



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

JAN 22 2016

16-ESQ-0022

Ms. J. A. Hedges, Program Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Ms. Hedges:

RESPONSE TO THE DANGEROUS WASTE COMPLIANCE INSPECTION ON JULY 14, 2015, OF THE LOW-LEVEL BURIAL GROUNDS TRENCHES 31 AND 34 (LLBG TR. 31/34), RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) SITE ID: WA7890008967- NUCLEAR WASTE PROGRAM (NWP) COMPLIANCE INDEX NO. 15.541 COMPLIANCE PROBLEMS AND CONCERNS

This responds to the letter dated October 20, 2015, (15-NWP-187) regarding the LLBG TR. 31/34 Compliance Inspection performed on July 14, 2015. The LLBG TR. 31/34 is operated by CH2M HILL Plateau Remediation Company (CHPRC) on behalf of the U.S. Department of Energy Richland Operations Office (RL). RL and CHPRC have reviewed the alleged violations, concerns, and requested actions described in the letter and respond through the enclosed documents.

As with previous RL and CHPRC responses related to the T Plant Complex, Waste Receiving and Process Facility and other Hanford Site facilities, alleged issues related to training are more appropriately addressed through the Hanford Facility Dangerous Waste Permit reissuance and are not addressed in the enclosed materials.

If you have any questions, please contact me, or your staff may contact Jeffrey A. Frey, Assistant Manager for Safety and Environment, on (509) 376-7727.

Sincerely,

A handwritten signature in black ink that reads "Stacy Charboneau".

Stacy Charboneau
Manager

ESQ:DBC

Enclosures

cc: See page 2

JAN 22 2016

Enclosures:

1. Response Table to Ecology
2. Technical Procedure SW-040-041
3. Copies of SW-040-11
4. Copy of Ecology Inspection Checklist,
dated November 2015
5. Copy of LLBG Tr. 31/34 Photographs
6. Copy of CHPRC-01908 Rev.1
- Section 7.5 Revised
7. Copy of CHPRC-01908 Rev.1
- Section 2.5 Revised

cc w/encls:

D. B. Bartus, EPA
J. L. Boller, EPA
L. J. Cusack, CHPRC
J. W. Cammann, MSA
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D. A. Faulk, EPA
M. N. Jaraysi, CHPRC
J. W. Mathey, Ecology
J. B. Price, Ecology
K. Schanilec, EPA
C. J. Simiele, CHPRC
D. G. Singleton, Ecology
R. R. Skinnarland, Ecology
J. F. Williams Jr, CHPRC
Admin Record, TSD: D-2-9 LLBG (Hardcopy)
Ecology NWP Library (Hardcopy)
Environmental Portal (LMSI A3-01)
HF Operating Record (J. K. Perry, MSA A3-01)

cc w/o encls:

G. Bohnee, Nez Perce
R. Jim, YN
R. Skeen, CTUIR

ENCLOSURE 1

RESPONSE TO WASHINGTON STATE DEPARTMENT OF ECOLOGY DANGEROUS
WASTE COMPLIANCE INSPECTION ON JULY 14, 2015, OF THE LOW-LEVEL BURIAL
GROUNDS TRENCHES 31 AND 34 (LLBG TR. 31/34), RESOURCE CONSERVATION
AND RECOVERY ACT (RCRA) SITE ID: WA7890008967
NUCLEAR WASTE PROGRAM (NWP) COMPLIANCE INDEX NUMBER: 15.541
15-NWP-187 DATED OCTOBER 20, 2015

Consisting of 6 pages,
Including this cover page

**RESPONSE TO WASHINGTON STATE DEPARTMENT OF ECOLOGY DANGEROUS WASTE COMPLIANCE INSPECTION ON JULY 14, 2015, OF THE LOW-LEVEL BURIAL
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The following factual accuracy table comprises of a review for factual accuracies of the actions and responses to Ecology's alleged violations and concerns per Ecology's letter (15-NWP-187). These alleged violations and concerns are based on the results of the Ecology's treatment, storage, and/or disposal compliance Inspection of LLBG Trenches 31 and 34 on July 14, 2015.

Ecology Alleged Violations

ITEM NO.	ECOLOGY QUOTED WAC 173-303 REFERENCE	ECOLOGY OBSERVATION	ECOLOGY PROPOSED ACTION	ECOLOGY ACTION DATE	DOE/CHPRC RESPONSE
1	WAC 173-303-400(3), as referenced by the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion Revision 8C- Condition I.A Effect of Permit. WAC 173-303-400, and by reference, WAC 173-303-320(2)(d). The owner or operator must keep an inspection log or summary, including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made, an account of spills or discharges in accordance with WAC 173-303-145, and the date and nature of any repairs or remedial actions taken. The log or summary must be kept at the facility for at least five years from the date of inspection.	I observed that DW weekly inspections were not always performed weekly. I observed inspection records that did not include the printed name of the inspector. Also, I observed inspection records which did not include a notation of the observations made, or the date and nature of any repairs or remedial actions taken. A list of inspection record deficiencies is included as Attachment 1.	Immediately upon receipt of this report, USDOE-RL and CHPRC must perform weekly inspections weekly (every 7 days). The inspection record must include the printed name, the hand written signature, a notation of the observations made, and the date and nature of any repairs or remedial actions taken. USDOE-RL and CHPRC must submit to Ecology six weeks of weekly inspection records 60 days after receipt of this report.	<u>Within 60 days</u> of receipt of the compliance report letter.	<p><u>Weekly inspections:</u> During a November 5, 2015 meeting with Ecology inspection staff to discuss the inspection report, Ecology clarified that when no containers are in storage at LLBG Trenches 31/34, Ecology had determined that an inspection frequency of once within a calendar week (i.e. there may be more than seven (7) days between inspections) is acceptable as long as this frequency is clearly described in the required inspection schedule [see WAC 173-303-320 (2). Attached is the procedure containing the schedule that has been updated to clearly describe this frequency.</p> <p>Nevertheless, regardless of the presence of stored containers, DOE/CHPRC do not agree that WAC 173-303 inspection provisions requiring inspections "weekly" or "at least weekly" mean inspections must be conducted every 7 days or less. Inspections are only required to be conducted within a calendar week, meaning that in some cases there may be more than 7 days between inspections. As presented in the November 5, 2015 meeting, this position is based on the following:</p> <ol style="list-style-type: none"> 1. Weekly is not defined in WAC 173-303-040, Definitions, which states "Any terms used in this chapter which have not been defined in this section have either the same meaning as set forth in Title 40 C.F.R. Parts 260, 264, 270, and 124 or else have their standard, technical meaning." <ul style="list-style-type: none"> • There is no definition in 40 CFR 260.10. • EPA, Ecology, and DOE perform work according to a standard "calendar week." 2. EPA and Ecology are required as a principle of legal interpretation to use the meaning of "weekly," which is more advantageous to the regulated community. <ul style="list-style-type: none"> • This gives the parties who write the rules a legal incentive to be more precise. 3. By performing inspections once each calendar week, over the course of 52 weeks, 52 inspections are performed. Performing inspections on a Monday one week and a Friday the next week does not result in fewer overall inspections. 4. Implementation of a requirement to inspect every 7 days adds a large administrative and compliance burden to facilities such as CWC-WRAP, which have numerous areas to inspect. For example, unanticipated operating conditions may prevent all of a scheduled inspection from being completed on the scheduled day. If this was the 7th day, it would result in a noncompliance. Planning for

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					<p>such contingencies will drive facility managers to inspect more frequently than every 7 days in order to minimize the potential for such a noncompliance. This will lead to conflicts with weekends and holidays as the day of inspection is moved back with each inspection cycle.</p> <p>5. The EPA conducted a compliance inspection at the Pacific Northwest National Laboratory (PNNL) 325 HWTU on July 14, 2015. The EPA inspector was specifically asked if weekly meant every 7 days. EPA responded that weekly meant once per calendar week.</p> <p>6. There is no indication that EPA's similar regulatory language on weekly inspections was intended by EPA to mean every seven days. For example, the State of Ohio has replaced "weekly" in its rules with the phrase "once during the period from Sunday to Saturday." Ohio's authorized RCRA program cannot be less stringent than the EPA program.</p> <p>7. DOEL/CHPRC plan to continue conducting weekly inspections once per calendar week.</p> <p>Additionally, DOE/CHPRC have identified and attached a copy of the Ecology "Weekly Inspection Checklist" that is structured by calendar weeks in a month. There is nothing in the structure of the checklist form or the text that requires two successive inspections to be no more than 7 days apart.</p> <p>Printed name: During the aforementioned November 5, 2015 meeting, Ecology clarified that the inspection report's statement that observed inspection records "did not include the printed name of the inspector" meant that in some cases only first and middle initials of the inspectors' names along with the fully spelled out surnames were printed. The Ecology interpretation of the WAC 173-303-320 (2) (d) requirement for "printed name" is that, at a minimum, the first name must be fully spelled out, in addition to the fully spelled out surname. DOE/CHPRC do not agree that this is a proper interpretation. Printed given name initials are compliant with the rule.</p> <p>Ecology has not articulated their interpretation in WAC 173-303-040 definition of "name," nor has EPA in its rules. Therefore, per WAC 173-303-040 "name" has a "standard, technical meaning." In this case a standard dictionary definition of "name" relevant to the context of the requirement is "a word or phrase that constitutes the distinctive designation of a person or thing" (http://www.merriam-webster.com/dictionary/name). For the inspection records in question, in all cases the printed initials and surname are sufficiently distinctive for identifying the individual who conducted the inspection.</p> <p>Notation of observations made:</p>

