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93-RPA-264

Ms. Patricia Hervieux
Washington State Department of Ecology
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Olympia, Washington 98504-7659

Dear Ms. Hervieux:

COMMENTS ON WASHINGTON ADMINISTRATIVE CODE 173-303 PROPOSED RULE

The U.S. Department of Energy Richland Operations Office (RL) submits the enclosed comments regarding the proposed rule. RL commends the State of Washington Department of Ecology (Ecology) on the thoroughness and quality of the proposed rule. The regulatory reforms proposed are expected to simplify the regulatory compliance process while maintaining high level of environmental protection.

RL appreciates the opportunity to work with your staff and to provide early input. If you have any questions regarding the enclosed comments, please call me or Alex Teimouri of my staff on (509) 376-6222.

Sincerely,

Robert J. Holt

Robert G. Holt, Acting Program Manager
Office of Environmental Assurance,
Permits, and Policy

Enclosure

cc: D. Butler, Ecology
D. C. Nylander, Ecology
~~R. J. Landon, WAC~~
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U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE

COMMENTS ON WAC 173-303 PROPOSED RULES,
WASHINGTON STATE REGISTER 93-12-109
FILED JUNE 2, 1993

1. **Preamble:** The U.S. Department of Energy, Richland Operations Office (RL) commends the State of Washington Department of Ecology (Ecology) on the thoroughness and quality of the preamble discussion. Overall, the preamble does an excellent job of presenting the intent and mechanics of the proposed changes. Ecology has served the citizens of the State well with this exemplary effort.

Ecology should continue to pursue regulatory reforms that maintain a high level of environmental protection while reducing duplication and simplifying the process of determining compliance.

2. **General Comment:** RL favors the suggestion that the state-only D002 solid corrosives designation be repealed, as stated in later comments. Any attempt to simplify regulations while maintaining compatibility with federal regulations is encouraged. Ecology should vigorously pursue a comprehensive evaluation of the other "state only" portions of the dangerous waste regulations. Substances such as table salt, baking powder, baking soda, and many alcoholic beverages should not be considered dangerous waste when discarded, yet are in Washington State. These solids designate as dangerous waste at a concentration of 10% or above. It is illogical to consider common foodstuffs dangerous waste when discarded. The level of regulation must be commensurate with risk.
3. **WAC 173-303-016(5)(a)(ii)(B) and -016(5)(b)(ii), Consistency of proposed exemption with federal program requirements:** The proposed changes would exempt commercial chemical products from regulation when applied to the land or used as fuel when such uses are consistent with ordinary use of the material. Although RL concurs that exempting such materials is desirable, there is a question as to whether it is allowable, from the standpoint of maintaining equivalency with the U.S. Environmental Protection Agency (EPA) program, to exclude characteristic wastes in this manner.

The corresponding federal regulations at 40 Code of Federal Regulations (CFR) 261.2(d)(1)(ii) and 40 CFR 261.2(d)(2)(ii) exempt only *listed* commercial chemical products, not characteristic commercial chemical products. Listed commercial chemical products that also exhibit a characteristic would be exempt under the federal rules, but apparently non-listed characteristic wastes would not. Please verify that the proposed State exemption does not create a regulation that is less stringent than the federal counterpart.

4. **WAC 173-303-040, Scope of mixed waste regulation:** The proposed rule would amend the definitions for "acutely hazardous waste," "dangerous wastes," and "extremely hazardous waste" to include reference to "mixed waste" as well as to add a "mixed waste" definition. The source, special nuclear, or byproduct components of mixed waste are specifically exempt from federal hazardous waste regulation via Section 1004(27) of Resource Conservation and Recovery Act (RCRA). Additionally, Ecology has officially stated that the intention of mixed waste regulation is to cover those portions of the waste regulated by EPA (i.e., the non-Atomic Energy Act constituents), and no more (See "*Responsiveness Summary for the Washington State Dangerous Waste Regulations, Chapter 173-303 WAC, Parts 1 & 2,*" dated September, 1984.) Presuming that this continues to be Ecology's intent, RL has no objection to the proposed rule changes regarding mixed waste. On the other hand, RL strenuously objects if this signals a new direction whereby Ecology intends to extend beyond the scope of the federal RCRA program in this area. In the latter case, RL believes that further public comment is warranted before proceeding with a major change in direction from Ecology's previous position.
5. **WAC 173-303-040, Definition of "independent qualified registered professional engineer:** According to the preamble, an independent engineer could not include an engineer responsible for design of a treatment, storage, or disposal (TSD) facility. However, from an EPA perspective, an engineer who designed a facility *would* be considered independent (and therefore able to provide certification) so long as he is independent of the facility owner/operator. Thus, EPA makes the "independent" distinction based upon association with the facility owner/operator, not upon involvement with the facility design. Does Ecology truly intend to preclude facility designers from being "independent" for certification purposes and, if so, what is the justification for this stance?
6. **WAC 173-303-040, -100(3)(b), and -100(6)(c), Polycyclic Aromatic Hydrocarbons (PAHs):** Revise the definition to be consistent with the discussion found in Ecology's Chemical Testing Methods. The definition should read; "... The PAH of concern for designation are only those PAH with more than three and less than seven fused benzene rings".
7. **WAC 173-303-040, Definition of "release":** The proposed definition of release includes "disposing of dangerous wastes, *including dangerous waste constituents . . .*" This language equates "dangerous waste" and "dangerous waste constituents." This appears to be in error - clearly dangerous waste constituents are not the same as dangerous wastes. Dangerous wastes would generally (although not always) contain some dangerous waste constituents; however many substances containing dangerous waste constituents are not dangerous wastes. Consider revising the definition to read " . . . or disposing of dangerous waste or dangerous waste constituents as defined . . ."

