

START

0033971

INTERNAL MEMO

May 22, 1989

TO: Roger Stanley
Toby Michelena

FROM: Joe Witczak *JW*

SUBJECT: Hanford Site Inspection - May 15-16, 1989



On May 15 and 16, 1989, I conducted a RCRA inspection on the Hanford Reservation. This inspection included the 183-H Basins, 1325-N and 1301-N Liquid Waste Disposal Facilities, 100-D Ponds, 1706-KE Waste Treatment System and 300 Area Solvent Evaporator. A close-out meeting included discussions of the 183-H Basins, slaked lime disposal and the 300 Area Solvent Evaporator.

I was escorted on May 15 by Fred Ruck (WHC), Dan Duncan (USDOE) and John Sands (USDOE). We met Ken Gano and Dave Watson (both of WHC) to discuss 1301-N and 1325-N. Both of these facilities are located within radiation zones and are therefore not easily accessible. Their configuration and geographical location makes it nearly impossible to make visual contact with them. Both of these facilities are a hybrid of a ditch and a crib. They consist of a trapezoidal ditch covered by a concrete cap. Most discharges originate from N-Reactor's cooling system although they admit some listed wastes were discharged to each facility. Discharge is through a common pipe which first passes by 1301-N and terminates at 1325-N. All wastes currently by-pass 1301-N and discharge to 1325-N. The shut-down of N-Reactor has almost eliminated discharges to these facilities. I suggest we purchase a camera and telephoto lens along with binoculars to observe unaccessible facilities, operations and details. I will recommend particular equipment once the PPR freeze is lifted in July 1989.

Also of interest near these facilities is their Liquid Effluents Retention Facility (LERF). This facility has recently (since the Chernobyl accident) been constructed as a safety control measure. The facility appears to be an HDPE double-lined surface impoundment. In actuality, there are three liners with the two upper-most liners sealed around the edges to form a bladder. In the event of a potentially dangerous situation, all of the water from N-reactor's cooling system can be discharged, via underground conduits, to the bladder. This facility is intended to be a one-time, temporary storage unit.

Next we visited the 1706-KE Waste Treatment System. Here we met the facility manager, Al Larrick (WHC). The system consists of a few pieces of equipment located in the basement of Building 1706-KE. The only way to see the unit without entering a rad zone is to open a ceiling access located outside the building and look down at the equipment. Due to

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operational difficulties, this unit supposedly never received dangerous waste and never will. The Part A application will be withdrawn shortly. In lieu of this treatment facility, the hazardous waste generated by the R&D operations conducted in this building are held in a satellite storage area on the first floor. This particular area appeared to be operated safely. Although satellite storage areas, as well as 90-day storage areas, are not required to be permitted, they must still be operated safely and in accordance to certain regulations. Therefore, I have drafted a letter (Attachment 1) requesting Hanford to identify all of their 90-day storage areas and satellite storage areas.

Our next stop was the 100-D area. The 105-DR Large Sodium Fire Facility is located in a locked concrete building. No-one in our party had keys and therefore we could not enter this facility. The 100-D Ponds are located between the river and the D area road which parallels the river. The pond nearest the road contained liquid with a large algae bloom on the surface. A few waterfowl were observed on the surface of this pond. The pond further from the road was an overflow impoundment for the first pond. It is impossible to see the bottom of the further pond from outside the fence. I was therefore unable to verify the presence of liquids in this pond. I took pictures before leaving.

Our final stop in the 100 areas was the 183-H Basins. Decontamination activities continue at this facility. Sandblasting operations were being conducted in basin #1. Workers were decontaminating the concrete piers and walkways from the other basins. As we walked around the facility, we could feel sand being carried outside the basins from the blasting operations. I informed Fred that signs or fencing should be posted to protect individuals who walk near the facility. I also informed him that efforts should be made to keep all the sand inside the basins. He agreed. Newly ordered equipment was on-site in preparation of the liquid solidification to begin in June 1989. I took a number of pictures.

