



Department of Energy

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0022598

AUG 07 1992

9205241

Mr. David B. Jansen, P.E.
Hanford Project Manager
State of Washington
Department of Ecology
Post Office Box 47600
Olympia, Washington 98504-7600



Dear Mr. Jansen:

RESPONSE TO THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY COMPLIANCE LETTER ON THE OVERFLOWS OF PLUTONIUM-URANIUM EXTRACTION PLANT TANK F18

- References:
- (1) Letter, Dave Nylander, Ecology, to J. P. Hamric, DOE-RL, and R. J. Bliss, WHC, Dangerous Waste Compliance Inspections for PUREX Tank F-18, dated July 16, 1992.
 - (2) Letter, Gary Anderson, Ecology, to R. D. Izatt, DOE-RL, Equivalent Device as Secondary Containment for PUREX Dangerous Waste Tank, dated March 3, 1992.

Pursuant to Article VII, Paragraph 28 of the Hanford Federal Facility Agreement and Consent Order, this is the U.S. Department of Energy, Richland Field Office (RL) response to the State of Washington Department of Ecology (Ecology) compliance letter (Reference 1) on overflows of the Plutonium-Uranium Extraction (PUREX) Plant Tank F18. Enclosure 1 addresses the 11 action items.

The compliance letter identifies a Class I violation of WAC 173-303-400 and of 40 CFR Section 265.193(a),(b)(1), and (d)(2)(iv) as "Failure to provide adequate secondary containment." On examining the fact sheet attached to the letter and Title 40 Code of Federal Regulations (40 CFR), Section 265.193, it is assumed that the letter text reading "... (d)(2)(iv)." actually refers to 40 CFR, Section 265.193(e)(2)(iv). The RL concerns on this asserted Class I violation will be addressed based on this assumption.

The RL does not consider the identified Class I violation of the WAC, Chapter 173-303-400, and 40 CFR, Sections 265.193(a), (b)(1), and (e)(2)(iv), relative to secondary containment to be valid. The RL considers that the PUREX Plant secondary containment does meet the requirements of 40 CFR, Section 265.193(d)(4), as an "equivalent device." A revised petition for equivalency is currently under preparation for resubmittal to Ecology. On March 3, 1992, RL received a letter (Reference 2) indicating that the PUREX Plant requires no approval of secondary containment by Ecology. In this instance a citation has been issued on a subject that RL has been working with Ecology to resolve since 1990. Currently, negotiations are under way to include PUREX Plant secondary containment as a proposed Hanford Federal Facility Agreement and Consent Order milestone, M-XX-08.

Mr. David P. Jansen, P.E.

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During the review of Ecology's fact sheet, several inaccuracies were noted. Enclosure 2 identifies the inaccuracies, provides the recommended corrections, and gives the justification for these corrections.

If you have any questions or require more information, please call Mr. J. E. Mecca at (509) 376-7471.

Sincerely,



R. D. Izatt, Program Manager
Office of Environmental Assurance,
Permits, and Policy

Enclosures:

1. Response to Compliance Action Items
2. Recommended Corrections to the Fact Sheet

cc w/encls:

P. T. Day, EPA
R. E. Lerch, WHC, w/o encls.
J. C. Midgett, WHC, w/o encls.
D. T. Nylander, Ecology
G. T. Tebb, Ecology

RESPONSE TO THE COMPLIANCE LETTER ACTION ITEMS

Reference: Letter, Dave Nylander, Ecology, to J. P. Hamric, DOE-RL, and R. J. Bliss, WHC, Dangerous Waste Compliance Inspection for PUREX Tank F18, dated July 16, 1992.

The compliance letter provides, "Responsibility for 'corrective actions' for these items of none compliance (sic) is being directed to the operator (WHC) and verification of completion of actions is directed to the owner (USDOE-RL)." Likewise, the fact sheet designates WHC as the operator. As has been indicated on previous occasions when this issue has arisen, it is not accurate to refer to WHC as an "operator."