8. **WAC 173-303-040 and -646, Expansion of corrective action requirements beyond solid waste management units:** The preamble discussion indicates that the intent is to allow Ecology to require corrective action for any release, regardless of origin (i.e., releases from units other than solid waste management units would also be subject to corrective action). The definition of solid waste management unit (SWMU) in WAC 173-303-040 still refers only to sites where routine and systematic release have occurred. This would appear to preclude one-time spill events since such incidents would not meet the routine and systematic criteria. WAC 173-303-646 states that the corrective action provisions applies to release sites "including releases from solid waste management units," thereby not limiting corrective action solely to SWMUs. In WAC 173-303-806(4)(a)(xxiii), however, the owner/operator is required only to provide information on SWMUs at the facility.

How does Ecology intend to identify and extend the corrective action requirements to non-SWMUs? RL believes that this is an issue which should be considered carefully by Ecology and subjected to public comment prior to any final decision. As an illustration of why this issue is important, consider tap water that contains lead contamination at levels less than drinking water standards. Such lead would qualify as a dangerous constituent per the definition in WAC 173-303-646 since lead is listed in WAC 173-303-9905. How does Ecology intend to identify and apply corrective action to a one-time spill (i.e., non-SWMU event) of such water? Presumably, Ecology would not pursue corrective action in a case as this, but what are the limits for exclusion or inclusion?

RL believes that the regulated community should be given an opportunity to understand and comment on Ecology's intention in this area. Pending such an opportunity, limiting the scope of corrective action solely to SWMUs seems appropriate.

9. **WAC 173-303-070(3)(b), Designation requirements:** The preamble language states "... a person need not determine additional designations for a solid waste once it has been designated as a dangerous waste." This approach to waste designations is inconsistent with EPA's. EPA requires that all applicable waste codes be evaluated for purposes of land disposal restrictions.
10. **WAC 173-303-070(3)(c)(i), -110, Specification of analytical testing methods:** These sections appear to mandate specific testing methods for waste designation. This is inappropriate given the scope of wastes potentially needing designation. For example, it may be necessary to determine the concentrations of constituents in a waste in order to designate for the state toxicity criterion, but the primary analytical method identified in WAC 173-303-110 (i.e., *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846*) may not contain procedures for all the analyses necessary. It is EPA's position that "except where regulations specifically require the use of certain SW-846 test methods or QC procedures, use of the methods contained in SW-846 are not mandatory" and that "... any reliable analytical methods,

including any version of SW-846, may be used to meet other requirements in parts 260-270." (See Federal Register of September 29, 1989, page 40260.) Currently, EPA mandates use of SW-846 only in a few instances. RL recommends that Ecology reconsider the use of SW-846, given the limitations of the document, and adopt a philosophy analogous to that of the EPA: except where an analytical method is specifically mandated in regulation, any test method may be used to determine the composition of a waste. At a minimum, some provision should be made to allow use of alternative testing methods when there is no corresponding procedure in the referenced methods. Note that the "equivalent testing methods" provision of WAC 173-303-110(5) would not be applicable in a case such as this in that if SW-846 contains no procedure for the constituents or matrix requiring analysis, then there can be no demonstration of equivalency of method.

11. **WAC 173-303-070(3)(c)(ii)(A), Sufficient knowledge for proper designation:** RL recommends that Ecology develop guidance for the regulated community regarding what constituents "sufficient" knowledge to designate a waste. Lacking such guidance, this standard is subject to much interpretation, raising the probability of inconsistent application across the state.
12. **WAC 173-303-071(3)(g)(ii) exclusion for treated wood waste:** RL commends Ecology on the preamble discussion regarding treated wood wastes. It appears that Ecology does not have the desire to regulate treated wood waste. RL is concerned that the Hanford Facility cannot take full advantage of the exclusion as written. Specifically, the Low-Level Burial grounds cannot utilize this exclusion since it is operated under interim status in accordance with WAC 173-303. Add a statement at the end of the -071(3)(g)(ii) exclusion to read: Treated wood wastes disposed of in a facility operated in accordance with this chapter will be considered equivalent to the solid waste handling, and criteria for municipal waste landfills.
13. **WAC 173-303-070(4), Procedure for requiring testing:** RL recommends that WAC 173-303-070(4) be revised to identify the procedure Ecology will follow in requiring testing for designation. At a minimum, RL believes that the regulations should establish that Ecology will provide written notification when implementing this authority, and that such notification will (1) identify the specific waste in question and (2) provide a technical based rationale for requiring testing. Such a provision would serve to promote consistent application of this discretionary Ecology authority.
14. **WAC 173-303-071(3)(g)(i), Consistency with federal rules:** In order to make the arsenical-treated wood exemption consistent with the federal regulations, revise this item to read " . . . who utilize the arsenical-treated wood for the materials' *intended* end use."