Our last stop of the day was the 242-A Evaporator, its associated retention basins and associated Crib 216-A-37-1. Before seeing these sites, we encountered security difficulties at a 200 East gate relating to my camera. Apparently, Fred's temporary property pass was not properly signed. This snafu held us up approximately one hour. Dan and Fred are both trying to get permanent property passes. We were escorted to the facility by Jeff Branson. I was told that hexone was the only dangerous waste which had passed through this facility to Crib 216-A-37-1. The hexone resulted from salt well pumping. The retention basins are located across the road east of 242-A. These basins are currently not listed in the Part A application as part of the evaporator. There are six basins, three of which discharge to Crib 216-A-37-1 and three which discharge to B Pond. The capability exists to pump liquids back to 242-A from the basins. The crib parallels the southern Grout facility fence. Discharge to this crib is through underground pipes and therefore there is not much to see. I took pictures of the crib and basins before returning to Richland.

The first 183-H Basins Unit Manager Meeting (UMM) was held the morning of May 16, 1989. The meeting was attended by Mike Hughes-the WHC unit manager, Mike Mihalic (WHC), Daryl Smoot (WHC), Ed Powers (WHC), Sam Clifford (WHC), Fred, Dan, John and myself. Mike apologized for the delay in providing us a monthly report in April as required by our last NOD. He gave me a draft of this report (Attachment 2) and will send the final after it goes through their review. He was pleased when I informed him that such a report would only be required when a face-to-face UMM is not held. I informed WHC and USDOE of my four month absence planned for later this year. They understand that monthly reports will be required during that period. ||

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We discussed the following operational aspects of this closure. Solidification of the remaining liquids is scheduled to begin in mid-June. The mid-June start is based on the delivery of the solidification material. The batch blender was delivered the previous week and will be placed and wired in the next two weeks. Decontamination of the concrete and basin liners is progressing very slowly. I was shown the results of informal sampling of the concrete indicating that at least nitrate has contaminated much farther into the concrete than expected. These results will be transmitted to our office shortly. We discussed the possibility of leaving contaminated concrete in place. It is almost certain that the facility will be closed as a landfill irregardless of whether the concrete is removed or not. The only reason it might be necessary to remove the concrete is if the soil beneath the facility is "clean". I therefore recommended they core through basins 1 and 4 to determine concentrations beneath the basins. They will investigate further and hopefully have a sampling plan by next month's UMM. Groundwater monitoring was held up last month due to the purge water issue. Monitoring has resumed and will be increased from quarterly to monthly when work begins. ||

I provided input to their 183-H NOD response table. I concurred with the majority of their responses. Some of their responses required further clarification which they immediately provided or will provide in the next revision. A discrepancy still exists as to the date which closure must be complete. We did not discuss this issue and will not until the other two remaining issues are settled. A strategy for handling these issues is outlined in a draft response letter to their NOD table (Attachment 3).

~ The next meeting addressed slake lime disposal. Barry Vedder (WHC) and Rudolph Guercia (USDOE) presented their reasoning (Attachment 4) for disposing animal carcasses treated with lime as rad-only waste. In response to this, I explained that 1) their citation of WAC refers to applying wastes to the ground, not disposing of wastes in the ground, and 2) DSHS is not responsible for enforcing dangerous waste regulations and, therefore, an action on their part does not constitute dangerous waste policy. I informed them if they want to pursue this, they must formally respond to our March, 1989 letter regarding this matter. The University of California-Davis is holding, in a freezer, 20 drums of these carcasses which belong to USDOE. Furthermore, the Hanford site generates approximately 20 drums of this per year. They have traditionally disposed of these materials as rad-only waste.

We next drove to the 300 Area Solvent Evaporator site. Our escort at the facility was Everett Weakly (WHC). We focused on the concrete pad associated with this unit. The pad itself was not addressed as part of the 300 ASE closure plan until we identified it in our last NOD. The pad is located to the north of and adjacent to what was originally considered to be the 300 ASE site. The original storage pad has been overlain by new concrete within the last five years. Since the removal of the evaporator, half of the pad is used as a 90-day storage facility and half as equipment storage. Both the original and existing pad surfaces sloped to the center of the pad. The original pad drained via pipes to the 300 Area Process Trenches. The existing pad drains to a depression in the pad where runoff accumulates and evaporates. An area of the original pad, approximately 40 by 40 feet, remains uncovered at the southwest corner of the pad. Approximately 15-20 drums are currently located in the 90-day storage facility. Some of the drums were dated in 1986 and 1987. This far exceeds the 90 day limit. I inquired about the drums and was told the drums are thought to be non-dangerous wastes and were sampled two weeks prior to verify their contents. These drums will be disposed based on this analysis. Attachment 5 is a written summation of the drums provided to me by WHC.