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					<p>There were two instances (3/24/2015 for Trenches 31 and 34) in which the inspection form did not include the date or nature of any repairs or remedial actions taken for an open item. A note was entered into the operating record addressing the lack and a reference to the Closed RCRA Open Item List Report-LLBG (see attached copies).</p> <p>A deficiency by Ecology was identified for 4/16/2015 for a lack of date and nature of any repairs or remedial actions taken. In the previous inspection, 4/6/2015, there is a comment stating "Update 4/9/2015: R-14-002 closed due to housekeeping performed." On 4/15/2015 Closed RCRA Open Item List Report-LLBG, R-14-002 is listed as closed as of 4/9/2015.</p> <p>There were numerous instances where there appeared to be an inconsistency between the Open Item and the inspection form checklist. For example, Open Item R-10-006 ("Tumbleweeds in Trench 31") is noted in Comments/Observations. In the checklist, "Windblown vegetation has been removed" received a checkmark in the YES column. Per SWSD-PRO-OP-51713, Section 4.1, "If Open Item already exists, and no additional deficiency is recorded, then check "Yes" box on affect inspection sheet because it is an existing open item."</p> <p>There were numerous instances where an Open Item is noted in both the Weekly LLBG RCRA Inspection for Trenches 31 & 34 and Weekly LLBG RCRA 90-day AA Inspections. Per SWSD-PRO-OP-51713, both the RCRA Inspection and 90-day AA Inspection are to "perform Open-Item List check per Section 4.1" which states "if facility/module has any RCRA open items on Open-Items List, then enter RCRA open item log # in Comments section of inspection sheet."</p>
2	WAC 173-303-400(3), as referenced by the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion Revision 8C- Condition I.A Effect of Permit. WAC 173-303-400, and by reference, WAC 173-303-330(2). Written training plan. The owner or operator must develop a written training plan which must be kept at the facility and which must include the following documents and records: (a) For each position related to dangerous waste management at the facility, the job title, the job description,	The LLBG Tr. 31/34 DW Training Plan, Table 3-1 - <i>Job Titles/Positions at LLBG</i> , identifies job titles/positions for personnel that carry out job duties relating to the Tr. 31/34 DW management duties. The list of job titles/positions fails to include personnel (as defined in WAC 173-303-040 who: <ul style="list-style-type: none"> • Prepare and/or maintain records as required in WAC 173-303. • Provide training required under the DW training plan. • Provide DW regulation interpretations that affect 	No proposed action identified.	No action date is identified.	As described in previous correspondence responding to the inspection reports identifying similar training plan issues for Trench 94, T Plant Complex and the Waste Receiving and Processing facility, DOE/CHPRC do not agree that the Dangerous Waste Training Plan requires listing of the job titles/positions listed in the Observation (15-ESQ-0051, 15-ESQ-0100, 15-ESQ-0111). The Ecology observation on this training plan is a site-wide issue that affects all contractors on the Hanford Site. As such, this issue is more appropriately discussed/negotiated through the Hanford Facility Dangerous Waste Permit reissuance efforts that are currently ongoing.

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	and the name of the employee filling each job. The job description must include the requisite skills, education, other qualifications, and duties for each position.	DW management operations. <ul style="list-style-type: none"> • Are responsible for notifications as required in WAC 173-303. • Perform emergency response efforts required in WAC 173-303. 			
3	WAC 173-303-400(3), as referenced by the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion Revision 8C- Condition I.A Effect of Permit. WAC 173-303-395(6) as incorporated by reference in WAC 173-303-400. Labeling for containers and tanks. The owner or operator must label containers and tanks in a manner which adequately identifies the major risk(s) associated with the contents for employees, emergency response personnel and the public (Note--If there is already a system in use that performs this function in accordance with local, state or federal regulations, then such system will be adequate). The owner or operator must ensure that labels are not obscured, removed, or otherwise unreadable in the course of inspection required under WAC 173-303-320. For tanks, the label or sign must be legible at a distance of at least fifty feet. For containers, the owner or operator must affix labels upon transfer of dangerous waste from one container to another. The owner or operator must destroy or otherwise remove	I observed the Trench 31 less-than-90 day accumulation tank labeling was not legible at a distance of 50 feet.	Place a DW label on the LLBG Tr. 31 less-than-90 day accumulation tank which is legible at a distance of at least 50 feet. Submit to Ecology within 60 days of receipt of this report photo documentation that these revisions have been completed.	Within 60 days of receipt of the compliance report letter.	New labels have been affixed. See attached photos.

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	labels from the emptied container, unless the container will continue to be used for storing dangerous waste at the facility.				

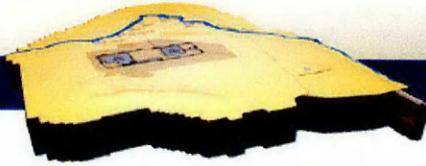
Ecology Concerns

ITEM NO.	ECOLOGY CONCERN	DOE/CHPRC RESPONSE
1	The language in the CAFO, RCRA-10-2013-0113, lists the requirement to immediately cease the placement of prohibited dangerous waste in the LLBG Tr. 31/34 without first satisfying applicable treatment standards in accordance with 40 CFR 268.45. I observed that the language in the LLBG Tr. 31/34 WAP is not consistent with the CAFO's requirement or with the requirements of 40 CFR 268.45. The WAP should be updated to reflect that no DW or MW will be placed in the LLBG Tr. 31/34 without first satisfying the requirements of 40 CFR 268.45.	Section 7.5 of the LLBG Waste Analysis Plan has been updated to reflect that waste managed at LLBG Trenches 31 & 34 must already be treated to meet applicable treatment standards prior to receipt, except when the waste will be treated in the associated container storage units. See attached text.
2	CHPRC-01908, Revision 0, <i>Low-Level Burial Grounds Trenches 31 & 34, Waste Analysis Plan, Section 2.5, Discrepant Container Management, states containers no longer in good condition and not in compliance with 40 CFR 265.171 will be tracked in the Discrepant Container Management Program (DCMP) until the issues are resolved. Placing DW containers no longer in good condition into a program with no near-term schedule for correction/resolution of the issue is not consistent with the requirements of 40 CFR 265.171.</i>	Section 2.5 of the LLBG Waste Analysis Plan has been updated to reflect that waste will not be accepted until the discrepancies are resolved. See attached text.
3	Information regarding requisite skills, education, other qualifications, and duties for each job position was not provided to Ecology upon request of the facility's DW training plan. Therefore, I could not determine that the information was or was not complete and in accordance with WAC 173-303-330(2) training plan requirements.	The Ecology concern with this training plan related information is a site-wide issue that affects all contractors on the Hanford Site. As such, this issue is more appropriately discussed/negotiated through the Hanford Facility Dangerous Waste Permit reissuance efforts that are currently ongoing.

ENCLOSURE 2

TECHNICAL PROCEDURE SW-040-041 "INSPECT LOW-LEVEL BURIAL
GROUNDS," REV. 9, CHANGE 4, DATED 12/08/2015

Consisting of 38 pages,
Including this cover page



One Team. One Culture.

Technical Procedure

SW-040-041

SWSD-PRO-OP-51713

Inspect Low-Level Burial Grounds

Revision 9, Change 4

Published: 12/08/2015

Effective: 12/08/2015

Project: DWF&RS-Decommissioning Waste Fuels & Remediation Services
Topic: Operations

Technical Authority : Conley, Jeffrey
Alternate Technical Authority : Mortensen, Alan
Functional Manager: Mortensen, Alan

Use Type: Reference



Inspect Low-Level Burial Grounds

Published Date: 12/08/15

SWSD-PRO-OP-51713

Effective Date: 12/08/15

JHA: Technical - AJHA AJHA 2X-515

Periodic Review Due Date: 07/30/2018

Rev. 9, Chg. 4

USQ Screen Number:

- Solid Waste Operations Complex : **Categorical Exclusion: GCX-7 (Minor Change)**
Screener: Olsen, Ashley

CHANGE SUMMARY

Description of Change

Add established inspection frequencies in response to regulator inspections.

Inspect Low-Level Burial Grounds

Published Date: 12/08/2015

SWSD-PRO-OP-51713

Effective Date: 12/08/2015

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Inspect Low-Level Burial Grounds

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1.0 INTRODUCTION

1.1 Purpose

This procedure provides instructions for inspecting Low-Level Burial Grounds (LLBG) and equipment located in LLBG. This surveillance is necessary for prompt identification and correction of safety hazards, maintenance, and general housekeeping problems.

This inspection procedure covers hazard communication issues, packaging, and containment inspections in addition to inspection of other safety items (fire extinguishers and hoses, spill kit inventory, vehicles).

1.2 Scope

Regular inspection of waste storage/disposal facilities identifies malfunctions and deterioration, human error, or packaging problems that may cause or lead to release of radioactive or hazardous waste constituents to the environment or pose a threat to human health.

1.3 Applicability

This procedure is designed to satisfy safety concerns and to implement the following federal and state environmental regulation inspection requirements:

- 40 CFR 265, *Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*
- 40 CFR 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions*
- WAC 173-303, *Dangerous Waste Regulations*

1.4 Implementation

This procedure is effective upon publication.