15. **WAC 173-303-071(3)(g)(ii), Consistency with federal rules:** The proposed exclusion appears to be too broad in that, as currently written, it could allow federally regulated wood waste to be disposed of in a WAC 173-304 solid waste (i.e., non-RCRA) landfill. In order to correct this situation, the exemption should be limited to prohibit disposal of any federally listed or characteristic wood waste in a non-RCRA landfill. The proposed language prohibits such disposal for federally listed or Toxicity Characteristic Leaching Procedure characteristic wood waste, but fails to preclude non-RCRA disposal of other federally characteristic wood waste.
16. **WAC 173-303-071(3)(m), -100(7), Elimination of respiratory carcinogen exemption:** With the proposed redefinition of carcinogenicity, the exclusion in WAC 173-303-071(3)(m) no longer appears necessary for asbestos per se. RL recommends, however, that the exemption be continued for wastes containing respiratory carcinogens (e.g., beryllium) provided that such wastes are managed in a manner equivalent to the asbestos management procedures of 40 CFR Part 61. In addition, RL recommends that the exclusion in the current version of WAC 173-303-103 for respiratory carcinogens in non-friable forms be added to the new carcinogen designation procedures at WAC 173-303-100(7).
17. **WAC 173-303-071(3)(u), State only corrosivity exclusion:** RL supports repealing altogether the solid corrosive designation. If however, Ecology elects to retain this criteria, this exclusion should be expanded to exclude other waste streams than wood ash. Specifically, ordinary cement and stabilized waste matrices with portland cement need to be included within this exclusion. The alkaline nature of ordinary cement and portland cement introduces unneeded designation concerns with respect to the state-only criteria for corrosivity.
18. **WAC 173-303-090(6)(a)(iii), Solid corrosives:** RL supports repealing the solid corrosive designation. As Ecology notes in the preamble discussion, this criteria creates impediments to recycling and reuse options. However, should these wastes continue to be regulated, then at a minimum, the regulations should be revised to exempt solid corrosives when used in a manner constituting reuse or recycling.
19. **WAC 173-303-100(4), Aggregation of waste quantities on a monthly basis:** Is the waste generator given the flexibility to determine whether or not to designate his waste on a batch basis versus a monthly basis, or must the monthly basis be used for wastes generated more than once a month? In the latter case, how is a generator to address the situation where a second waste batch is unexpectedly generated during a month - should both batches have been regulated if the total exceeds the quantity exclusion limit (QEL), or just the amount in excess of the QEL? If the entire quantity is regulated, how does Ecology intend to address a situation where the generator, who mistakenly anticipated only one batch, has already disposed of the first batch of material as non-regulated waste based on having quantity less than the QEL?

20. **WAC 173-303-100(5), Toxicity category ranges:** The toxicity category ranges shown in the table are very broad, resulting in regulation of common substances such as salt. RL questions the technical basis for the ranges, which appear to have been established by applying an arbitrary multiplication factor to ranges used by the EPA. Thus, the lower limit of Ecology's range for Toxic category "D" substances based upon oral LD₅₀ values is a factor of 10 times more conservative than that used in EPA's Comprehensive Environmental Response Compensation and Liability Act program. The basis for Ecology's selection of the category ranges is unclear but the EPA ranges seem more appropriate since they are aimed at identification of substances that could represent a threat to human health or the environment if a release occurred. If Ecology saw a need to go beyond these ranges, they could do so by assigning a category "D" toxicity to additional substances they might want to regulate (e.g., ethylene glycol). These "other regulated wastes" could be identified in a list within the toxicity criteria section. Targeting specific toxic constituents in the manner suggested is much more reasonable than generic regulation via establishment of overly broad toxicity ranges.
21. **WAC 173-303-100(5)(b)(i), Toxicity data sources:** RL recommends that certain language in this section be deleted to help ensure uniformity when designation for Washington state toxicity is being addressed. Specifically the following phrase in the last sentence of this section should be deleted: "...or other source reasonably available to a person...". This deletion is also encouraged due to language in WAC 173-303-100(3) which makes specific reference to National Institute for Occupational Safety and Health as the document which shall be used in determining the toxicity data or toxic category.
22. **WAC 173-303-100(6), Persistence criteria:** Consider revising the persistence designation criteria to identify those substances listed in 40 CFR 268 Appendix III (the list of halogenated organic compounds regulated under 268) as the universe of halogenated hydrocarbon (HH) wastes. If Ecology desires, they could place additional substances on the list. Currently, use of the generic "halogenated hydrocarbon" terminology raises a variety of questions about the scope of constituents regulated pursuant to this criterion. For example, many polymerized plastics are "halogenated hydrocarbons," yet regulation of waste streams containing these constituents (e.g., PVC pipe) is unwarranted.
23. **WAC 173-303-100(7):** RL strongly supports Ecology's effort to redefine the carcinogenic designation criteria. RL believes that the approach taken, which specifically identifies carcinogens and designation limits, greatly simplifies and appropriately targets those carcinogenic constituents that are of concern when present in a waste stream. In order to further clarify this criterion, RL recommends that Ecology incorporate language in -100(7) addressing how mixtures containing more

than one carcinogen are to be evaluated for designation. Is this intended to be solely a constituent-by-constituent determination, or does Ecology intend that a "unity rule" formula be used in cases where more than one carcinogenic contaminant is present in a waste?