We returned to 450 Hills where the 300 ASE closure plan was discussed. We were joined by Suzanne Clark (USDOE) and Jim Hoover (WHC). I was provided with a draft response (Attachment 6) to our last NOD for this unit. Our discussion focused on "how clean is clean" and the incorporation of the pad into the closure plan. I agreed to each of their revised sources of action levels as well as the numerical quantities. As far as the pad is concerned, they wish to avoid coring any of the pad which was overlain with new concrete because it is still functioning as a storage area. I persisted that we could not consider the site "clean-closed" without verifying the cleanliness of the pad. Based on a discussion with Toby, I have informed them that a minimum of three cores must be withdrawn - 1 at the drain point, 1 on the side of the drain where they admit drums were stored and 1 on the side of the drain where they do not believe drums from the evaporator were stored. Based on the fact that this facility handled almost exclusively solvents, it is likely that a spill on the concrete would be volatilized leaving little, if any, contamination. The cores would be a verification of this scenario. Their sampling plan will be presented in their NOD response table due June 9, 1989.

ATTACHMENTS

cc: 183-H file
300 ASE file

ASSESSMENT #1

May 22, 1989

Mr. R. D. Izatt, Director
Environmental Restoration Division
U.S. Department of Energy
P.O. Box 550
Richland, Washington 99352

Dear Mr. Izatt: LEATT & LEACH

943337-2130

This letter constitutes a

Re: Information Request for a listing of all Hanford site

~~I am formally requesting a list of every 90-day dangerous waste storage facility and every dangerous waste satellite storage facility on the Hanford Reservation. The list should include the location and predominant wastes stored at each site.~~

to inspection by

Although dangerous waste permits are not required for these facilities, they are ~~still~~ subject to certain state dangerous waste regulations and Ecology inspections. This list is ~~required~~ ^{needed} for us to ensure compliance with these regulations. one subject

Please contact Mr. Joe Witczak at (206) 438-7557 with any questions concerning this matter.

Sincerely,

Roger Stanley
Hanford Project Manager

RS/JJW:1m

cc: Dan Duncan ← Roger Freeberg
Paul Day

183-H SOLAR EVAPORATION BASINS

MONTHLY REPORT - APRIL 1989

DRAFTPROJECT ACTIVITIES/ACCOMPLISHMENTS

- . The DOE-RL response to the 183-H Closure Plan Notice Of Deficiency was submitted to Ecology on April 19, 1989.
- . The WHC Storage/Disposal Approval Record (SDAR) for the liquid solidification task was completed on April 21. The procurement of 55-gallon drums and the liquid solidification material (Sorbond LPC-II) has been initiated.
- . The batch mixer for the solidification process was delivered on May 9. The initial delivery date for receiving the 55-gallon steel drums is May 19, and the requested delivery date for receiving the solidification material (Sorbond LPC-II) is June 15. (Actual delivery date will not be finalized until a contract is awarded.)
- . The revised schedule based on the response to the Notice-Of-Deficiency (NOD) was completed. The schedule will be reviewed with Ecology at the May 16, 1989, meeting.
- . PNL has temporarily discontinued sampling of the monitoring wells at 183-H due to site-wide issues relative to the disposal of purge water. This action impacted the monitoring program by noncollection of the April quarterly samples. Sampling of the ground water monitoring wells at 183-H is to resume in May. The purge water will continue to be collected in 55-gallon drums and is scheduled to be used for washdown of solidification equipment.
- . Decontamination is scheduled to resume in Basin #1 the week of May 15, 1989, and be completed by June 2. The concrete surfaces will then be sampled and analyzed for nitrates to document the residual waste level that will remain in the concrete.
- . The evaporation rate from Basins #2 and #3 is much less than anticipated due to the wetter-than-normal spring.