2.0 PRECAUTIONS & LIMITATIONS

2.1 Warnings & Cautions

- 2.1.1 Walking or driving over buried waste areas is restricted because of potential for injury from subsidence in burial grounds. Vehicle and foot traffic access restrictions are identified in HNF-2030, Rev 0, *Subsidence Potential in the Burial Grounds*, and on drawing H-2-821555.
- 2.1.2 If containers show signs of spills or leaks or containment breach is suspected, area must be evacuated and operations field work supervisor (FWS) and RadCon management notified.
- 2.1.3 Personnel must follow all Radiological Control postings associated with this procedure.

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- 2.1.4 Possible safety hazards include:
- Tripping
 - Slipping
 - Injuries to hands/head
 - Contamination
 - Exposure to poisonous snakes/spiders
 - High-pressure gas bottles.
- 2.1.5 If performing inspections alone, a radio or some other means of communication must be carried in case of emergency.
- 2.1.6 If an emergency should occur or abnormal condition exists, FWS must be notified immediately by radio or phone.
- 2.1.7 Based on conditions, FWS may require a second operator to be present during inspections for safety reasons.
- 2.1.8 For contamination control, a radiological buffer area (RBA) shall be established prior to performing partial body entries into a contamination area (CA).
- 2.1.9 If radiation levels are greater than 100 mrem/hour at 30 cm or removable contamination levels are greater than 20 dpm/100 cm² alpha or greater than 1000 dpm/100 cm² Beta/Gamma, a Work Package or other work process will be developed.

2.2 Limitations

- 2.2.1 All vehicles performing inspection of burial ground facilities must be equipped with portable fire-fighting equipment, shovel, and radio. Vehicles without this equipment must remain outside posted perimeter of burial grounds.
- 2.2.2 Fissile containers are handled and arrayed by the assigned Criticality Prevention Specification (CPS) Container Type per CPS-SW-003. The CPS, postings, and a guide for recommended array markings are located on the intranet under SWOC Criticality Safety Documents at <http://prc.rl.gov/rapidweb/dwfrs/index.cfm?PageNum=13>.
- a. Waste with greater than 1 FGE is required to be packaged in 55-gallon drum or larger size container.
 - b. 55-gallon drum or larger containers are exempt from fissile labeling and CPS requirements unless they contain greater than or equal to 15 FGE.
- 2.2.3 If boxes are damaged and are subject to water intrusion, notify criticality safety representative (CSR) to verify CPS Container Type.

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2.2.4 Transient combustible materials. [TSR 5.7.1.b&c]

- a. Transient combustible materials shall not exceed the amounts and types required for current operations. Transient combustible materials include but are not limited to wood, paper, liquid, cloth, or plastic debris left in the form of shipping containers, wrapping material, dunnage, wooden pallets, supplies, or operational waste that is remaining from operational activities.

Exception: Transient combustible materials are not intended to encompass windblown vegetation.

- b. Accumulations of any transient combustible waste material and debris outside shall be separated from waste containers or arrays by a distance of at least 33 ft at the end of each work day.

2.2.5 Vehicle/Heavy Equipment Controls for Exposed Waste. [TSR 5.6.3.a][FHA LLBG Key 1.3.3.4 & 5]

Engineering shall be contacted for controls on vehicles and heavy equipment with greater than 400 gallons of fuel or other combustible/flammable liquids and needing to access areas containing waste, when such equipment is within 100 ft of waste containers, to preclude the introduction of flammable liquids within 5 ft of noncombustible waste containers or caissons and within 53 ft of combustible waste containers. Vehicles will travel at low speeds.

Note: The fuel volume limits do not apply to Class IIIB (Flash Point greater than 200°F) lube oils and hydraulic oils that are required for vehicle operation.

2.2.6 Prior to moving a waste container, the accessible surfaces of the container shall be examined, per criteria in Appendix L. Waste containers that meet the entry criteria shall be entered into the ACMP. [TSR 5.6.4.b]

2.2.7 A minimum of 33 ft shall be maintained between outside facility zones and areas between zones maintained free of combustible materials. Operational evolutions may temporarily introduce transient combustible materials into this separation distance while actively engaged in waste handling activities, but will be removed upon completion of the activity. [TSR 5.6.4.h]

3.0 PREREQUISITES

3.1 Tools, Equipment, & Materials

3.1.1 Essential Equipment:

- Inspection Checklists
- Open-item lists
- Ball-point pens including red
- Portable radio (for one operator) or radio installed in vehicle (for more than one operator) or some other means of communication
- Keys necessary for entrance into locked areas

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- Distance measuring device

3.1.2 As Needed:

- Burial grounds maps
- Binoculars
- Flashlight
- Fence posts
- Fence post driver
- Flag markers for problem area location identification
- Government vehicle (4x4)
- Global positioning system (GPS) equipment
- Protective clothing/equipment as required by radiological work permit (RWPs) and AJHA
- Photographic equipment (for recording discrepancies)
- Spill response tools and equipment
- Rope

3.2 Special Personnel Requirements

Radiological Control Technician (RCT), as required for radiological work

3.3 Performance Documents

Operator Aid, CWC/LLBG-OPA-001, *90-Day/SAA/SA Inventory*, or WRP-OPA-001, *90-Day/SAA/SA Inventory* (as needed)

3.4 Pre-Start Items

- 3.4.1 FWS has requested inspections be performed.
- 3.4.2 Personnel have been ACE'd in under current RWP.
- 3.4.3 All safety requirements for entry into each facility have been satisfied.
- 3.4.4 Vehicles and communication devices are in working order to allow an immediate response to an emergency.
- 3.4.5 Any unusual conditions or hazards (such as inclement weather) have been discussed with operations manager and contingency measures taken (if needed).

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- NOTE:**
- Sections of this procedure may be performed independently, concurrently, repeated, or not performed when unneeded.
 - Abnormal conditions must be circled in red on Checklists.
 - (RCT) at beginning of step indicates Radiological Control survey or support is needed to complete step.
 - [TSR] after step, in note, or in appendix relates to Safety Basis information in HNF-15280.
 - [FHA] after step contains actions necessary to comply with the Fire Hazards Analysis (FHA), HNF-21239.
 - (CPS) after a step contains actions necessary to comply with Criticality Prevention Specification.
 - All RCRA "No" or "N/A" data points are required to have an explanation in the Comments section of the inspection sheet. An explanation for non-RCRA "No" or "N/A" data points is not required.
 - For the purposes of this inspection schedule, the various inspection frequencies have been established:
 - Weekly – once per calendar week
 - Monthly - once per calendar month
 - Quarterly - once per calendar quarter

4.0 PERFORMANCE**4.1 Perform Open-Item List Check**

- 4.1.1 While performing any inspection in this procedure, PERFORM Open-Item List check.

NOTE: A new open item exists when "No" column is checked for an inspection item.

- 4.1.2 IF open item already exists, and no additional deficiency is recorded, THEN CHECK "Yes" box on affected inspection sheet because it is an existing open item.
- 4.1.3 IF facility/module has any RCRA open items on Open-Items List, THEN ENTER "RCRA open item log #_" in Comments section of inspection sheet.

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- 4.1.4 IF any open items (RCRA or non-RCRA) have been closed since previous inspection,
THEN ENTER the following in Comments section of inspection sheet:
- Date item was closed
 - How item was closed.
 - Log number of RCRA open item.

4.2 Weekly LLBG Non-RCRA Inspections

- 4.2.1 OBTAIN current Weekly LLBG Non-RCRA Inspection Checklist, (Appendix A), and Operator Aid Authorization CWC/LLBG-OPA-001 or WRP-OPA-001.
- 4.2.2 PERFORM Open-Item List check per Section 4.1.

- NOTE:**
- *For burial ground and areas of burial grounds that do not have exposed waste, visual inspection from perimeter of burial ground using binoculars is adequate.*
 - *“Driving” burial grounds (entering burial grounds in vehicle and traversing it to closely observe entire area) will be done as conditions warrant. When driving burial ground, drive pattern giving good visual coverage of entire burial ground is used; every square foot of burial ground does not need to be driven over. Section 2.0 Precautions & Limitations, refers to areas restricted to vehicle access.*
 - *All Non-RCRA burial grounds will be inspected weekly.*
 - *The completion of Appendix A fulfills a TSR weekly surveillance requirement to assure transient combustible materials are being separated from waste containers or arrays. [TSR 5.7.1.b&c]*
 - *Operator Aids CWC/LLBG-OPA-001 and WRP-OPA-001 are used to identify locations with fire break defensible spaces.*

- 4.2.3 RECORD burial ground, time, and date at top of Appendix A.
- 4.2.4 IF inspecting alone and before entering burial ground,
THEN NOTIFY dispatch by radio.

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WARNING:

Depressed areas in LLBG indicate waste is buried in that spot and should not be approached closer than 30 ft or driven over.