24. **WAC 173-303-110(3)(c), Version of SW-846 clarification:** RL commends Ecology on identifying the correct version of SW-846 that has been promulgated in the Federal Register. The only problem concerns the language and what version of SW-846 laboratories are actually using. In fact the Ecology/EPA laboratory in Manchester, Washington is using the third edition of SW-846 (Sept. 1986). Using the third edition is standard industry practice for a majority of the laboratories nationwide. RL would like a comment added to this effect so that this language does not disrupt this practice. RL proposes that Ecology include language similar to the footnote in 40 CFR 260.11.
25. **WAC 173-303-140, General comment:** RL has been involved in commenting on the federal Land Disposal Restriction (LDR) rulemakings for many years. It has become evident in doing so that LDR compliance relies heavily on preamble language to clarify the intent behind the regulations, perhaps more so than for any other set of regulations. As an example, 40 CFR 268.3 contains language regarding the dilution prohibition. This section is quite vague and contains little information to lead the regulated community in understanding the complexities that have been built into this prohibition through preamble language. EPA has developed a flow diagram as guidance to supplement the complex preamble language existing on the dilution prohibition.

RL is facing many compliance issues in the future as part of cleanup actions that include LDR compliance issues. RL is concerned that, in lieu of an understanding and common interpretation of preamble language for the numerous LDR rulemakings, there will be inconsistent application of 40 CFR 268 to the regulated community by Ecology. RL presumes that the preamble language associated with federal LDR will be applied by Ecology. RL requests that Ecology be sensitive to the complexities associated with LDR compliance and strive toward consistent application of federal LDR intent. It is suggested that Ecology develop "user-friendly" guidance on LDR regulation for distribution to the regulated public. Issues such as the dilution prohibition, the debris rule, determining proper treatment standards, the storage prohibition, and multi-source leachate requirements would be probable subject matter for such guidance.

26. **WAC 173-303-140(2), Application of the LDR program to wastes regulated under the federal and the state programs:** The proposed language in this section would exclude state-only waste from the federal LDR program. State-only regulated waste would be required to comply with subsections (3) through (7) of this section. RL supports this addition.

However, the language also requires that federal waste that is also state-only waste must comply with subsections (3) through (7) of WAC 173-303-140 which appears to result in the federal LDR regulations being superseded by these subsections. This could result in a less stringent treatment standard than that of the federal LDR program in a number of areas including that discussed below in the comment on WAC 173-303-140(4)(d), Definition of Organic/carbonaceous waste. The federal program specifies technologies for certain wastes and requires treatment below certain concentration levels for others. The state program contained in subsections (3) through (7) would not capture all of these standards for federally regulated waste. Examples (which assume that the waste is also regulated by state criteria) would include lead-bearing nonwastewaters (not an Extremely Hazardous Waste [EHW]) which must be treated below 5 mg/kg lead in an extract. Another example would be corrosive liquids which require deactivation (and after August 9, 1993, treatment of F039 hazardous constituents according to the interim final rule published in the May 24, 1993 Federal Register) prior to disposal. The state program does not include treatment requirements for these wastes.

It is recommended that the wording in this subsection be rewritten in a manner similar to the following: "Land disposal restrictions for state only waste shall be the restrictions set forth in subsections (3) through (7) of this section. Land disposal restrictions for waste that is both federal and state regulated shall be: 1) the restrictions set in 40 CFR 268 for the hazardous constituents or characteristics that designate the waste as a federally regulated waste, and; 2) subsections (3) through (7) of this section for the constituents or characteristics that would designate the waste as a state regulated waste. In the event that a federal hazardous constituent or characteristic is the same as that of a state-regulated hazardous constituent or characteristic, the federal restriction will supersede that of the state restriction."

27. **WAC 173-303-140(2), Federal land disposal restrictions applied to state only solvent wastes:** A potential for confusion exists in cases where the state program regulates a broader scope of wastes than the federal program, yet utilizes the same waste codes. In particular, the spent solvent listings (waste codes F001 - F005) are prone to confusion since the federal program regulates only those wastes wherein the total solvent concentration, prior to use, exceeds 10%, whereas the state program has no de minimis concentration. The state program assigns the same waste codes used in the federal program.

RL recommends that either of two options be considered. The first (and preferred) alternative would be to revise the state F001 - F005 listings in WAC 173-303-9904 to incorporate the 10% limit used by the EPA. In deciding on the 10% limit, EPA concluded that this threshold level was "well below the minimum solvent concentration typically used in solvent formulations." (See Federal Register of December 31, 1985, page 53316.) Under the state program with no de minimis limit, potable water used for washing (a solvent use) would technically be listed

waste in many instances due the presence of halogenated hydrocarbon solvents in concentrations that are detectable, but below drinking water limits. Obviously, Ecology does not intend to regulate at these levels, but the current language makes it unclear at what concentration regulation as a spent solvent is appropriate. RL believes that the Ecology's concentration-based persistence criteria adequately regulates any F001 - F005 solvent constituents present in wastes below the 10% federal listing limit.