PLANNED MAJOR ACTIVITIES

- . Complete sandblasting/cleanup in Basin #1
- . Complete installation/functional check of solidification equipment
- . Initiate liquid solidification
- . Complete the ISC/PC Plan revision based on the NOD

DRAFT

94237.2131

May 22, 1989

Mr. R.D. Izatt, Director
Environmental Restoration Division
U.S. Department of Energy
P.O. Box 550
Richland, WA 99352

Mr. R.E. Lerch, Manager
Environmental Division
Westinghouse Hanford Company
P.O. Box 1970
Richland, WA 99352

Dear Messrs. Izatt and Lerch:

here draft

Re: 183-H Solar Evaporation Basins NOD Response Review

Please note that we have received and reviewed your 183-H NOD Response Table dated April 19, 1989. Each of ~~the~~ responses were addressed at the May 1989 unit managers meeting. Based upon these discussions, there are three outstanding issues to be resolved. They are:

1. Development of a soil and concrete sampling and analysis plan.
2. Determination of the extent of decontamination to be conducted on the basin concrete.
3. Determination of a closure completion date.

We expect the first two issues to be addressed by your staff before the next unit managers meeting scheduled for June 13, 1989. I recommend your staff forward a copy of the sampling and analysis plan to our office prior to this meeting. This will allow a meaningful discussion of the plan at the meeting. The third issue will be addressed after the first two are resolved.

Upon resolution of these three items, and verbal concurrence by the unit managers on the remaining comments, an amended response table should be submitted. Assuming these responses are acceptable, I will provide you with a date by which a complete revision of this document must be submitted.

Technical inquiries regarding this application should be directed to Mr. Joe Witczak at (206) 438-7557.

94337.2132

Messrs. Izatt and Lerch
May 22, 1989
Page 2

Sincerely,

Roger Stanley
Hanford Project Manager

RS/JJW:1m

Roger Stanley
cc: Paul Day (EPA) ✓
Dan Duncan (USDOE)
Carol Geier (WHC)

91722133

ATTACHMENT # 4

From BARRY VEDDER - MAY 12, 1989

BURIAL OF RADIOACTIVE ANIMAL CARCASSES CONTAINING SLAKED LIME

1. The Department of Energy - Richland Operations (DOE-RL) has approximately 20 drums of radioactive animal carcasses. The DOE-RL desires to bury these containers in the 200 Area as low-level waste. In response to a March, 1989, letter on this issue, Ecology has stated that the slaked lime in the drums is a solid waste, and therefore the containers may only be disposed of in an interim status or permitted disposal facility.
2. The Department of Energy - Richland Operations (DOE-RL) believes that the slaked lime continues to serve the intended purpose (i.e., to promote the animal decomposition process) after burial, and hence is not a waste. The DOE-RL believes that this interpretation is consistent with Washington Administrative Code (WAC) 173-303-016(5)(a)(ii), which states that commercial chemical products which are listed or which exhibit any of the criteria or characteristics of a hazardous waste are not solid wastes if applied to the land in an ordinary manner of use. In the case of slaked lime (a commercial chemical product which exhibits the criteria of toxicity), an ordinary use is placement in the land in conjunction with the burial of animal carcasses.
3. The DOE-RL feels that further review of this matter is appropriate with regards to three particular requirements established by the Washington State Department of Social and Health Services (DSHS). First, WAC 248-50-120(3) specifies that, in cases where an animal has died from a communicable disease, the carcass shall be thoroughly enveloped in unslaked lime prior to burial. (The difference between slaked and unslaked lime is that the former has been reacted with water. Lime and slaked lime exhibit the same aquatic toxicity range). Secondly, WAC 248-50-180(5) requires that piggeries be treated daily to prevent offensive odors and the breeding of flies. One of the specified treatment materials is unslaked lime. Finally, the DSHS has issued a Radioactive Materials License which requires that unslaked lime be added to drums of radioactive animal carcasses prior to burial. The DSHS has not required these drums to be buried in a dangerous waste disposal facility.
4. The DOE-RL believes that, in all three instances involving the use of unslaked lime, the material should not be considered a waste and, therefore, should not be subject to the requirements of WAC 173-303.