Applicable Dangerous Waste Regulations define an "operator" as the person responsible for the overall operation of a facility (Washington Administrative Code [WAC], Chapter 173-303-040). As WHC is not responsible for the overall operation of either the Hanford Facility or any individual unit within the Hanford Facility, it is not an "operator" within the meaning of the law. Rather, RL is responsible for overall management and operation of the Hanford Facility with authority over policy, programmatic funding and scheduling decisions, and general oversight. WHC, on the other hand, is responsible for certain day-to-day activities such as waste analysis, waste handling, monitoring, container labeling, personnel training, and record keeping. Consistent with their respective responsibilities, permit applications are signed by RL as the owner and operator, and WHC signs as the co-operator. The recognition of RL's role is also confirmed by the Hanford Federal Facility Agreement and Consent Order in which the RL, Ecology, and the Environmental Protection Agency have agreed that RL owns and operates the Hanford Facility.

While WHC has certain responsibilities under its contract and under the law with regard to PUREX Tank F-18, it does not have the responsibility of an "operator" as defined in WAC-173-303-040. Therefore, Ecology's placement on WHC of the "corrective actions" responsibility of an operator is not well-founded.

1. Compliance letter Action Item 1:

"Within thirty (30) days of receipt of this letter WHC shall identify all leak detection systems, overflow prevention controls and alarm systems related to the monitoring of Tank F-18. WHC shall also identify any discrepancies found with any of the above equipment including but not limited to, sump controls, high level alarms, alarm lights, level sensing devices, automatic feed cutoff or bypass to a standby tank and the Computer Automated Surveillance System (CASS) if applicable."

Response:

As requested, the Tank F18 leak detection systems, overflow prevention controls, and alarm systems have been identified and documented in Attachments A and B. Attachment A is the Tank F18 engineering instrumentation diagram illustrating the instrumentation. Note that automatic feed cutoff and/or bypass systems are not used. The Computer Automated Surveillance System is only used by Tank Farms and is not used at the PUREX Plant.

The Tank F18 leak detection systems, overflow prevention controls, and alarm systems have been evaluated for compliance with Washington Administrative Code (WAC) Chapter 173-303-400(3) and Title 40 Code of Federal Regulations (40 CFR), Section 265.194(b)(2). This evaluation is documented in Attachment B.

2. Compliance letter Action Item 2:

"Within forty-five (45) days of receipt of this letter WHC shall provide Ecology with the results of the investigation required by item 1 and a schedule for correcting any deficiencies found."

Response:

Per the requirements of compliance letter Action Item 1, the Tank F18 monitoring equipment has been identified and evaluated for compliance with 40 CFR, Section 265.194(b)(2). The RL has determined that the Tank F18 leak detection systems, overflow prevention controls, and alarm systems meet the requirements of WAC 173-303-400(3) and 40 CFR section 265.194(b)(2). The one physical problem with the air line was located and repaired. As the result of the spill, the Tank F18 weight factor transmitter was recalibrated after a 3 percent error was identified. The results of the evaluation are documented in Attachment B.

The physical problem was located after the spill. There was a leak in the instrument air line between the Tank F18 weight factor transmitter and the two Tank F18 weight factor recorders. The air line leak was not detected during calibration of the tank monitoring equipment, but was detected visually by PUREX Maintenance during a routine surveillance. As soon as the problem was noted, a work package was initiated to repair the leak. It is believed that the air line leak was present when the overflow occurred. The leak would have contributed to the error in the weight factor indicators for Tank F18. This makes the leak a contributing cause to the overflow. The detection and repair of the air line leak is documented in Attachment B.

The existing surveillance activities can locate and identify air-line leaks. However, to improve the ability to detect air-line leaks, a more formal approach will be developed. The existing surveillance procedures will be evaluated to determine placement for this additional procedure

by August 31, 1992. The new procedure will be developed and implemented by October 1, 1992.

The RL considers the root causes of the event to be an administrative error in exceeding 90 percent of the Tank F18 volume and miscommunication in classifying the event as non-reportable. The RL does not consider that equipment deficiencies with respect to the regulations were a root cause of the event. Additional administrative actions to prevent reoccurrence of this event are discussed in the response to compliance letter Action Item 10.

3. Compliance letter Action Item 3:

"Within forty-five (45) days of receipt of this letter WHC shall provide Ecology with a schedule for an investigation, similar to that conducted for item 1, for all tank systems within the PUREX Canyon."

Response:

A schedule for evaluating the other PUREX Plant interim status dangerous waste treatment tanks (Tank E5, Tank F15/Tank F16, Tank U3/Tank U4, Tank G7, and Concentrator F11) leak detection systems, overflow prevention controls, and alarm systems for compliance with 40 CFR, Section 265.194(b)(2), was established:

| | |
|----------------------|-------------------------|
| Start evaluation: | Thursday, July 23, 1992 |
| Complete evaluation: | Friday, July 31, 1992 |

The results of the evaluation are discussed in the response to compliance letter Action Item 4.