4.2.5 COMPLETE Appendix A.

- a. IF any transient combustibles, ground fuels, or dead vegetation (such as; paper, rags, trash, scrap wood, etc.) are found within 33 ft of waste containers or between zones,
THEN REQUEST RCT to perform survey, if required. [TSR 5.7.1.b&c][TSR 5.6.4.h]
- 1) (RCT) For material not in a CA or high contamination area (HCA),
PERFORM verification survey of material to verify that contamination is less than Table 2-2 of CHPRC-00073, *CH2M HILL Plateau Remediation Company Radiological Control Manual*.
- a) IF contamination is detected,
THEN STOP work activity
AND NOTIFY RadCon management.
- 2) (RCT) For material to be removed from a CA or HCA,
PERFORM survey of material for movement to verify contamination levels are within RWP limits and dispose of as radioactive waste.
- b. IF RCT survey results are within limits,
THEN REMOVE combustibles by end of shift.
- c. IF combustibles cannot be removed,
THEN PERFORM the following:
- 1) NOTIFY (immediately) FWS.
- 2) RECORD as problem in Comments section of Appendix A.
- d. IF live vegetation is found, within fire break defensible space,
THEN PERFORM the following:
- 1) NOTIFY (immediately) FWS.
- 2) RECORD as problem in Comments section of Appendix A.
- e. IF depression, cave-in, subsidence, etc., is found,
THEN PERFORM the following:
- MARK area with flag or by placing fence stakes at each corner and installing light chain/rope around area at least 30 ft away from depression, so area can be easily found.
 - OBTAIN coordinates using GPS equipment, whenever possible.

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- RECORD burial ground, trench number, coordinates, approximate size, shape and depth of depression in Comments section of Appendix A.
 - f. IF subsidence is large and/or deep or if waste containers are visible, THEN NOTIFY (immediately) FWS, CSR and RadCon Manager.
 - 1) (FWS) NOTIFY CSR if it is suspected that fissile waste containers have been exposed or disturbed.
 - g. IF problems with marker-barricades or signs are found, THEN PERFORM the following:
 - REPAIR OR REPLACE barricade or sign as soon as possible.
 - RECORD correction in Comments section of Appendix A.
 - h. IF it is not possible to correct problem, THEN RECORD problem in Comments section of Appendix A.
 - i. WRITE any other comments/observations in Comments section of Appendix A.
- 4.2.6 COMPLETE Appendix A by entering check mark in appropriate box: "Yes" or "N/A" (not applicable) unless problem cannot be corrected immediately.

NOTE: *Transient combustible material left at the end of the previous shift is recorded as a deficiency and a potential TSR violation. [TSR 5.7.1.b&c]*

- 4.2.7 RECORD deficiencies in Comments section of Appendix A.
- 4.2.8 IF any abnormal conditions exist that cannot be immediately corrected, THEN WRITE clear description of condition(s) in Comments section of Appendix A.
- 4.2.9 IF an abnormal container is identified, per the criteria in Appendix L, THEN NOTIFY (immediately) FWS and safety basis technical advisor (SBTA) to place container into ACMP. [TSR 5.6.4.b]
- a. RECORD deficiencies in Comments section of Appendix A.
- 4.2.10 IF vegetation, drifting sand, etc. prevents proper container inspection or access to package(s), THEN NOTIFY FWS.
- 4.2.11 IF TRU modules in 218-W-3A trenches 5, 6S, 9S, 23, 30, and 32, and 218-W-4B Trench 7 (containing vertically stacked unretrieved waste containers) are found to have pooling water, THEN NOTIFY FWS and CSR.
(CPS-SW-003)

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- 4.2.12 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix A.
- 4.2.13 SUBMIT completed Appendix A to FWS for review, signature, notifications, and disposition.

4.3 Weekly LLBG RCRA Inspection for Trenches 31 & 34 in 218-W-5

- 4.3.1 Whenever a RCRA inspection cannot be performed within the required frequency, PROVIDE condition information for why inspection could not be performed in Comments section of appropriate Checklist, AND NOTIFY ECO (immediately).
- 4.3.2 OBTAIN current Weekly LLBG RCRA Inspection for Trenches 31 & 34 in 218-W-5 (Appendix B), and Operator Aid CWC/LLBG-OPA-001.
- 4.3.3 PERFORM Open-Item List check per Section 4.1.

- NOTE:**
- *Emphasis of exposed container inspection should be to ensure exposed waste containers are not leaking, corroded, or damaged, and labels and markings are in place and legible. (CPS-SW-003)*
 - *Only waste stored in Trench 31 or staged in Trench 34 (denoted by being staged at top entrance to ramp or in area identified as "Waste Pending Acceptance" at bottom of trench) needs to be inspected per RCRA requirements.*
 - *All waste packages placed in temporary staging areas should be accessible (as much of package surface as possible should be exposed for visual inspection).*
 - *Both RCRA trenches will be inspected weekly.*
 - *The completion of Appendix B fulfills a TSR weekly surveillance requirement to assure transient combustible materials are being separated from waste containers or arrays. [TSR 5.7.1.b&c]*
 - *Transient combustible material left at the end of the previous shift is recorded as a deficiency and a potential TSR violation. [TSR 5.7.1.b&c]*
 - *Interim soil cover inspection (Appendix B) items are performed only if granular bulk waste has been disposed of in the trench.*
 - *Operations perform inspection of areas after weather disturbances or upset conditions per Appendix B.*
 - *Operator Aid CWC/LLBG-OPA-001 is used to identify locations with fire break defensible spaces.*

- 4.3.4 COMPLETE Appendix B.

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- a. IF any transient combustibles, ground fuels, or dead vegetation (such as; paper, rags, trash, scrap wood etc.) are found within 33 ft of waste containers or between zones,
THEN REQUEST RCT to perform survey, if required. [TSR 5.7.1.b&c]
[TSR 5.6.4.h]
- 1) (RCT) For material not in a CA or HCA,
PERFORM verification survey of material to verify that contamination is less than Table 2-2 of CHPRC-00073, *CH2M HILL Plateau Remediation Company Radiological Control Manual*.
- a) IF contamination is detected,
THEN STOP work activity
AND NOTIFY RadCon management.
- 2) (RCT) For material to be removed from a CA or HCA,
PERFORM survey of material for movement to verify contamination levels are within RWP limits and dispose of as radioactive waste.
- b. IF RCT survey results are within limits,
THEN REMOVE combustibles by end of shift.
- c. IF combustibles cannot be removed,
THEN PERFORM the following:
- 1) NOTIFY (immediately) FWS.
- 2) RECORD as problem in Comments section of Appendix B.
- d. IF live vegetation is found, within fire break defensible space,
THEN PERFORM the following:
- 1) NOTIFY (immediately) FWS.
- 2) RECORD as problem in Comments section of Appendix B.
- 4.3.5 RECORD deficiencies in Comments section of Appendix B.
- 4.3.6 IF an abnormal container is identified, per the criteria in Appendix L,
THEN NOTIFY (immediately) FWS and SBTA to place container into ACMP.
[TSR 5.6.4.b]
- a. RECORD deficiencies in Comments section of Appendix B.
- 4.3.7 IF problem is found for Item 3 (marked "No"),
THEN PERFORM the following:
- a. CORRECT problem immediately.
- b. RECORD corrections in Comments section of Appendix B.

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- 4.3.8 IF it is not possible to correct any deficiency immediately, THEN RECORD problem in Comments section of Appendix B.
- 4.3.9 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix B.
- 4.3.10 SUBMIT completed Appendix B to FWS for review, signature, notifications, and disposition.

4.4 Weekly LLBG RCRA 90-day Accumulation Area (AA) Inspections

- 4.4.1 Whenever a RCRA inspection cannot be performed within the required frequency, PROVIDE condition information for why inspection could not be performed in Comments section of appropriate Checklist, AND NOTIFY ECO (immediately).
- 4.4.2 OBTAIN current Weekly LLBG RCRA 90-day AA Inspections, (Appendix C).
- 4.4.3 PERFORM Open-Item List check per Section 4.1.
- 4.4.4 REVIEW Operator Aid CWC/LLBG-OPA-001 or WRP-OPA-001 for location of containers to be inspected.
- a. RECORD location obtained from appropriate Operator Aid in "Location" block of Appendix C.
- 4.4.5 COMPLETE Appendix C.
- 4.4.6 EXPLAIN all "No" and "N/A" checked boxes in Comments section of Appendix C.
- 4.4.7 IF problem is found, THEN PERFORM the following:
- NOTIFY FWS and ECO.
 - MOVE to safe location as necessary.
 - STAND BY for FWS direction.
 - RECORD problem in Comments section of Appendix C.
- a. IF problem is found with container marking/labeling and marking/labeling information is available, THEN PERFORM the following:
- 1) CORRECT problem immediately.
 - 2) RECORD corrections in Comments section of Appendix C.
- b. IF it is not possible to correct RCRA deficiency immediately, THEN RECORD problem in Comments section of Appendix C

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- 4.4.8 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix C.
- 4.4.9 SUBMIT completed Appendix C to FWS for review, signature, notifications, and disposition.

4.5 Monthly LLBG RCRA Fire Extinguisher Inspections

- 4.5.1 Whenever a RCRA inspection cannot be performed within the required frequency, PROVIDE condition information for why inspection could not be performed in Comments section of appropriate Checklist, AND NOTIFY ECO (immediately).