BLV-5/12/89

DOE-RL

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STINE O. GREGOIRE
Director



ATT #4

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

April 25, 1989

Mr. R.D. Izatt, Director
Environmental Restoration Division
U.S. Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

RECEIVED
R.E. LERCH

APR 27 1989

Mr. R.E. Lerch, Manager
Environmental Division
Westinghouse Hanford Company
P.O. Box 1970
Richland, Washington 99352

ACTION _____
COPIES _____
ROUTE _____
FILE _____

Dear Messrs. Izatt and Mr. Lerch:

Re: Animal Carcass Disposal

This letter is a response to your March 27, 1989 letter regarding burial of radioactive animal carcasses packed in slaked lime. We have reviewed the DOE/WHC proposal to dispose of radioactively contaminated animal carcasses and have determined that burial in the 200 Area radioactive burial grounds is not acceptable. It is the Department's position that the radioactively contaminated animal carcasses and the slaked lime in which they are packed should be considered a solid waste as defined in WAC 173-303-016 and as such are subject to the dangerous waste regulations. This means the waste in question must be designated (to include aquatic toxicity) and disposed of accordingly. As your March 27, 1989 letter has already identified the material will be designated as a dangerous waste, it must be disposed of in an interim status or permitted disposal facility. The DOE-RL plan to dispose of the waste in the 200 Area radioactive burial grounds will not be acceptable if the trenches used are not identified as interim status disposal facilities. Please ensure that the disposal of this waste occurs in the appropriate areas.

Should you have any questions or concerns regarding this issue, please contact Mr. Toby M. Michelena at (206) 438-7016.

Sincerely,

Roger Stanley
Hanford Project Manager

941037.2135



AMENDMENT 17
ATT #4

STATE OF WASHINGTON

Page 1 of 27 Pages

RADIOACTIVE MATERIALS LICENSE

Pursuant to the Nuclear Energy and Radiation Control Act, RCW 70.98, and the Radiation Control Regulations, Title 02 WAC, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations promulgated by the State Department of Social and Health Services.

<p style="text-align: center;">Licensee</p> <p>Name US Ecology, Inc. 9200 Shelbyville Road, Suite 300 P.O. Box 7246 Address Louisville, Kentucky 40207</p>	<p>3. License number HII-1019-2 is renewed in its entirety to read as follows:</p> <hr/> <p>4. Expiration date November 30, 1990</p> <hr/> <p>5. Reference number</p>
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<p>6. Radioactive materials (licensee and mass number)</p> <p>Any radioactive material excluding source material and special nuclear material.</p> <p>Source material.</p> <p>Any radioactive material excluding special nuclear material.</p>	<p>7. Chemical and/or physical form</p> <p>A. Dry packaged radioactive waste except as authorized by this license.</p> <p>B. Dry packaged radioactive waste except as authorized by this license.</p> <p>C. Any.</p>	<p>8. Maximum quantity licensee may possess at any one time</p> <p>A. 60,000 curies (2.22 x 10¹⁵ Bequerel)</p> <p>B. 36,000 kilograms.</p> <p>C. 0.1 curie (3.7 x 10⁹ Bequerel)</p>
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CONDITIONS

9. Authorized use:
- A. & B. - Radioactive waste may be received, transferred, stored, repackaged and disposed at a low-level radioactive waste burial facility. The maximum radioactivity and/or quantity of radioactive material indicated in item 8A and 8B applies only to above ground activity.
 - C. - Check and calibration sources.



MSJ #4

STATE OF WASHINGTON
RADIOACTIVE MATERIALS LICENSE

License Number ...MN-1019-2.....

Animal carcasses containing, or contained in, radioactive materials shall be packaged in accordance with the following requirements: the biological material shall be layered with absorbent and lime and placed in a metal container meeting either DOT 7A performance specification or manufactured to DOT 17H specifications, having a heavy duty closure device (see Condition 16). The inner container shall be sealed and placed in a metal container meeting DOT 7A performance specification with a heavy duty closure device, having a capacity at least 40 percent greater than the inner container. The void between the inner container and the outer container shall be completely filled by approved sorbent material and the outer container must be sealed. Only sorbents approved by the Department shall be used. (See Appendix F).

Waste in gaseous form must be packaged at a pressure that does not exceed 1.5 atmospheres at 20°C. Total activity shall not exceed 100 curies (3.7×10^{12} Bqs) per container. Class A gaseous waste shall be contained within U.S. DOT specification cylinders. Specific approval of the Department is required if the gaseous waste is Class B or C.