4. Compliance letter Action Item 4:

"Within sixty (60) days of receipt of this letter WHC shall provide Ecology with a schedule for the correction of any discrepancies found during the investigation for item 3."

Response:

The other PUREX Plant interim status dangerous waste treatment tanks (Tank E5, Tank F15/Tank F16, Tank U3/Tank U4, Tank G7, and Concentrator F11) leak detection systems, overflow prevention controls, and alarm systems have been identified and evaluated for compliance with 40 CFR, Section 265.194(b)(2). The appropriate leak detection systems, overflow prevention controls, and alarm systems are identified in Attachments B and C. Attachment B documents the evaluation and Attachment C contains the interim status dangerous waste treatment tank engineering drawings showing tank instrumentation.

Based on the evaluation, the RL has determined that all the tanks' monitoring equipment meet the requirements of WAC 173-303-400(3) and 40 CFR, Section 265.194(b)(2).

The RL considers the root causes of the event to be an administrative error in exceeding 90 percent of the Tank F18 volume and miscommunication in classifying the event as non-reportable. The RL does not consider that equipment deficiencies with respect to the regulations as a root cause of the event. Additional administrative actions to prevent reoccurrence of this event are discussed in the response to compliance letter Action Item 10.

During the PUREX Plant cold standby operation, it is anticipated that Tank U3/Tank U4 and Tank F18 of those tanks identified in the Part A permit application and in the Notice of Intent, currently in process, will be used for the storage and treatment of dangerous waste.

5. Compliance letter Action Item 5:

"Immediately upon receipt of this letter WHC shall comply with the requirement to remedy problems revealed by WHC/USDOE-RL inspections as set forth in WAC 173-303 Section 320, paragraph (3). Provide Ecology, within 30 days, a list of the action taken to correct any deficiencies found with the management systems used to identify and correct problems identified during the inspections."

Response:

The RL considers that the existing management systems for inspecting, calibrating, and repairing the PUREX Plant dangerous waste tanks meet the requirements of WAC 173-303-320(2). The requirement for a written schedule for inspections of tank monitoring equipment and for maintaining an inspection log or summary is met by the combination of the WHC-CM-5-9, PUREX/UO₃ Administration, Appendix A, "Dangerous Waste Inspection Plan" (PUREX Dangerous Waste Inspection Plan), the site-wide Process Instrument Surveillance, Calibration, and Evaluation System (PISCES), and the site-wide Job Control System (JCS). Each of these is briefly described below along with a discussion of how they meet the requirements of WAC 173-303-320(2).

The PUREX Dangerous Waste Inspection Plan (Attachment D) documents the requirements for tank systems that treat or store dangerous waste per WAC 173-303-640(6). This Plan includes the following regulatory compliance requirements:

- Daily inspections of monitoring data from leak detection systems
- Daily inspections of overfill/spill control equipment

- General inspections of general safety and emergency equipment
- General inspections of security devices.

The Plan also covers the generic safety and emergency equipment in the PUREX Plant. This generic equipment includes, but is not limited to, safety showers, eye washes, fire extinguishers, emergency acid suit lockers, emergency self-contained breathing apparatus, emergency lanterns, etc.

All plant instrument calibration/inspection schedules are generated by the PISCES. For the Hanford Site, PISCES is defined by WHC-CM-8-2, Central Support Services, Section 202.0, "Plant Instrumentation, Surveillance, Calibration, and Evaluation System." There is no PUREX Plant-specific document for PISCES. The PISCES is a computerized system that generates computer print-out sheets for calibrations/inspections of plant instrumentation. The PISCES is used by PUREX Maintenance/Work Control to forecast, help schedule, and document the calibrations/inspections of the plant instrumentation. When a PISCES calibration indicates a problem with the equipment, the JCS is used to develop a work package to correct the problem. A copy of the PISCES procedure is included in Attachment E.