NOTE: *HNF-IP-0263-BG, Building Emergency Plans-Burial Grounds, contains locations of fire extinguishers within facility buildings.*

- 4.5.2 OBTAIN current Monthly LLBG RCRA Fire Extinguisher Inspections (Appendix D) for each building and vehicle to be inspected.
- 4.5.3 PERFORM Open-Item List check per Section 4.1.
- 4.5.4 RECORD data requested for each fire extinguisher inspected.
 - a. DETERMINE extinguisher expiration year.
 - 1) CHECK extinguisher label, or bottom of extinguisher, for year it was manufactured.
 - 2) IF current year is six or more years greater than manufactured year, THEN CHECK "Yes" on Appendix D, AND RECORD in Comments section the extinguisher needs to be replaced.
- 4.5.5 CHECK fire exits, paths to exit, and area around fire-fighting equipment to ensure they are not obstructed.
- 4.5.6 PERFORM visual inspection of fire extinguisher.
 - a. CHECK that operating instructions on extinguisher are legible and face outward.
 - b. EXAMINE for physical damage, corrosion, leakage, or clogged nozzle.
 - c. CHECK that seal is intact (not broken or missing).
 - d. RECORD discrepancies in Comments section of Checklist.
 - e. INITIAL tag on fire extinguisher indicating visual inspection of extinguisher has been completed.

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- 4.5.7 RECORD deficiencies that cannot be immediately corrected in Comments section of Appendix D.
- 4.5.8 EXPLAIN all "No" and "N/A" checked boxes in Comments section of Appendix D.
- 4.5.9 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix D.
- 4.5.10 SUBMIT completed Appendix D to FWS for review, signature, notifications, and disposition.

4.6 Monthly LLBG RCRA Spill Kit Inspections

- 4.6.1 Whenever a RCRA inspection cannot be performed within the required frequency, PROVIDE condition information for why inspection could not be performed in Comments section of appropriate Checklist, AND NOTIFY ECO (immediately).
- 4.6.2 OBTAIN Monthly LLBG RCRA Spill Kit Inspections (Appendix E).
- 4.6.3 PERFORM Open-Item List check per Section 4.1.
- 4.6.4 VERIFY seal to spill kit is not broken.
- 4.6.5 IF seal is broken, THEN PERFORM the following:
 - a. CHECK "No" on Appendix E.
 - b. VERIFY no equipment in kit is damaged.
 - c. COMPLETE Appendix E.
 - d. NOTIFY FWS.
 - e. REPLACE missing, damaged, or partially used items.
 - f. RESEAL spill kit.
 - g. RECORD corrective actions in Comments section of Appendix E.
- 4.6.6 IF spill kit seal is not broken, THEN CHECK "Yes" on Appendix E.
- 4.6.7 RECORD deficiencies that cannot be immediately corrected in Comments section of Appendix E.
- 4.6.8 EXPLAIN all "No" and "N/A" checked boxes in Comments section of Appendix E.

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- 4.6.9 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix E.
- 4.6.10 SUBMIT completed Appendix E to FWS for review, signature, notifications, and disposition.

4.7 Monthly LLBG Non-RCRA First Aid Equipment Inspections

- 4.7.1 OBTAIN Monthly LLBG Non-RCRA First Aid Inspections (Appendix F).
- 4.7.2 PERFORM Open-Item List check per Section 4.1.
- 4.7.3 VERIFY first aid kit seal is not broken.
- 4.7.4 IF seal is broken,
THEN LOOK inside box and identify any missing items per Inventory List (inside kit)
AND REPLACE items as necessary.
- 4.7.5 IF seal is not broken,
THEN WRITE "Yes" on Appendix F.
- 4.7.6 VERIFY portable eye wash seals are intact.
- 4.7.7 IF eye wash seals are broken,
THEN PERFORM the following:
- WRITE "No" on Appendix F.
 - NOTIFY FWS.
- 4.7.8 VERIFY expiration dates on portable eye washes.
- 4.7.9 IF dates are expired,
THEN PERFORM the following:
- REMOVE from service.
 - NOTIFY FWS.
- 4.7.10 RECORD deficiencies that cannot be immediately corrected in Comments section of Appendix F.
- 4.7.11 EXPLAIN all "No" checked boxes in Comments section of Appendix F.
- 4.7.12 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix F.

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- 4.7.13 SUBMIT completed Appendix F to FWS for review, signature, notifications, and disposition.

4.8 Monthly LLBG Non-RCRA Telephone & Windsock Inspections

- 4.8.1 OBTAIN current Monthly LLBG Non-RCRA Telephone & Windsock Inspections (Appendix G)
- 4.8.2 PERFORM Open-Item List check per Section 4.1.
- 4.8.3 ENSURE telephones listed on Appendix G are working properly.
- 4.8.4 INSPECT windsock for damage and free rotation.
- 4.8.5 RECORD results on telephone/windsock Appendix G.
- 4.8.6 RECORD deficiencies that cannot be immediately corrected in Comments section of Appendix G.
- 4.8.7 EXPLAIN all "No" checked boxes in Comments section of Appendix G.
- 4.8.8 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix G.
- 4.8.9 SUBMIT completed Appendix G to FWS for review, signature, notifications, and disposition.

4.9 Monthly Satellite Accumulation Area(s) Inspections

- 4.9.1 OBTAIN current Monthly Satellite Accumulation Area(s) (SAA) Inspections (Appendix H).
- 4.9.2 PERFORM Open-Item List check per Section 4.1.
- 4.9.3 COMPLETE Appendix H for each location.
- 4.9.4 EXPLAIN all "No" checked boxes in Comments section of Appendix H.
- 4.9.5 PRINT/SIGN/DATE name in Operator blank at bottom of completed Appendix H.
- 4.9.6 IF problem is found (a "No" answer for any question except 8), THEN PERFORM the following:
- a. MOVE to safe location as necessary.
 - b. NOTIFY FWS for direction.
 - c. RECORD problem and question number in Comments section of Appendix H.

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- d. STAND by for FWS direction.
- 4.9.7 IF answer to question 8 is “No”,
THEN NOTIFY (immediately) FWS for direction.
- a. CORRECT problem as directed by FWS.
 - b. RECORD correction and question number in Comments section of Appendix H.
 - c. IF it is not possible to correct problem,
THEN RECORD problem and question number in Comments section of Appendix H.
- 4.9.8 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix H.
- 4.9.9 SUBMIT completed Appendix H to FWS for review, signature, notifications, and disposition.
- 4.9.10 (FWS) AFTER corrective action(s) are taken,
PERFORM the following:
- a. ENTER corrective action(s) taken in Comments section of Appendix H.
 - b. SIGN and DATE Appendix H.
 - c. FORWARD Appendix H to records management specialist.
- 4.10 Monthly Combustible Loading Surveillance [TSR 5.7.1.a]**
- 4.10.1 OBTAIN current Monthly Combustible Loading Surveillance (Appendix I).
- 4.10.2 PERFORM Open-Item List check per Section 4.1.
- 4.10.3 CHECK compliance with combustible loading program.
- a. RECORD on Appendix I.
 - b. IF any answer on Appendix I is “Yes”,
THEN NOTIFY SDO.
 - c. (SDO) IF corrections are required,
THEN RECORD correction in Comments section of Appendix I
AND SIGN next to comment.
- 4.10.4 EXPLAIN all “No” checked boxes in Comments section of Appendix I.

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- 4.10.5 RECORD name (print/sign), date, and time in Operator blank at bottom of completed Appendix I.
- 4.10.6 SUBMIT completed Appendix I to FWS for review, signature, notification, and disposition.

4.11 Quarterly Kelly Klosure Building (293W) Inspection

- 4.11.1 PERFORM building inspection in accordance with Appendix J.
 - a. IF any answer on Appendix J is "Yes",
THEN NOTIFY FWS.
 - 1) (FWS) IF corrections are required,
THEN RECORD correction in Comments section of Appendix J
AND SIGN next to comment.
- 4.11.2 PERFORM Open-Item List check per Section 4.1.
- 4.11.3 NOTIFY Dispatch Operator of completion of Inspection for entry into Facility Logbook.
- 4.11.4 SUBMIT completed Appendix J to FWS.

4.12 (Operations FWS) Additional Review of RCRA Checklists

- 4.12.1 ENSURE problems revealed by a RCRA inspection are remedied on a schedule which prevents hazards to the public health and the environment.
- 4.12.2 COLLECT all Weekly LLBG RCRA Inspection for Trenches 31 & 34 in 218-W-5 Checklists (Appendix B).
 - a. ENSURE there is one Appendix B for each building/area for each calendar week.
 - b. REVIEW Appendix B for addition of new RCRA action items.
 - c. REVIEW Appendix B to ensure there is a comment recorded for each "No" or "N/A".
 - d. IF there are any RCRA action items, comments, or observations,
THEN FORWARD a copy of Appendix B to ECO.
- 4.12.3 COLLECT all Weekly LLBG RCRA 90-day AA Inspections (Appendix C).
 - a. ENSURE there is one Appendix C for each 90-day AA listed on Operator Aid CWC/LLBG-OPA-001 for each week the area is listed.
 - b. REVIEW Appendix C for addition of new RCRA action items.

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- c. REVIEW Appendix C to ensure there is a comment recorded for each "No" or "N/A".
 - d. IF there are any RCRA action items, comments, or observations, THEN FORWARD a copy of Appendix C to ECO.
- 4.12.4 COLLECT all Monthly SAA(s) Inspections (Appendix H).
- a. ENSURE there is one Appendix H for each SAA for each calendar month.
 - b. REVIEW Appendix H for addition of new RCRA action items.
 - c. REVIEW Appendix H to ensure there is a comment recorded for each "No" or "N/A".
 - d. IF there are any RCRA action items, comments, or observations, THEN FORWARD a copy of Appendix H to ECO.