Class A ion exchange and filter media containing radionuclides with half-lives greater than five years, the total concentration of which is one microcurie (3.7×10^4 Bqs) per cubic centimeter or greater, shall meet the stability requirements of Condition 22 and shall contain no detectable free-standing liquid. No detectable free-standing liquid is defined to be as little liquid as reasonably achievable but in no case shall the liquid exceed one percent of the volume of the waste when the waste is in a disposal container designed to ensure stability, or 0.5 percent of the volume of waste processed to a stable form. Other Class A ion exchange and filter media which are classified as unstable shall contain not more liquid than 0.5 percent by volume of the waste.

- 3. Radioactive waste containing radium and transuranic radionuclides, as described in Appendix B, are acceptable provided that the radium and transuranic radionuclides are essentially evenly distributed within an homogenous waste form. The receipt and disposal of waste in which the radium or transuranic radionuclides are not evenly distributed (components or equipment primarily contaminated with radium or transuranic radionuclides) or radium or transuranics in excess of Class A limits requires the specific approval of the Department.
- 4. Radioactive consumer products, the use and disposal of which is exempt from licensing control, may be received without regard to concentration limits of Appendix B provided the entire unit is received and is packaged with sufficient sorbent material so as to preclude breakage and rupture of its contents.

ATTACHMENT #5 Questions Call
LISA GARNE

333 Pond

5/16/89

18 barrels total - Each with a "contents" sticker that is not a haz. waste label. The sticker is about 8" x 10" and is yellow with black writing.

All are marked "Major Risk: none"

All contain waste hydraulic oil awaiting analysis

10 are marked "recycle"

2 are marked "waste"

11 are marked both Non-Hazardous & Non-Radioactive

All are dated - earliest date is 1986

7 are marked non-Radioactive

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9413137.2139 ATTACHMENT #16

05/16/89 12:36pm

300 AREA SOLVENT EVAPORATOR (ASE)
NOD RESPONSE TABLE

May 16, 1989, DRAFT
Page 1 of 6

Ecology
Concurrence

No.	Comment/Response	Ecology Concurrence
1.	<p><u>Attachment 2.</u> Typo. Title should read "300 <u>AREA</u> SOLVENT EVAPORATOR", not "300 <u>ASE</u> SOLVENT EVAPORATOR". Response: Agree. Typo will be corrected.</p>	
2.	<p><u>Page 1-1.</u> Typo. "51 FED. Reg. 7722" should be correctly cited as "51 FR 7722". Response: Agree. Typo will be corrected.</p>	
3.	<p><u>Page 1-3.</u> The 3000 Area is not labeled on Figure 1-1. Please indicate the location of this area on the map. Response: Agree. Typo will be corrected.</p>	
4.	<p><u>Page 1-10.</u> The concrete pad which "was used as a storage pad that included storage of solvent barrels" must be considered as part of the 300 ASE or as a separate RCRA storage facility. The 90-day storage exemption does not apply because, as indicated on 1-22, "drums were typically stored from six months to one year before the waste was poured into the evaporator". The extent of the pad which was used for storage must be delineated and addressed in this closure plan and in any applicable 300-FF-2 Operable Unit documentation. (WAC 173-303-200(1)(a)) Response: Agree. An intensive search of historic records produced a better definition of the location of the 300 ASE and its associated solvent drum storage. The Interim Status Closure Plan will be revised to reflect this new information.</p>	
5.	<p><u>Page 1-22.</u> See comment #4. Response: Agree. As stated in comment/response #4, the text will be changed per the new information.</p>	
6.	<p><u>Page 3-6.</u> Table 3-2 lists action levels for potential contaminants in the soil beneath the 300 ASE. All of the wastes in group 1 and 2, except petroleum naphtha, are "listed" dangerous wastes. As per Section 5.3 of the Action Plan, closure standards are established by WAC 173-303-610. These standards require, in part, that listed wastes be removed to background concentrations. A justification is required as part of the closure plan to support the use of action levels greater than background. At that time, Ecology will review the appropriateness of such a request. (WAC 173-303-610(2)(b)(i)) Response: Agree. Text will be modified to provide discussion and justification for action levels other than background.</p>	