The JCS is a computerized system for managing and assigning priority to maintenance activities at the Hanford Site. The JCS is defined in WHC-CM-8-8, Job Control System. For the PUREX Plant, the JCS is implemented in WHC-CM-5-9, PUREX/UO₂ Administration, Section 5.11, "Job Control System." When problems are identified with the tank monitoring equipment, a work plan or work package is generated using the JCS. The JCS is used to plan and schedule the work, document approvals of the work plan or work package, describe the work to be performed, and to document completion of work plan or work package. A copy of the PUREX JCS procedure is included in Attachment F.

The RL considers that the combination of the PUREX Dangerous Waste Inspection Plan and PISCES meet the requirement for a written inspection schedule. Together, they specify when, how, and how often the tank monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment is inspected per WAC 173-303-320(2)(a), (2)(b), and (2)(c). The PISCES and JCS act as the summary and documentation for the inspections and the actions taken to resolve any findings or remedial actions. Together, PISCES and JCS meet the intent of WAC 173-303-320(2)(d).

To fully meet the requirements of WAC 173-303-320(2)(d), the PUREX Dangerous Waste Inspection Plan will be revised to incorporate an inspection log or summary. The inspection log or summary will include at least the date and time of the surveillance (i.e., inspection), the printed name and handwritten signature of the inspector, a notation of

the observations made, and the date and nature of any repairs or remedial actions taken. It will supplement the existing shift manager's log and surveillance data sheets and will also provide one single location for this information. This revision to the PUREX Dangerous Waste Inspection Plan will be completed by September 16, 1992.

6. Compliance letter Action Item 6:

"Within thirty (30) days of receipt of this letter WHC shall investigate to determine any discrepancies in the inspection (calibration system) for Tank F-18. Within the 30 days, WHC shall provide to Ecology the results of the investigation and a schedule for correcting any problems found."

Response:

The PISCES relative to Tank F18 has been evaluated for compliance with WAC 173-303-320(2). This evaluation is documented in Attachment B.

The RL has determined that PISCES, in combination with the JCS and the PUREX Dangerous Waste Inspection Plan (see also response to compliance letter Action Item 5), meets the requirements of WAC 173-303-320(2).

7. Compliance letter Action Item 7:

"Within thirty (30) days of receipt of this letter WHC shall provide Ecology with a schedule for investigating the calibration system for other tank systems within the PUREX canyon. Within 60 days of this Order, provide Ecology with the results of the investigation and a schedule of correcting any problems found."

Response:

Per direction from RL, a schedule for evaluating how the PUREX Plant interim status dangerous waste treatment tanks (Tank E5, Tank F15/Tank F16, Tank U3/Tank U4, Tank G7, and Concentrator F11) leak detection systems, overflow prevention controls, and alarm systems comply with WAC 173-303-320(2) was established:

| | |
|----------------------|-------------------------|
| Start evaluation: | Thursday, July 23, 1992 |
| Complete evaluation: | Friday, July 31, 1992 |

The PISCES relative to the other PUREX Plant less than 90-day dangerous waste tanks (Tank E5, Tank F15/Tank F16, Tank U3/Tank U4, Tank G7, and Concentrator F11) has been evaluated for compliance with WAC 173-303-320(2). This evaluation is documented in Attachment B.

The RL has determined that PISCES, in combination with the JCS and the Dangerous Waste Inspection Plan (see also response to compliance letter Action Item 5), meets the requirements of WAC 173-303-320(2).

8. Compliance letter Action Item 8:

"Within twenty-one (21) days of receipt of this letter WHC shall provide Ecology with access to inspect, and copies of the previously requested training records for Nuclear Operators and Shift Supervisors as set forth in WAC 173-303 Section 960."

Response:

The RL disputes this finding and finds no basis for the use of WAC 173-303-960, "Special Powers and Authorities of the Department," citation. The training records of interest to Ecology are available using the agreed to Freedom of Information Act (FOIA) procedure.

The training records requested by Ecology are subject to the Privacy Act of 1974. In its contract (No. DE-AC06-87RL10930) with the Westinghouse Hanford Company (WHC), RL requires that WHC maintain employee training records as Privacy Act records. When Ecology demands to view training records, a conflict arises between the need to maintain the records' confidentiality, under the Privacy Act, and Ecology's need to review training records to verify dangerous waste regulation compliance under WAC 173-303-330.

