRAP and CWC. These requirements would result in the maintenance of up-to-date waste analysis plans and quality

assurance/quality control measures at WRAP and CWC without the necessity of incorporating this documentation into the Permit.

Currently, Permit incorporation of plans and other documents submitted during the permitting process triggers a detailed Permit modification process described in WAC 173-303-830 each time that a modification is made to such documents. Conversion of the proposed Draft Permit Conditions to the preferred alternative will allow the Department of Ecology to ensure that all relevant requirements are met without triggering permit modifications each time a document is changed. It also will allow the Department of Ecology, on a real-time basis, to verify that relevant requirements are being met during unit operations.

To meet the objective of performance-based requirements in the Permit while still maintaining regulatory compliance, the Permittees propose that individual requirements that must be contained in a waste analysis plan be identified as Draft Permit Condition III.7.B.d and III.8.B.d., based on WAC 173-303-110 and -300. The waste analysis plan and associated quality assurance/quality control measures should remain separate from the Permit and contain all requirements of WAC 173-303-110 and -300. The only enforceable regulatory requirements are that a waste analysis plan be developed and that the waste analysis plan meets a number of criteria. The waste analysis plan and associated quality assurance/quality control measures are not part of the Permit, but a document that is generated by the Permittees in compliance with regulations.

WAC 173-303-806(4)(a)(iii) requires that a copy of the waste analysis plan be included in a Part B permit application. WAC 173-303-810 and -815 do not require that waste analysis plans, quality assurance/quality control measures, or other Permittee-supplied documentation be incorporated in the final status Permit. The proposed Draft Permit Conditions restate and expand on waste analysis and quality assurance/quality control requirements provided in the Dangerous Waste Regulations. Restatement and expansion where necessary provide clarity and are consistent with the Department of Ecology's approach in Parts I and II of the Permit, where the requirements are restated instead of referenced.

This preferred alternative benefits the Department of Ecology by providing a clear and concise Permit that reduces the administrative effort and cost required to maintain the Permit. A clear and concise Permit improves the enforceability for the Department of Ecology compliance inspectors by providing a regulatory basis for the requirements identified in the Permit.

Cost Estimate Impacts of Implementing Draft Permit Conditions

Preliminary cost estimates for compliance with only 14 of the Draft Permit conditions (WRAP Conditions: III.7.B.d.19., III.7.B.d.23., III.7.B.d.25., III.7.B.d.35., III.7.B.d.43., III.7.B.d.47., and III.7.B.d.77.; and CWC Conditions: III.8.B.c.4., III.8.B.d.19., III.8.B.d.21., III.8.B.d.31., III.8.B.d.39., III.8.B.d.43, and III.8.B.d.73.) outlined by the Department of Ecology would exceed an annual cost of \$1,000,000. The Permittees believe that the Draft Permit conditions identified in this Comment Package for deletion or modification add little or no protection to human health and/or the environment.