ATTENTION #6

05/16/89 12:36pm

300 AREA SOLVENT EVAPORATOR (ASE)
NOD RESPONSE TABLEMay 16, 1989, DRAFT
Page 2 of 6

No.	Comment/Response	Ecology Concurrence
7.	<p><u>Page 3-6.</u> The following comments specifically address the action levels and their sources as given in Table 3.2:</p> <ul style="list-style-type: none"> - Source #1. It is not clear what drinking water standard is being referenced. Please specify. Response: Agree. The standards shown reflect values developed by the U.S. Environmental Protection Agency. It was anticipated that a rule for these standards would be proposed in January 1989. This action did not occur. Further information will be provided in the revised text regarding the action levels. - Source #2. This source refers to MCL's. 1,1,1 trichloroethane, trichloroethylene, and vinyl chloride are identified in 40 CFR 141.50 as Maximum Contaminant Level Goals (MCLG's) and not MCL's. Furthermore, TCE and vinyl chloride have MCLG's of zero which contradicts the values listed in this table. Please clarify. Response: Disagree. The values listed for 1,1,1-trichloroethane, trichloroethylene, and vinyl chloride are correct. A reference to the actual regulation (i.e., 40 CFR 141.61) where the maximum containment levels can be found will be added. It is possible that Ecology is not looking at the most current version of the drinking water regulations, and is therefore unable to find values shown. - Source #3. the Code of Federal Regulations (CFR) only has 50 titles. Therefore, the reference "51 CFR 1716" does not exist. If there is a reference to a federal register, then the proper cite would be 51 FR 1716. Please correct. Response: Agree. The Ecology comment is correct; the appropriate reference should be 51 FR 1716. The closure plan text will be revised accordingly. - Source #4. This source does not apply to methylene chloride. Please correct. Response: Agree. The Ecology comment is correct; the closure plan text will be revised to refer to source 3, rather than source 4, as the correct footnote for methylene chloride. 	

05/16/89 12:36pm

300 AREA SOLVENT EVAPORATOR (ASE)
MOD RESPONSE TABLEMay 16, 1989, DRAFT
Page 3 of 6

No.	Comment/Response	Ecology Concurrence
-	<p>Source #5. It is not clear what standard is being applied nor how it is applied. Please clarify.</p> <p>Response: Agree. The standard listed represents one-tenth of the designation limit for toxic "C" category substances, in accordance with Washington Administrative Code (WAC) 173-303-084(5). This is more conservative than required by WAC 173-303-610(b)(ii), which requires removal only to the designation limit for state-only wastes. The text for the footnote will be revised to incorporate a reference to WAC 173-303-084(5).</p>	
-	<p>Source #6. See comment on source #3.</p> <p>Response: Agree. The Ecology comment is correct; the appropriate reference should be 51 FR 1717. The closure plan text will be revised accordingly.</p>	
-	<p>Source #6, 7, & 8. Are these three sources based on the same premise? If so, do not list separately. If not, explain the difference between them.</p> <p>Response: Agree. These three sources are indeed based upon the same characteristic (i.e., ignitability). The reason for ignitability designation differs between zirconium, which is designated per WAC 173-303-390(5)(a)(ii), and the flammable organics, which are designated per WAC 173-303-090(5)(a)(i). This issue will be reviewed and, if appropriate, the three footnotes will be combined into a single item.</p>	
-	<p>Source #8. Zirconium is generally not considered an ignitable waste. Explain why this characteristic is used and why the action level is listed as "greater than baseline".</p> <p>Response: Agree. Finely divided zirconium, such as saw fines and lathe turnings, is pyrophoric. The 49 CFR 172.101 identifies zirconium scrap as a flammable solid. The definition of flammable solid (see 49 CFR 173-150) and the characteristic of ignitable solid (see WAC 173-303-090(5)(ii)) are very closely related. As a consequence, finely divided zirconium is designated due to ignitability. The action level is identified as "greater than baseline" due to the potential presence of naturally-occurring zirconium in the soil. "Clean closure" will necessitate demonstration that the levels present are at or below the action level.</p>	