A method to access the training records in a way that avoids the conflict of law that exists between federal statute and state environmental regulation has been established by the legal counsel of the Washington State Attorney General's Office, RL, and WHC. It was agreed to use the FOIA method for supplying the required training records to Ecology inspectors. The Ecology inspectors are to write a FOIA request for the desired records to the RL Privacy Act/FOIA Officer. This is done by the inspector filling in the names of the individuals for whom training records are desired and signing the previously provided form. The RL Privacy Act/FOIA Officer will supply Ecology with the requested training records. The formal communication on the agreement has already been provided to Ecology in the response to the 101-SY Tank inspection findings.

The RL also agreed to pursue a change to the Federal Register Privacy Act Record Notice that would allow environmental regulators routine access to the training records subject to the Privacy Act. The Privacy Act Record Notice change will have to be reviewed and approved by the U.S. Department of Energy-Headquarters (DOE-HQ). Routine access would allow Ecology inspectors to immediately review the training records of particular employees at the facility, but it would also require

confidentiality be maintained for those records. Albeit, copies of those records could still be obtained via the FOIA method so that the records would not be subject to the confidentiality requirements of the Privacy Act.

On March 18, 1992, Ecology's inspector did not request the training records under the agreed procedure. The Ecology inspector was aware of the process by which the training records could be provided to him without violating any laws. The training records in question can be provided to Ecology when a FOIA request identifying the personnel in question is received.

9. Compliance letter Action Item 9:

"Within twenty-one (21) days of receipt of this letter WHC shall take the necessary action to assure WHC training records as set forth in WAC 173-303 Section 330 are immediately accessible to Ecology inspectors. Within the 21 days, WHC shall provide Ecology a copy of the documented action taken to resolve this violation."

Response:

The RL disputes this finding. The training records of interest to Ecology are available using the agreed to FOIA procedure.

The training records that Ecology is interested in being able to review are subject to the Privacy Act of 1974. In its contract (No. DE-AC06-87RL10930) with WHC, RL requires that WHC maintain employee training records as Privacy Act records. When Ecology demands to view training records, a conflict arises between the need to maintain the records' confidentiality under the Privacy Act and Ecology's need to review training records to verify dangerous waste regulation compliance under WAC 173-303-330.

A method to access the training records in a way that avoids the conflict of law that exists between federal statute and state environmental regulation has been established by the legal counsel of the Washington State Attorney General's Office, RL, and WHC. It was agreed to use the FOIA method for supplying the required training records to Ecology inspectors. Ecology inspectors are to write a FOIA request for the desired records to the RL Privacy Act/FOIA Officer. This is done by the inspector filling in the names of the individuals on which training records are desired and signing the previously provided form. The RL Privacy Act/FOIA Officer will supply Ecology with the desired training records. The formal communication on the agreement has already been provided to Ecology in the response to the 101-SY Tank inspection findings.

The RL also agreed to pursue a change to the Federal Register Privacy Act Record Notice that would allow environmental

regulators routine access to the training records subject to the Privacy Act. The Privacy Act Record Notice change will have to be reviewed and approved by the DOE-HQ. Routine access would allow Ecology inspectors to immediately review the training records of particular employees at the facility, but it would also require confidentiality be maintained for those records. Albeit, copies of those records could still be obtained via the FOIA method so that the records would not be subject to the confidentiality requirements of the Privacy Act.

Because of the need to maintain confidentiality under the Privacy Act and until the Privacy Act Notice change is approved by DOE-HQ, training records will not be available for immediate review by Ecology. However, using the agreed to FOIA procedure, the training records of interest can usually be provided within one or two working days.

10. Compliance letter Action Item 10:

"Within twenty-one (21) days of receipt of this letter WHC shall take the necessary action to assure Ecology notification as set forth in WAC 173-303 Section 145 immediately transpires. Within the 21 days, WHC shall provide Ecology a copy of the documented action taken to resolve this violation."

Response:

The RL considers the root causes of the event to be an error in exceeding the administrative limit of 90 percent of Tank F18's volume and miscommunication in classifying the event as non-reportable. The RL does not consider that equipment deficiencies with respect to the regulations as a root cause of the event. The PUREX Plant management has implemented administrative actions to prevent overflowing the PUREX Plant tanks:

- The PUREX Operations organization has implemented administrative controls on tank volume management which limits tank volumes to ≤ 70 percent of tank capacity. The new ≤ 70 percent administrative limit provides an additional safety margin not present with a potential ± 10 percent instrument error and the old administrative limit of 90 percent. Authorization to exceed the administrative limits must be obtained from the PUREX Operations Manager. This action is documented in Attachment G.
- The PUREX has initiated a program to deactivate unnecessary instruments and alarms in the plant which do not support the standby/shutdown condition of the facility. This will enhance and help focus attention on the instruments and alarms which support the PUREX dangerous waste tank systems. Estimated completion date for the deactivation of unnecessary instruments and alarms is October 31, 1992.