NOTE: *After every wind, snow, and/or ice storm (e.g., wind/inclement weather), a tent inspection shall be performed on the tents in burial grounds (as determined by FWS following receipt of a Hanford Meteorology Service Weather Advisory).*

4.13 Tent Inspection

- 4.13.1 PERFORM tent inspection in accordance with Appendix K.
 - a. IF any answer on Appendix K is "Yes", THEN NOTIFY FWS to restrict access or correct deficiency.
- 4.13.2 PERFORM Open-Item List check per Section 4.1.
- 4.13.3 NOTIFY Dispatch Operator of completion of Inspection for entry into Facility Logbook.
- 4.13.4 SUBMIT completed Appendix K to FWS.

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5.0 FORMS

None

6.0 RECORD IDENTIFICATION

6.1 RCRA inspection records must be kept at the facility for at least five years from the date of inspection. This requirement may be satisfied by electronic records storage or by storage in RHA or other records storage locations on the Hanford site.

6.2 All records are required to be managed in accordance with PRC-PRO-IRM-10588, *Records Management Processes*.

Records Capture Table

Name of Record	Submittal Responsibility	Retention Responsibility
Weekly LLBG Non-RCRA Inspection Checklist (Appendix A)	Operations Management	Facility Records
Weekly LLBG RCRA Inspection for Trenches 31 & 34 in 218-W-5 (Appendix B)		
Weekly LLBG RCRA 90-day AA Inspections (Appendix C)		
Monthly LLBG RCRA Fire Extinguisher Inspections (Appendix D)		
Monthly LLBG RCRA Spill Kit Inspections (Appendix E)		
Monthly LLBG Non-RCRA First Aid Equipment Inspections (Appendix F)		
Monthly LLBG Non-RCRA Telephone & Windsock Inspections (Appendix G)		
Monthly Satellite Accumulation Area(s) Inspections (Appendix H)		
Monthly Combustible Loading Surveillance (Appendix I)		
Quarterly Kelly Klosure Building (293W) Inspection (Appendix J)		
LLBG Tent Inspection after Wind/Inclement Weather (Appendix K)		

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7.0 SOURCES

7.1 Requirements

40 CFR 265, *Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*
40 CFR 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions*
HNF-15280, *Technical Safety Requirements*
WAC 173-303, *Dangerous Waste Regulations*

7.2 References

CHPRC-00073, *CH2M HILL Plateau Remediation Company Radiological Control Manual*
CPS-SW-003, *Low-Level Burial Ground (LLBG/WRP)*
HNF-2030, Rev 0, *Subsidence Potential in the Burial Grounds*
PRC-RD-EP-15332, *Environmental Protection Requirements*
PRC-PRO-EP-15333, *Environmental Protection Processes*

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Appendix A - Weekly LLBG Non-RCRA Inspection Checklist

Burial Ground:				
#	Yes	No	N/A	Area Inspected/Description of Non-RCRA Items
1				Areas between and within 33 ft of waste zones are free of transient combustibles such as, paper, rags, trash, scrap wood, etc. [TSR 5.7.1.b&c][TSR 5.6.4.h]
2				Waste container zones are separated by at least 33 ft. (less if approved by FPE).
3				Container integrity is not compromised by punctures, dents, penetrating scratches, loose lids, bulging, excessive corrosion or other damage/deterioration (where possible to inspect). [TSR 5.6.4.b][CPS-SW-003]
4				Containers are closed, are stored in a manner which will not rupture the containers or cause them to leak, and show no evidence of spillage or leakage, such as moisture on the sides or underneath (where possible to inspect).
5				Spill pallets contain no liquid.
6				Fire lanes are clear and unobstructed. Fire fighting vehicles have free and easy access to the burial ground/trench.
7				Road into trenches, trench sidewalls and bottoms, spoil piles and paving (asphalt, concrete or gravel) are intact and in good repair
8				Backfilled storage/disposal trenches/areas are free of depressions, cave-ins, subsidence, cracks, signs of animal intrusion, or erosion.
9				Marker-barricades (chain barricades, chain-link fences, marker posts, etc.) around burial ground are intact and in good condition. Burial ground postings are intact, unobscured, legible and in good condition.
10				All valves between caisson and breather filters are OPEN (trench #14 in burial ground 218-W-4B only; mark other burial grounds as N/A).
11				Wind-blown vegetation has been removed.
12				Fire break defensible space (within 33 ft of waste containers) is clear of all ground fuels, dead rooted vegetation, and combustible materials. [BMP]
13				Fire break defensible space (within 33 ft of waste containers) is clear of live vegetation. [BMP]
14				Aisle spacing of 36 inch wide nominal is maintained between rows of containers. Rows of drums may be two drums wide. [FHA SWOC Key 1.3.1.13]
15				TRU modules in 218-W-3A trenches 5, 6S, 9S, 23, 30, and 32 (containing vertically stacked Unretrieved waste containers) have no pooling water. (CPS-SW-003)

Comments:

Operator (print/sign/date/time):

FWS (print/sign/date):

Inspect Low-Level Burial Grounds

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Appendix C - Weekly LLBG RCRA 90-day AA Inspections

Location:			
Inspection Item	Circle One		
1. Is the area controlled or locked/or is container locked?	Yes	No	N/A
2. Are the containers closed except when adding or removing waste?	Yes	No	N/A
3. Are containers in good condition (not deteriorated, badly rusted, bulging, or dented)?	Yes	No	N/A
4. Is the area free of any evidence of leaks?	Yes	No	N/A
5. Is the container marked as "hazardous waste" or "dangerous waste"?	Yes	No	N/A
6. Are the major risks (toxic, corrosive, etc.) clearly identified on each container, as applicable?	Yes	No	N/A
7. Are the labels and markings facing outward and in good condition?	Yes	No	N/A
8. Is there secondary containment for liquid wastes?	Yes	No	N/A
9. Are containers elevated?	Yes	No	N/A
10. Is housekeeping satisfactory (containers in dry location, no trash or debris, area maintained in an orderly condition, no uncontainerized dangerous waste, etc.)?	Yes	No	N/A

Comments:

Operator (print/sign/date/time):
FWS (print/sign/date):

NOTE: See Operator Aid, CWC/LLBG-OPA-001 or WRP-OPA-001, for location of containers to be inspected.

Inspect Low-Level Burial Grounds

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Appendix D - Monthly LLBG RCRA Fire Extinguisher Inspections (Page 1 of 3)

Building Number:		Fire Extinguisher Inspections (Use check mark (✓) to indicate condition)										Month & Year:	
Station Number	Extinguisher Type	Extinguisher in Place		Accessible		Visual Inspection Complete		Gauge Reading Normal		Expiration Year*	Location	Comments	
		Y	N	Y	N	Y	N	Y	N				
3	ABC										218-W-5-252 (TR 31)		
4	ABC										218-W-5-SAA (TR 31)		
5	ABC										218-W-5-252A (TR 34)		
6	ABC										218-W-3AE Staging Area (CB1)		
	ABC										218-W-3A (MO-2163)		
	ABC										218-W-4C (Pad)		
8	ABC										218-E-12B (TR 94)		
13	ABC										218-E-12B (Outside, #10895)		
20	ABC										MO-614 Mask Station (Eastside)		
21	ABC										MO-614 Mask Station (Westside)		
22	ABC										Gas Storage (160' west of MO-760)		
25	ABC										MO-264		
26	ABC										MO-760 (South End)		
27	ABC										MO-760 (North End)		
31	ABC										MO-618 (218-W-4B, South)		
32	ABC										MO-618 (218-W-4B, North)		
33	ABC										218-W-4B (90-day Pad)		
36	ABC										90-day Pad (218-W-3A)		
55	ABC										217F (218-W-3A)		
56	ABC										217H (218-W-4B)		
Operator (print/sign/date/time):											FWS (sign/date):		

* If current year is six or more years greater than manufactured year, then extinguisher has expired and should be replaced.

Inspect Low-Level Burial Grounds

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Appendix D - (Cont.) Monthly LLBG RCRA Fire Extinguisher Inspections (Page 2 of 3)

Fire Extinguisher Inspections (Use check mark (✓) to indicate condition)												
Building Number:		Burial Grounds:						Area:		Month & Year:		
Station Number	Extinguisher Type	Extinguisher in Place		Accessible		Visual Inspection Complete		Gauge Reading Normal		Expiration Year*	Location (License Plate #)	Comments
		Y	N	Y	N	Y	N	Y	N			
Vehicle	ABC										G43-1079K	
Vehicle	ABC										G62-3300H	
Vehicle	ABC										G63-0549H	
Vehicle	ABC										G63-3299H	
Vehicle	ABC										G43-1078K	
Vehicle	ABC										G62-3184P	
Operator (print/sign/date/time):										FWS (sign/date):		

* If current year is six or more years greater than manufactured year, then extinguisher has expired and should be replaced.

Inspect Low-Level Burial Grounds

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Appendix E - Monthly LLBG RCRA Spill Kit Inspections

TR-34 Seal Intact (circle one): Yes No	
Item/Quantity	Check (✓)
Dam kits/Absorbent socks (2)	
Absorbent (2, 25 lb)	
Wide, Flat-end fiberglass Shovels (non-sparking) (2)	
Face Shields (2)	
Radiation Rope (50 ft)	
Contamination Signs (4)	
Silver Shield Gloves (2 pair)	

Comments:

Operator (print/sign/date/time):
FWS (print/sign/date):

NOTE: Additional tools/supplies may be obtained, as needed.