No.	Comment/Response	Ecology Concurrence
7.	<p>(Cont'd)</p> <p>- Source #9. See comment on source #5. There are two action levels listed for beryllium. What is the criteria for picking one over the other?</p> <p>Response: Agree. See response to source #5. The appropriate action level will be 1 ppm (one-tenth the toxicity designation limit for the Toxic "X" substance) or baseline if naturally-occurring beryllium levels exceed the 1 ppm value. The footnote will be revised to clarify this intention.</p>	
8.	<p><u>Page 3-7.</u> The last sentence of the third paragraph on this page is incorrect. Notification of findings does not constitute closure. The facility will be considered clean closed under RCRA and WAC 173-303 upon a favorable acknowledgement, by our office, of Energy's certifications of closure. Please correct.</p> <p>Response: Agree. Text will be changed accordingly.</p>	
9.	<p><u>Page 5-1.</u> It is unclear how notations will be placed in the deed. Is this a generic notification for the entire facility to be entered into the deed and amended as other Hanford sites close? Describe how deed notations will be entered.</p> <p>Response: Agree. Text added to clarify procedure.</p>	
10.	<p><u>Page 5-1.</u> What is the significance of the November 19, 1985, date in subparagraph (b)? This subparagraph misleads the reader to believe that hazardous waste has only been disposed since November 19, 1985. This subparagraph should indicate the time frame during which hazardous wastes were disposed at this location. Please correct.</p> <p>Response: Agree. Corrections will be made.</p>	
11.	<p><u>Page 5-1.</u> The text indicates that the notice will be placed in the deed "within 180 days of the start of the post-closure care period". State law requires the notice to be placed in the deed within 60 days of certification of closure. Please correct. (173-303-610(10))</p> <p>Response: Agree. Corrections will be made.</p>	
12.	<p><u>Page 5-1.</u> Both state and federal regulations are applicable at the Hanford Reservation. Therefore, the term "/or" should be deleted from subparagraphs (b),(c), and (e) as well as from the paragraph preceding subparagraph (a).</p> <p>Response: Disagree. In the future, federal regulations or state regulations may not be applicable at the Hanford Site. Federal regulations may not be applicable when the state is authorized HSWA authority. State regulations may not be applicable if federal authorization for the RCRA program is withdrawn. This language covers all eventualities.</p>	

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No.	Comment/Response	Ecology Concurrence
13.	<u>Page C-1.</u> The word "None" in the second line from the bottom of the page should probably be placed with "Note". Please clarify or correct. Response: Agree. Typo will be corrected.	
14.	<u>Page C-2.</u> The final statement on this page regarding halogenated hydrocarbons (HH) is incorrect. A concentration greater than <u>1%</u> HH is required in order to be regulated as WP01 (EHW). (WAC 173-303-102(3)) Response: Agree. Typo will be corrected.	
15.	<u>Page E-1.</u> Comments #6 and #7 also apply to the third paragraph of this page. Response: Agree. Text will be modified.	
16.	<u>Page E-1.</u> Typo. "WAC 173-101" should read "WAC 173-303-101". Response: Agree. Typo will be corrected.	
17.	<u>Page E-4.</u> See comments #6 and #7. Response: Agree. Text will be modified.	
18.	<u>Page E-12.</u> Typo. A comma should be inserted after "300 ASE" in the first bullet of the second paragraph. Response: Agree. Typo will be corrected.	
19.	<u>Page E-12.</u> The EPA Region X Policy Statement is inadequately referenced. Section 10 of this report should include an entry with a title, date, and author for this reference. Response: Agree. Text will be modified.	
20.	<u>Page E-17 and Misc.</u> There is a different sample label proposed in the building 2727-S closure plan than in this plan. Each of these labels are different than the label proposed in the 183-H Basins closure plan. Although sampling labels may be a relatively insignificant matter in the closure process, consistency between reports in sampling procedures and other areas would lend to greater quality control and assurance. An initial effort on your part to "boilerplate" certain sections of closure plans and permit applications would greatly reduce your time in preparing future reports. This effort would also reduce the time required on our part in reviewing these documents.	

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<u>No.</u>	<u>Comment/Response</u>	<u>Ecology Concurrence</u>
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20. (Cont'd)

Potential areas for boilerplating are:

- General facility description
- Notice placed in deed
- Certifications of closure/post-closure
- Certain sampling procedures

In addition to specific areas, it would also be beneficial to use similar formats in these submittals. For example, the closure certifications for the 300 ASE appear as a separate section in the main body of the plan, but they appear as an appendix in the 2727-S plan.

We are not requiring this to be accomplished for the three reports referenced in this comment. We do expect consideration of this matter in future reports. In order to facilitate this effort, our staff is available to work with you in developing pre-approved formats in these or any other areas which you may target.

Response: Agree. WHC Control Manual (CM-7-7) presents standardized sampling protocols including Sample Labels. When this manual has been cleared for public release, a copy will be given to Ecology.

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