The second option which Ecology might consider is establishment of special codes for wastes that are regulated in the state, but not by the federal RCRA program. For example, state-only spent solvents could be coded "WF01 - WF05" rather than "F001 - F005."

28. **WAC 173-303-140(2), Applicability:** The LDR program is applicable to generators and storage, treatment, and disposal owners/operators, not just to "any person who owns or operates a land disposal facility in Washington state and to any generator affected by these regulations." Treatment facility owners/operators have specific waste analysis requirements imposed in 40 CFR 268.7(b), for example.
29. **WAC 173-303-140(4)(d), Definitions - "Organic/carbonaceous waste":** This definition encompasses some federally regulated wastes that have promulgated treatment standards under 40 CFR 268. As stated above, these regulations must supersede those contained in WAC 173-303-140(4)(e) where LDR standards are more stringent. It is recommended that references to organic/carbonaceous waste exclude all federally regulated wastes and only apply to state-only designated organic\carbonaceous waste types.

For example, the federal program regulates halogenated organic compounds (HOC's) (40 CFR 268 Appendix III) in hazardous waste matrices (California List HOC's). In concentrations greater than 1,000 mg/l, the federal LDR program requires incineration of these wastes. This is consistent with WAC 173-303-140(4)(d), however, the WAC would be less stringent than the federal LDR program if the waiver provisions of WAC 173-303-140(4)(d)(iii) were actuated. RL recommends that the "organic/carbonaceous waste" definition exclude federally regulated waste subject to federal LDR treatment standards or prohibition levels.

30. **WAC 173-303-140(4)(a) Disposal of extremely hazardous waste:** Extraction and destruction technologies required under the LDR program (40 CFR 268) for organic wastes will likely result in regulated waste that is not an EHW under state regulation. However, immobilization technologies, utilized for many inorganic wastes such as heavy metals under the federal program, may not be able to treat to EHW levels.

The congressional intent of the LDR program was for EPA to develop treatment standards that substantially diminished the toxicity of the wastes or reduced the likelihood that hazardous constituents from wastes would migrate from the disposal site. Extraction and destruction technologies inherently diminish the toxicity of the waste.

Immobilization technologies, on the other hand, decrease migration of hazardous constituents. In the State of Washington, immobilization technologies cannot be utilized to treat a waste to render it non-EHW if the total content of heavy metals exceeds an EHW designation.

RL strongly urges Ecology to consider the allowance to dispose of wastes in the State of Washington if they are treated in compliance with LDR treatment standards. At a minimum, RL urges that Ecology consider providing relief from the EHW designation for regulated debris waste. Debris is very difficult to representatively sample. This in fact was the basis for EPA promulgating separate treatment standards for debris. Treatment standards for debris require the use of specified technologies contained in 40 CFR 268.45 Table 1. Wastes with treatment standards expressed as specified technologies have the advantage of not being required to be analytically verified for LDR compliance, thus avoiding the difficulties of sampling and analyzing debris.

As with verification of LDR treatment standard concentrations, verification of EHW versus Dangerous Waste (DW) levels for debris cannot be ascertained in many debris matrices. RL recommends that a special exemption be given from DW/EHW designation requirements for debris. This would prompt a required change in the current WAC 173-303-070(1)(c) as well as a specific exclusion, perhaps, in WAC 173-303-140. this nature if they are treated in compliance with LDR treatment standards. Congressional intent can be assured with this provision in that the leachability of these total metals has been appropriately reduced.

31. WAC 173-303-140(4)(a) Disposal of extremely hazardous waste: RL requests that Ecology incorporate into regulation in this subsection the allowance granted under Substitute Senate Bill Number 5071 (1987 Regular Session of the Conference Committee) Section 4 (2) which reads: "Extremely hazardous wastes that contain radioactive components may be disposed at a radioactive waste disposal site that is (a) owned by the United States department of energy or a licensee of the nuclear regulatory commission and (b) permitted by the department and operated in compliance with the provisions of this chapter. However, prior to disposal, or as a part of disposal, all reasonable methods of treatment, detoxification, neutralization, or reasonable methods of treatment, detoxification, neutralization, or other waste management methodologies designed to mitigate hazards associated with these wastes shall be employed, as required by applicable federal and state laws and requirements." This bill was adopted into the Revised Code of Washington 70.105.050.

The lack of codification of this language has been a source of much confusion relative to the management of radioactive mixed waste (RMW) at Hanford. It's incorporation into regulation would greatly clarify the status of RMW EHW to the regulated community.