Also, the PUREX Plant management has taken the following corrective actions to ensure proper communication, identification, and classification of spills:

- A formal critique of the event has been conducted. Causal factors and lessons learned were developed and all PUREX shift surveillance supervisors were briefed. A copy of the critique was provided during the original Ecology inspection.
- Retraining of all PUREX Operations personnel on the WAC 173-303 Dangerous Waste Regulations has been initiated. The estimated completion date for this training is August 31, 1992. Initiation of this action is documented in Attachment H.
- The PUREX Operations has implemented the use of the Environmental Spill Checklist (Form A-6000-428, 2/92) to evaluate potentially reportable spills. Use of this checklist, developed by WHC Environmental Protection, will be formally incorporated into the plant operating and administrative procedures by August 31, 1992. A copy of the Environmental Spill Checklist is in Attachment I.
- The PUREX Plant has implemented a day-shift process engineer position to provide independent expertise to the day-to-day activities in the plant. Responsibilities of this position include, but are not limited to, verification of compliance with dangerous waste regulations and improved communication between PUREX Operations, PUREX Process Engineering, and PUREX Regulatory Compliance. Documentation that this position has been established is included in Attachment J.

In addition, WHC Environmental Protection has taken the following corrective actions relative to the Environmental Spill Checklist.

- The Environmental Spill Checklist (form A-6000-428) has been revised. The revision of the form, A-6000-428 (2/92) has superseded the previous version, A-6000-428 (7/91). A copy of the revised form has already been included in Attachment I.
- The Environmental Spill Checklist (form A-6000-428 (2/92)) is available in an electronic format via the Hanford Local Area Network computer system. This ensures that a current revision of the form is available to Hanford Site personnel at all times.

11. Compliance letter Action Item 11:

"Within twenty-one (21) days of receipt of this letter WHC shall take the necessary action to assure reporting to Ecology as set forth in WAC 173-303 Section 390 and as specified in WAC 173-303-360 are achieved. Within the 21 days, WHC shall provide Ecology a copy of the documented action taken to resolve this violation."

Response:

The RL disputes that a 15-day report was required because the facility contingency plan was not implemented. The WAC 173-303-360(2)(k) requires that the operating record include a notation of the time, date, and details of any incident that requires implementing the facility contingency plan and a filing of a written report within 15 days of the incident. Since the incident was not of the nature that required the implementation of the contingency plan, a 15-day report was not provided.

According to the WAC 173-303-350(1), the purpose of the contingency plan and emergency procedure is to lessen the potential impact on the public health and the environment in the event of an emergency circumstance, including fire, explosion, or unplanned sudden or gradual release of dangerous waste or dangerous waste constituents to air, soil, surface water, or groundwater by a facility. The requirements of WAC 173-303-360(2)(d) state that the emergency coordinator is to assess whether a known release could threaten human health or the environment, and if such a threat is found, to report the release in a certain manner.

The Tank F18 overflowed into the secondary containment with no releases to the air, soil, surface water, or groundwater. No threat to human health or the environment occurred which would have required evacuation of local areas, or immediate notification to emergency centers. The emergency coordinator did not and had no reason or requirement to activate the emergency plan. Therefore, the reporting requirements are those of WAC 173-303-360(2)(e), not by WAC 173-303-360(2)(k). The reporting requirements of WAC 173-303-360(2)(e) are covered in the off-normal report.

Enclosure 2

RECOMMENDED CORRECTIONS TO THE FACT SHEET

Reference: Letter, Dave Nylander, Ecology, to J. P. Hamric, DOE,-RL and R. J. Bliss, WHC, Dangerous Waste Compliance Inspection for PUREX Tank F-18, dated July 16, 1992.

During review of the fact sheet, several factual errors were noted. The following list identifies those errors, recommends corrections, and provides justification for the corrections.