Inspect Low-Level Burial Grounds

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Appendix F - Monthly LLBG Non-RCRA First Aid Equipment Inspections

Month:						
First Aid Kit			Blood Borne Kit			
Location	Seal Intact (circle one)			Location	Seal Intact (circle one)	
G62-3299H	Yes	No	NA	G62-3299H	Yes	No NA
218-W-5-252	Yes	No	NA	218-W-5-252	Yes	No NA
218-W-5-252A	Yes	No	NA	218-W-5-252A	Yes	No NA
G62-3184P	Yes	No	NA	G62-3814P	Yes	No NA

Comments:

Portable Eye Washes			
Location	Seal Intact (circle one)	Expiration Date	Comments
218-W-5-252	Yes No NA		
218-W-5-252A	Yes No NA		
218-W-3A (MO-2163)	Yes No NA		
Operator (print/sign/date/time):			
FWS (print/sign/date):			

Inspect Low-Level Burial Grounds

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Appendix G - Monthly LLBG Non-RCRA Telephone & Windsock Inspections

LLBG Telephone Inspection		
Number	Location	Operating Properly? (circle one)
372-3889	218-W-5-252A (Trench 34)	Yes No
373-5687	218-E-12B (Trench 94)	Yes No

Comments:

LLBG Windsock Inspection	
Location	Results (circle one)
East of Trench 8, 218-W-3AE	Sat Unsat
East of Trench 17, 218-W-3A	Sat Unsat
East of MO-223	Sat Unsat
North of Trench 34, 218-W-5	Sat Unsat
Northwest of Trench 7, 218-W-4B	Sat Unsat
Southeast of Trench 7, 218-W-4B	Sat Unsat
Southwest corner, 218-W-4B Caisson Area	Sat Unsat
North of MO-760, 218-W-4C	Sat Unsat
East of Trench 14, 218-W-4C	Sat Unsat
East of Trench 94, 218-E-12B	Sat Unsat
North of Trench 94, 218-E-12B	Sat Unsat

Comments:

Operator (print/sign/date/time):
FWS (print/sign/date):

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Appendix H - Monthly Satellite Accumulation Area(s) Inspections

SAA Location:					
Container Number(s):					
Inspection Item			Circle One		
1.	Is accumulation area at or near point of generation?	Yes	No	N/A	
2.	Is area controlled or locked/ or is container locked?	Yes	No	N/A	
3.	Are containers closed except when adding or removing waste?	Yes	No	N/A	
4.	Are containers in good condition (not deteriorated, badly rusted, bulging, or dented)?	Yes	No	N/A	
5.	Is area free of any evidence of leaks?	Yes	No	N/A	
6.	Is container marked as "hazardous waste" or "dangerous waste"?	Yes	No	N/A	
7.	Are major risk(s) clearly identified on each container?	Yes	No	N/A	
8.	Are labels and markings facing outward and in good condition?	Yes	No	N/A	
9.	From inventory checklist, is there less than 55 gallons of dangerous waste or 1 quart of acutely hazardous waste per waste stream?	Yes	No	N/A	
10.	Are containers holding flammable liquids properly grounded?	Yes	No	N/A	
11.	Is there secondary containment for liquid wastes?	Yes	No	N/A	
12.	Is housekeeping satisfactory (containers in dry location, no trash or debris area maintained in an orderly condition, no uncontainerized dangerous waste, etc)?	Yes	No	N/A	

Comments:

Operator (print/sign/date/time):
FWS (print/sign/date):

Inspect Low-Level Burial Grounds

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Appendix I - Monthly Combustible Loading Surveillance [TSR 5.7.1.a]

Key Assumption	#	Criteria	✓ Check	
			Yes	No
LLBG Key 1.3.3.2	1	Do any of the TRU retrieval trenches have exposed drum arrays > 12 drums wide and more than 5 drums high?		
SWOC Key 1.3.1.9	2	Are there any staged/stored drums coated with polyurea <u>not</u> on metal pallets or directly on the ground?		
LLBG Key 1.3.3.9	3	Are there any staged/stored NFPA Containers?		
SWOC Key 1.3.1.10	4	Are there any staged/stored drums above 1 tier <u>not</u> on pallets?		

Comments:

Operator (print/sign/date/time):
FWS (print/sign/date):

NOTE: The SDO is to be notified of any answer that is "Yes."

Inspect Low-Level Burial Grounds

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Appendix J - Quarterly Kelly Klosure Building (293W) Inspection

Inspection Item	Circle One		
	Yes	No	N/A
1. Is there any significant sign of animal intrusion?	Yes	No	N/A
2. Is there any visible damage to lights, doors, windows or other equipment?	Yes	No	N/A
3. Are there significant quantities of vegetation or other debris present around the exterior walls of the building?	Yes	No	N/A
4. Is the main rolling door open and unsecured?	Yes	No	N/A
5. Is there any sign of significant liquid leakage or accumulation from a roof leak or water intrusion under the wall?	Yes	No	N/A
Dispatch notified of completion of inspection for entry into Facility Logbook. (Check Box)			

Comments:

Operator (print/sign/date/time):
FWS (print/sign/date):

NOTE: *Electrical service is disconnected. Portable lighting (flashlight/spotlight) is required for this inspection.*

Inspect Low-Level Burial Grounds

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Appendix K - LLBG Tent Inspection after Wind/Inclement Weather

After every wind, snow, and/or ice storm (e.g., wind/inclement weather), a tent inspection shall be performed on the tents in burial grounds (as determined by FWS following receipt of a Hanford Meteorology Service Weather Advisory).

Location:			
Inspection Item	Circle One		
1. Is there 6 inches or more of snow on roof of tent?	Yes	No	N/A
2. Is there 2 inches or more of ice on roof of tent?	Yes	No	N/A
3. Are there quarter-sized or larger holes in tent fabric?	Yes	No	N/A
4. Are any anchor tie-down slings loose?	Yes	No	N/A
5. Are any wire ropes loose?	Yes	No	N/A
Dispatch notified of completion of inspection for entry into Facility Logbook. (Check Box)			

Comments:

Operator (print/sign/date/time):

FWS (print/sign/date):

NOTE: FWS may request rigging inspection for items 4 and 5.

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Appendix L - Criteria for Entry in the Abnormal Container Management Program

Containers meeting the following category and criteria must be entered into the ACMP. Both the category and criteria must be evaluated in making ACMP determinations.

Category		Criteria
1	Indications of bulging. [TSR 5.6.4.b&d] [TSR 5.7.8]	A bulged lid interferes with a straight edge laid across the top. The straight edge should span the diameter of the drum. The side wall is bulged, as determined visually. Rocking when setting on flat surface indicative of a raised section center region of bottom surface.
2	Damaged or corroded (degraded) containers. [TSR 5.6.4.e] [TSR 5.7.8]	Damaged or corroded (degraded) containers that cannot be safely handled using approved operating methods and/or procedures without a likely spread of contamination.
3	Non-standard containers stored outside [TSR 5.7.8]	A waste container (waste stream) stored outside for which no defined path forward to storage or disposal currently exists.
4	Containers with unknown contents [TSR 5.7.8]	Information is obtained that causes the characterization to be questioned and a technical evaluation determines that insufficient information is available to assure proper management of the container (e.g., ignitable, corrosive, explosive, or incompatible contents). For the Waste Retrieval Project: Container is <u>not</u> identifiable by PIN/CIN, seal number, and does <u>not</u> meet the physical descriptions identified in the records or cannot be tied to acceptable knowledge of a waste lot or waste stream.
5	Other	Other identified conformance issue that a technical evaluation determines has safety basis impacts.
6	Unvented containers discovered at or proposed for transfer to CWC, WRAP, or T Plant that require venting [TSR 5.7.8]	A technical evaluation determines venting is required. Examples include: LLW and TRU boxes that do <u>not</u> have an established vent path or contain a multi-piece gasket, or Containers that have completed the retrieval process, been released for unrestricted movement and processing, and subsequently determined to be unvented.
7	Unvented, non-drum containers identified in the LLBG that require venting. [TSR 5.7.8]	A technical evaluation determines venting is required (e.g., boxes that do <u>not</u> have an established vent path or contain a multi-piece gasket). Unvented waste container which requires venting, other than 55-gal drums.
8	Container exceeds the LFL. [TSR 5.7.8]	After released for unrestricted movement abatement, the hydrogen concentration is determined to be greater than 5% or the concentration of other flammable gases are greater than the LFL.
9	Waste containers that do <u>not</u> fully meet the waste acceptance criteria (HNF-EP-0063) [TSR 5.7.8] [TSR 5.7.9.c]	Waste containers that do <u>not</u> fully meet the waste acceptance criteria (HNF-EP-0063), that is, the waste container discrepancy cannot be resolved using normal operating procedures or involves one of the preceding ACMP entry criteria.

ENCLOSURE 3

COPIES OF SW-040-11 "INSPECT LOW-LEVEL BURIAL GROUNDS"
CHECKLISTS FOR LLBG TRENCHES 31/34

Consisting of 4 pages,
Including this cover page

Operational Knowledge is used to characterize these waste materials for the purposes of waste designation. Waste generated by LLBG Trenches 31 & 34 and the associated container storage units is considered accepted for storage at LLBG Trenches 31 & 34 when the waste is generated and may meet disposal requirements. All Knowledge and confirmation of Knowledge concerning LLBG Trenches 31 & 34 generated wastes will be documented in accordance with Section 8, Recordkeeping.