32. **WAC 173-303-140(4)(d), Incineration of organic/carbonaceous waste:** RL contends that the requirement to incinerate all state-only organic/carbonaceous waste is overly restrictive. Many organics are better suited to biological or chemical destruction or to other thermal treatment technologies. This requirement does not allow the generator the flexibility needed to use other, including innovative, technologies that may be more technically sound than that of incineration. It is recommended that this requirement be modified to include incineration or any other organic destruction technology (including chemical, biological, or thermal technologies) suitable to the waste type.
33. **WAC 173-303-140(4)(g) and (h) Disposal of dioxin containing wastes:** These sections should be deleted as they are reiterative of the proposed WAC 173-303-140(2), Applicability. Their continued presence would be confusing to the reader as there are many other types of wastes that are restricted by the federal regulations contained in 40 CFR Part 268.
34. **WAC 173-303-140(5) Treatment in land disposal facilities:** As long as this section only applies to state-only restricted waste and not to state and federally restricted waste, no conflict would occur. However, if this section is to apply to federally restricted waste, then it will be less stringent than the federal program. This section is in conflict with 40 CFR 268 which states that treatment cannot occur in certain surface impoundments (there is an exception for treatment in surface impoundments according to 40 CFR 268.4) or in any waste pile or land treatment facility because these units are defined as land disposal under the federal regulations. EPA in fact used this issue, in part, to redefine certain waste piles as "containment buildings" in a recent Federal Register (FR) final rule (57 FR 37194) in order that "land disposal" was not triggered and treatment could be performed in these units.
35. **WAC 173-303-140(6) and (7) Case-by-case exemptions to a land disposal prohibition and Emergency cleanup provisions:** Again, as long as this section only applies to state-only restricted waste and not to state and federally restricted waste, no conflict would occur. However, if this section is to apply to federally restricted waste, then it will be less stringent than the federal program. These sections are in conflict with 40 CFR 268 which requires federal approval of exemptions to the federal treatment standards. For example, treatability variances must be processed through EPA with approvals published in the FR (40 CFR 268.44[e]) and finally in 40 CFR 268. These sections cite exemption processes that cannot be utilized for generators of federally-coded wastes. This section must be deleted if not applicable solely to state-only wastes.
36. **WAC 173-303-170(3)(b) Treatment by Generator:** RL commends Ecology on the changes that are occurring for Treatment by Generator (TBG) provisions. RL would like to see the language expanded so that TBG provisions are extended to all of the units that EPA allows TBG to occur in. Specifically, drip pans and containment buildings need to be

added in the discussion contained in -170(3)(b). The Hanford Site anticipates frequent treatment in containment buildings once decontamination and decommissioning begin on its inactive facilities. Utilization of TBG provisions for simple treatment such as sand blasting or water washing would greatly expedite cleanup and lower its cost.

37. WAC 173-303-180(3)(f), Manifesting requirements for transport into other states: The State of Washington regulates many wastes that are unregulated in other states. Because of this, in many instances a waste regulated in the state of Washington may be disposed of in a non-RCRA facility in another state in a manner that state has determined to be adequately protective of public health and the environment. To attempt to impose Washington constraints (e.g., manifest requirements) on such facilities is an improper infringement upon the other state's sovereignty. RL recommends that Ecology revise the language in -180(3)(f) to clarify that the provision to ensure return of the manifest applies only to federally-regulated waste, not state-only wastes.
38. WAC 173-303-200(2)(a): Additions and clarifications on satellite accumulation rules: These changes are long overdue and well fitted to the intended use of satellite areas. However some clarifications on terminology are required to implement the new guidance in the field. First, WAC 173-303-200(2)(a) contains a requirement that the satellite area must be under the control of the operator of the process generating the waste or secured at all times. It is not clear who must secure the waste when it is not under the direct control of the generating operator. Must the generating operator maintain the secured area or can it be maintained by a second party uninvolved in the generation of the waste? It is suggested that if a satellite area must be somewhat removed from the process generating the waste (i.e. outside, or in a central building location) that it be secured by the operator(s), or primary operator of the process generating the waste.

Also, the new satellite guidance uses a terminology that could be confusing. The confusing terminology reads "...To prevent improper disposal of wastes into the satellite containers." The addition of wastes to a satellite container is not usually called disposal; it is usually considered storage. Wording such as the following is suggested: "...To prevent improper additions of wastes to a satellite container."

Also, the new satellite guidance is unclear on how many waste streams may be accumulated in a given satellite area and what total volume is allowed in a given satellite area in the event more than one waste stream is accumulated per satellite area. This confusion arises from the fact that the new guidance provides a 55 gallon DW or 1 quart EHW limit per waste stream, not per satellite area. In the past it was understood that each satellite area could only accumulate up to 55 gallons of DW and 1 quart of EHW and that only one waste stream was allowed per area. The reasonable definition of a waste stream was

always left to the generator. Please provide additional clarification on satellite limits and on which party must provide control of the area if it is not under the direct control of the operator of the process generating the waste.