1. Correction to Facility/Location: Text reading "...Tank 18-F..." should be changed to "...Tank F-18..." This is a more accurate identification of the tank.
2. Comment on Activity and Background: It is understood that this finding addresses only the spills to secondary containment from Tank F18 that occurred at the PUREX Plant on January 3, 1992, and January 6, 1992. In reading the Activity and Background sections of the finding, it appears that some information from other unrelated events is being included. Items number 3, 4, 6, and 7 below attempt to provide the correct information related to the Tank F18 spills.
3. Correction to Activity: The text reading "Overflow of Uranyl Nitrate Hexahydrate Waste..." is not accurate. Based on the type of materials being handled within the PUREX Plant, a more accurate description is "Overflow of Acidic Liquid Waste..." The overflowed material was not uranyl nitrate hexahydrate product material. It is possible that the overflowed waste may contain low concentrations of uranyl nitrate hexahydrate as uranium and nitrate ions. Based on process knowledge and analytical data, the waste is primarily water and dilute nitric acid.
4. Correction to Background: The text reading "The canyon contains a concentrator which separates waste. As the waste flows through the system, it is divided and sent to different holding tanks according to its properties." This is not an accurate description of the PUREX Plant in its current non-operating condition. Because the PUREX Plant is not processing irradiated fuel, the concentrator in question is not in operation. The aqueous waste generated within the PUREX Plant is not being separated by the concentrator. This section of text is incorrect and should be deleted.
5. Correction to Background: The text reading "...a capacity of 5,000 gallons..." is not correct. The actual capacity of the tanks is slightly higher. The text should be changed to read "...a nominal capacity of 5,000 gallons..."

6. Correction to Background: The text reading "... it contains uranyl nitrate hexahydrate...because of its corrosive hazard." is not an accurate description of the waste in Tank F18. As discussed in item 3, the waste in Tank F18 is better described as a waste consisting of water and dilute nitric acid contaminated with radionuclides. Based on process knowledge and analytical data, a more accurate description of the waste would be as follows: "...it contains an acidic liquid waste. This waste can contain a combination of radionuclides and heavy metals (with cadmium and chromium concentrations occasionally exceeding the regulatory limits). The acidic liquid waste from Tank F18 is considered a radioactive mixed waste because of the radioactive constituents, with the possibility that concentrations of specific hazardous constituents and/or characteristics may exceed the regulatory limits, and that the pH may be less than 2 or greater than 12.5."

7. Correction to Background: The text reading "...F-11 Concentrator bottoms..." is not currently correct. In the current non-operating condition, the F-11 Concentrator is not operational and is not generating any bottoms. This text should be deleted.

8. Correction to Finding #1: The text reading "...a sump alarm (WFR-F18-1) indicated that there..." is not correct. Part of the description of events is missing. Per Occurrence Report RL-WHC-PUREX-1992-0016, the correct text should read "... a sump alarm (WFA-SFB-1) sounded, indicating an overflow of Tank F18. At the time of the overflow, the Tank F18 level instrument (WFR-F18-1) indicated that there..."

9. Correction to Finding #1: The text reading "...nitrate was added..." and "...nitrate solution caused..." is not correct. Nitrite solution is added to the PUREX Plant waste tanks, not nitrate. Change the text to read "...nitrite was added..." and "...nitrite solution caused..."

CORRESPONDENCE DISTRIBUTION COVERSHEET

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| R. D. Izatt, RL | Mr. D. B. Jansen, Ecology | Incoming: 9205241 XRef: 9205215B |

Subject: RESPONSE TO THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY COMPLIANCE LETTER ON THE OVERFLOWS OF PLUTONIUM-URANIUM EXTRACTION PLANT TK-F18

INTERNAL DISTRIBUTION

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| | | G. J. LeBaron | S6-19 | |
| | | R. E. Lerch | B2-35 | |
| | | P. J. Mackey | B3-15 | |
| | | J. C. Midgett | S6-15 | |
| | | H. E. McGuire | B3-63 | |
| | | J. M. Nickels | T1-30 | |
| | | L. F. Perkins | S6-15 | |
| | | R. K. P'Pool | T1-30 | |
| | | S. M. Price | H4-57 | |
| | | R. C. Roal | S6-08 | |
| | | W. G. Ruff | R3-50 | |
| | | C. A. Sams | S6-20 | |
| | | R. V. Skinner | S6-05 | |
| | | S. A. Szendre | B2-19 | |
| | | B. D. Williamson | B3-15 | |
| | | JGA File/LB | S6-19 | |
| | | EDMC | H4-22 | |
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