39. WAC 173-303-200(2)(b), 3-days versus 72 hours: RL commends Ecology on the effort put forth in documenting requirements for satellite accumulation. RL would encourage Ecology to be consistent with the Federal program, however. When EPA proposed satellite accumulation, 72 hours was mentioned. However, if you look at 40 CFR 262.34(c)(2), EPA promulgated 3 days instead of 72 hours. Ecology should also adopt the 3-days in this section to avoid hourly recordkeeping considerations and to clearly address the problem of filling a container on Friday and deciding whether to bring personnel in on the weekend to move the container, or wait until Monday.
40. WAC 173-303-200(3)(a), First placing waste into a container: RL recommends that this section only state: "When waste is first placed into a container". The language "...located in a ninety day accumulation or storage area;" is inappropriate. When projects are conducted, waste is typically placed into a container and the accumulation date marked if the waste cannot be accumulated in a satellite accumulation area. Once the container is full or the project ends, whichever is sooner, the container is immediately moved to a less than 90-day accumulation area. It is impractical to set up a less than 90-day accumulation area for every project due to administrative requirements such as training plans, inspection plans, and contingency plans. The regulated community needs the flexibility to conduct projects and activities in this manner.
41. WAC 173-303-210(3)(b)(iii), Recordkeeping requirements: RL recommends that this criteria be revised to allow the evaluation of holding times in all situations. In many cases, the holding time is determined when the receiving laboratory extracts the sample. The sample may be stored in the laboratory for a while after the extraction is complete awaiting analysis. Revise this criteria to say: "The testing and extraction date as applicable, and testing method used;" to clarify this point.

WAC 173-303-510(6)(e)(i), Dangerous waste burned for energy recovery: This section reads: "Before a marketer initiates the first shipment of dangerous waste fuel to another distributor, a blender, or a burner, a distributor must obtain a one time written and signed notice from the distributor, blender, or burner..." I think it was intended to read "Before a marketer initiates the first shipment of dangerous waste fuel to a distributor, a blender, or a burner, a marketer must obtain a one time written and signed notice from the distributor, blender, or burner..."

WAC 173-303-510(6)(e): There are two paragraphs marked (e). The second, Recordkeeping, should be (f).

WAC 173-303-510(6)(3), Recordkeeping: This is written in such a way that a distributor would be required to keep a copy of certification notices indefinitely, unless there are five years between shipments. I believe the intent was to require records retention for only five years. The same wording problems arise in -510(7)(e) and -510(8)(e).

42. WAC 173-303-610(2)(b), Clean closure standards: RL strongly supports Ecology's proposal to establish health-based standards for clean-closure rather than utilizing background environmental levels. Ecology's formal position in initially adopting the background environmental levels was that background cleanup levels was mandated by EPA, and hence could not be displaced by less stringent standards. Nevertheless, Ecology acknowledged at that time that, "in some cases, cleanup of contaminated soils to background levels will probably not provide any significantly greater amount of health or environmental protection." (See *Responsiveness Summary for the Washington State Dangerous Waste Regulations, Chapter 173-303 WAC, Parts 1 & 2*, dated September, 1984.) Inasmuch as EPA standards now allow health-based standards for clean-closure, it is appropriate that Ecology adopt a similar cleanup philosophy.
43. WAC 173-303-610(2)(b), Clean closure standards: As stated, RL commends Ecology on its decision to establish health-based standards for TSD clean-closure rather than using background environmental levels. At the same time, RL encourages Ecology to go further in establishing realistic clean closure standards. The current proposal only allows Model Toxics Control Act (MTCA) Method A or B to be used to establish closure standards. This means that a TSD closure standard could not be set at 10^{-5} as allowed in MTCA Method C even if all the criteria are met. As proposed, if a TSD can only be closed to 10^{-5} risk levels then it must be closed as a landfill with all the associated requirements including a RCRA cap.

RL understands that Ecology's rationale for not allowing MTCA Method C levels for clean closure is that Method C requires institutional controls and EPA intended clean closure to represent an action that the facility owner, when complete, could completely walk away from. RL recognizes that EPA allows TSD closure to 10^{-5} risk levels, based on a case-by-case, evaluation without institutional controls. RL believes that just because EPA does not require any institutional controls for 10^{-5} clean closure does not mean that Ecology is precluded from doing so. In other words, Ecology can be more stringent than EPA if they desire to do so.

Based on the above rationale, RL strongly supports the use of Method C for establishing clean closure standards for consistency with MTCA and corrective action and because there are many legitimate reasons to use Method C for clean closure. WAC 173-340-706 allows the use of Method C when:

1. Method A or B are below area background,
2. Method C would result in less of a net environmental threat,
3. Method A or B are technically infeasible, or
4. The site is an industrial site.

A tiered closure system could be established as follows:

Tier 1 - Clean Closure to Method A or B - Facilities able to close to Method A or B would not be subject to any post closure requirements.

Tier 2 - Clean Closure to Method C - Facilities would be subject to requirements in MTCA including institutional controls, periodic assessments, and compliance monitoring but are not subject to post closure requirements in WAC 173-303-610.

Tier 3 - Closure with Waste Left In Place - Facilities such as landfills would be subject to the full post-closure requirements in WAC 173-303-610.

The tiered closure system would allow Ecology to make closure decisions which are consistent with MTCA and corrective action sites and ensure that the most appropriate cleanup action is being implemented at any particular site.

44. WAC 173-303-640(5)(e), Tank systems holding inhalation-toxic wastes: RL requests clarification on the meaning of the term "acutely or chronically toxic by inhalation." Is this based upon an inhalation LC₅₀? If so, what is the defining range for "acutely toxic"? Also, how does this apply to a inorganic waste constituents that are toxic, but completely soluble, with no appreciable emissions?
45. WAC 173-303-646(1)(c), Definition of dangerous constituent: The definition of dangerous constituent is overly broad. For example, the inclusion of petroleum products results in implementation problems. Will all parking lots, with known drippage of petroleum products from automobiles, become solid waste management units? In a similar vein, are all locations where salt was used for de-icing purposes subject to corrective action since Ecology apparently intends to apply corrective action to non-SWMU sites where dangerous constituents are applied? RL recommends that Ecology carefully consider application of the corrective action program for constituents beyond those covered by the federal program. Until additional guidance and an opportunity for public comment on the approach is available, RL believes it is appropriate to limit the definition of "dangerous constituent" to those constituents identified in WAC 173-303-9905/Appendix VIII of 40 CFR 261 and Appendix IX of 40 CFR 264.

46. **WAC 173-303-646(4), (5), and (6), Corrective action management unit provisions:** RL strongly supports inclusion of the corrective action management unit provisions in the regulation. This action will serve to expedite corrective actions and encourage utilization of treatment technologies compared with the current regulations, which were developed more in consideration of currently-generated waste management as opposed to cleanup of contaminated sites.
47. **WAC 173-303-630(8)(b), Understanding equivalency with the Uniform Fire Code (UFC):** RL is recommending that Ecology add language to this section similar to the proposal found in -630(8)(a). Specifically, revise the first sentence of -630(8)(b) to read: "...in a manner equivalent with the UFC or the version adopted by the local fire district". The Hanford Facility is subject to National Fire Protection Association requirements imposed by DOE Orders for fire protection. Determining what is in a manner equivalent with the current version of the UFC is a very difficult and overly burdensome task. The Hanford Facility needs the relief to use our local fire districts' version for fire protection considerations.
48. **WAC 173-303-800(9) and (10), Closure by removal standards:** The proposed regulatory sections reference the closure by removal standards of 40 CFR 264.111. RL recommends that the closure by removal standards of WAC 173-303-610(2) be referenced rather than 40 CFR 264.111.
49. **WAC 173-303-802(5), Permit prerequisite for permit by rule:** The preamble discussion indicates that elementary neutralization units (ENUs) or totally enclosed treatment facilities (TETFs) without a discharge to a sewer or surface water may be required to obtain a dangerous waste treatment permit for operation. RL questions the justification for the prerequisite to have a discharge in order to qualify for permit by rule. In many instances, an ENU or TETF with no discharge to the environment is more protective of public health and the environment. For example, an ENU or TETF may transport waste to a permitted RCRA TSD unit following treatment rather than discharge to the environment. This practice is arguably more environmentally sound than discharging a treated dangerous waste to the environment. RL recommends that permit by rule status be available to ENUs or TETFs with no environmental discharge provided that all other criteria are met. At a minimum, the regulations should allow ENUs and TETFs to have permit by rule status if the treated waste from these units are subsequently placed into a permitted TSD facility.
50. **WAC 173-303-802(5)(a)(iii)(D), Waste Analysis Plan requirements for ENU's:** RL is strongly opposed to subjecting ENU's to the Waste Analysis Requirements of -300. The LDRs require that TBGs be subject to Waste Analysis Plan requirements when restricted wastes are treated on-site. Elementary neutralization, is by far, a much less rigorous activity since the only wastes allowed to be neutralized under this

section are corrosive wastes. TBG activities can involve a broad range of treatment activities that can be conducted in tanks, containers, drip pans, or containment buildings. RL does not see any technical basis for this requirement and it should not be added to -802(5).

51. **WAC 173-303-806(4)(a)(vii), Contingency plan requirements for tanks:** The proposed rule seeks to change the reference for contingency plan requirements for tanks from -640(8) to -640(7). There are no contingency plan requirements in -640(7). Instead, this section details responses to be taken in the event of a release, but includes no specific requirements relating to contingency plans. -640(8) refers to a "contingent post-closure plan" which Ecology may have previously mistaken for a contingency plan. In any event, neither -640(7) or (8) contains any contingency plan requirements per se. RL recommends deleting all reference to -640 from this item.
52. **WAC 173-303-810(14)(a)(i), Scope of certification requirement:** RL strongly supports the proposed "Note" which clarifies that the only portions of a TSD facility requiring certification are those for which WAC 173-303 specifically requires such. Based upon our experience, RL is aware that the scope of the certification requirements is prone to misinterpretation. In addition to adding the note to -810(14)(a)(i), RL recommends adding a similar statement to WAC 173-303-806(4)(a).
53. **WAC 173-303-9908:** The table presents concentration levels (in ppm) for which listed chemicals are considered carcinogenic dangerous wastes. Since there are two common ways in which concentration levels in ppm may be calculated, the specific method for this determination should be presented. We assume the intent is ppm (weight/weight) rather than ppm (volume/volume).

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Subject: COMMENTS ON WASHINGTON ADMINISTRATIVE CODE 173-303 PROPOSED RULE

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