2.4.1 Waste Stream Approval Process

Documenting operational Knowledge constitutes the waste stream approval process.

2.4.2 Waste Transfer Approval Process

No transfer occurs while the waste resides in LLBG Trenches 31 & 34. If the waste is transferred to another SWOC unit, the requirements for a SWOC transfer in Section 2.3 apply.

2.4.3 Verification

Any container is exempt from verification requirements when the container resides in LLBG Trenches 31 & 34. Verification requirements include the container receipt inspection, physical screening, the PES, and chemical screening.

2.5 Waste Receipt Discrepancies

If discrepancies, such as improper container labeling, improper packaging, nonconformance issues, or manifest inconsistencies, are discovered during the container receipt inspection, the discrepant containers or shipment will be evaluated for entrance into a discrepant container management program and will not be accepted into LLBG Trenches 31-34-94 until the discrepancies have been resolved using one or more of the following alternatives:

- Incorrect or incomplete entries on the Uniform Hazardous Waste Manifest or onsite shipping or transfer paperwork can be immediately corrected with the concurrence from the generator. Corrections are made by drawing a single line through the incorrect manifest entry. Corrected entries are initialed and dated by the individual making the correction.
- The waste package(s) can be held at LLBG Trenches 31 and 34 container storage units, segregated from other stored waste, and the generator must provide written instructions for use in correcting the discrepancies.
- The waste package may be returned to the generator.

If a discrepant (nonconforming) waste container or shipment is received from an offsite generator and is nonreturnable because of container condition deficiencies, and if an agreement cannot be reached among the parties to resolve the noncompliant condition, then the Washington State Department of Ecology (Ecology) will be notified in writing within 15 days after receiving the noncompliant shipment. A copy of the manifest at issue will accompany the notification (WAC 173-303-370, "Manifest System"). Pending resolution, the nonreturnable package will be segregated from other waste and will not be accepted at LLBG Trenches 31 and 34.

2.6 Sampling and Analysis Plans

A sampling and analysis plan (SAP) may be developed outside the WAP to support the characterization of waste for various projects. A SAP provides sufficient detail to ensure that sampling personnel and the analytical laboratory correctly implement the DQOs and quality assurance project plan requirements pursuant to TPA action plan, Section 6.5. SAPs can utilize existing Knowledge, historical information, and/or additional analytical data in combination with sampling requirements as identified in the SAP to

purview of these LDRs per 40 CFR 268, incorporated by reference by, WAC 173-303-140. Waste constituents that are subject to LDRs are identified in 40 CFR 268.40, incorporated by referenced by WAC 173-303-140. Waste must meet certain treatment standards, as specified in 40 CFR 268, incorporated by reference by, WAC 173-303-140, if the waste is to be land disposed.

Generators are required to determine the treatment standards applicable to the wastes they generate at the point of generation, [40 CFR 268.7(a)], and make an evaluation of whether or not these treatment requirements have been satisfied. Each waste subject to concentration-based treatment standards will be analyzed for those LDR constituents contained in the listed and characteristic waste numbers identified by the generator, including any UHC identified by 40 CFR 268.2(i), if the Knowledge of the generator is not sufficient to make complete constituent determinations. If the LDR waste does not meet the applicable treatment standards, the generator provides waste information with each shipment stating so, in accordance with WAC 173-303-380(1)(j),-(k),-(l),-(m),-(n), or -(o). If the waste meets the LDR standards, the generator must send a certification that the waste meets the treatment standards.

Mixed waste constituents that are subject to LDRs are identified in 40 CFR 268.40 by reference in WAC 173-303-140(2), the extremely hazardous waste disposal requirements for DOE facilities contained in RCW 70.105.050(2), and the state-only LDRs contained in WAC 173-303-140(4)(b)-(d). The mixed waste must meet certain treatment standards, as specified in 40 CFR 268.40, RCW 70.105.050(2), and WAC 173-303-140(4)(b)-(d), if the waste is to be land disposed. Any waste requiring LDR treatment must be treated prior to acceptance into LLBG Trench 31 and 34 for disposal.

7.4 Sampling and Analytical Methods

It is recognized that ALARA concerns may warrant modifications to the methods to ensure appropriate protection of personnel health and safety without impact to the method or sample integrity. Waste analyzed using SW-846 methods modified to address ALARA protection concerns are considered acceptable provided the applicable data quality objectives specified in the modified SW-846 methods will be met.

Samples of waste will be transferred to an onsite laboratory or shipped offsite to a laboratory for analysis. Samples will be collected in accordance with SW-846 and as described in Section 4. Sample storage is provided for waste containers while awaiting laboratory analysis results.

7.5 Waste Treatment

Waste must be treated to meet LDR as specified in WAC 173-303-140.

Waste managed at the LLBG Trenches 31 & 34 must already be treated to meet applicable treatment standards prior to receipt, except when waste described below will be treated in the two associated container storage units. The alternative treatment standards for hazardous debris as specified in 40 CFR 268.45 or for contaminated soil as specified in 40 CFR 268.49 may also be used. When dealing with multiple dangerous waste numbers, both standards may apply, requiring a treatment train for ultimate compliance to LDR.

Treatment authorized in LLBG Trenches 31 & 34 container storage units includes hazardous debris immobilization technologies and macro-encapsulation treatment technology (MACRO). Treatment will be limited to those technologies that can be employed in/on containerized mixed waste, and will not be performed on the operational layer of the trenches. Hazardous debris immobilization technologies (i.e., macroencapsulation, microencapsulation, and sealing) are based on the requirements in 40 CFR 268.45, Table 1 Alternative Treatment Standards for Hazardous Debris. Macro-encapsulation treatment technology (MACRO) requirements are based on 40 CFR 268.42, Table 1 Technology Codes and Description of Technology-Based Standards.

Waste forms that can be treated include mixed waste in unique, large, and/or difficult-to-handle forms (e.g., large boxes, long-length equipment, pumps, valves, columns, and cylinders), radioactive lead solids, and other forms approved by Ecology to use these treatment technologies through appropriate processes

such as 40 CFR 268.42(c) or 40 CFR 268.44(h). Management of the waste containers at or near the mixed waste trenches will not constitute land disposal (per the definition of that term in WAC 173-303-140(3)(b)) until the contractor completes treatment and verification that satisfies the land disposal restriction treatment requirements.

7.6 Land Disposal Restriction Certification of Treatment

When LDR treatment has been completed and required treatment has been verified (either through analytical results, for LDR treatment standards expressed as constituent concentrations, or documentation that the required treatment method has been applied successfully for treatment standards expressed as a method of treatment), certification of the LDR treatment is prepared by either the generator or treatment unit which could include the LLBG Trenches 31 & 34 operating organization. The certification statement will be prepared in accordance with 40 CFR 268.7(b, d, and e). A copy of the certification will be placed in the Handord Facility Operating Record, LLBG Trenches 31 & 34 unit-specific portion.

When an LDR waste does not meet the applicable treatment standards set forth in 40 CFR 268.40 and WAC 173-303-140, or exceeds the application prohibition levels set forth in 40 CFR 268.32, this information is placed in the Handord Facility Operating Record, LLBG Trenches 31 & 34 unit-specific portion, in accordance with WAC 173-303-380(1).

ENCLOSURE 4

COPY OF ECOLOGY "WEEKLY INSPECTION CHECKLIST FOR DANGEROUS WASTE
CONTAINER ACCUMULATION AREA," ECOLOGY PUBLICATION NUMBER 12-04-019,
DATED NOVEMBER 2015

Consisting of 2 pages,
Including this cover page



Weekly Inspection Checklist

for Dangerous Waste Container Accumulation Area

For the Month of _____, _____

Mark answers Yes or No below

Week 1	Week 2	Week 3	Week 4	Week 5
--------	--------	--------	--------	--------

	Date	Time	Inspector's Printed Name AND Signature
Week 1	/ /		
Week 2	/ /		
Week 3	/ /		
Week 4	/ /		
Week 5	/ /		

- Are all drums and containers marked or labeled as hazardous waste (or "waste pending analysis")?
- Are all drums and containers marked with the risk associated with the waste?
- Are all containers (excluding satellite containers) marked with the accumulation start date?
- Are any drums near or exceeding the LQG 90-day or MQG 180-day timeframe?
- Are all drum labels visible and readable?
- Are all containers closed?
- Are all drums and containers in good condition?
- Are any drums leaking?
- Is there 30 inches of aisle space between rows of containers?

Containment

- Is the secondary containment free of cracks or other failures?
- Are sumps clean and free of contamination, spills, leaks, and standing water?

Safety Equipment

This section is not required for weekly inspections but will meet some of the general facility inspection requirements.

- Are fire extinguishers charged?
- Are spill kits stocked?
- Is the first aid cabinet stocked?
- Is the emergency shower and eye wash station functioning properly?
- Are the emergency communication devices operating properly?
- Is emergency response information posted near all communication devices? **(MQG only)**

Comments: Describe the actions taken to correct each deficiency noted above, and note date each action was taken.

Reference Washington Dangerous Waste Regulations, Chapter 173-303 WAC for further information, specifically, WAC 173-303-200(1)(b) and by reference 630(6).

ENCLOSURE 5

COPY OF LLBG TR. 31/34 PHOTOGRAPHS WITH AFFIXED NEW DANGEROUS
WASTE LABELS

Consisting of 5 pages,
Including this cover page



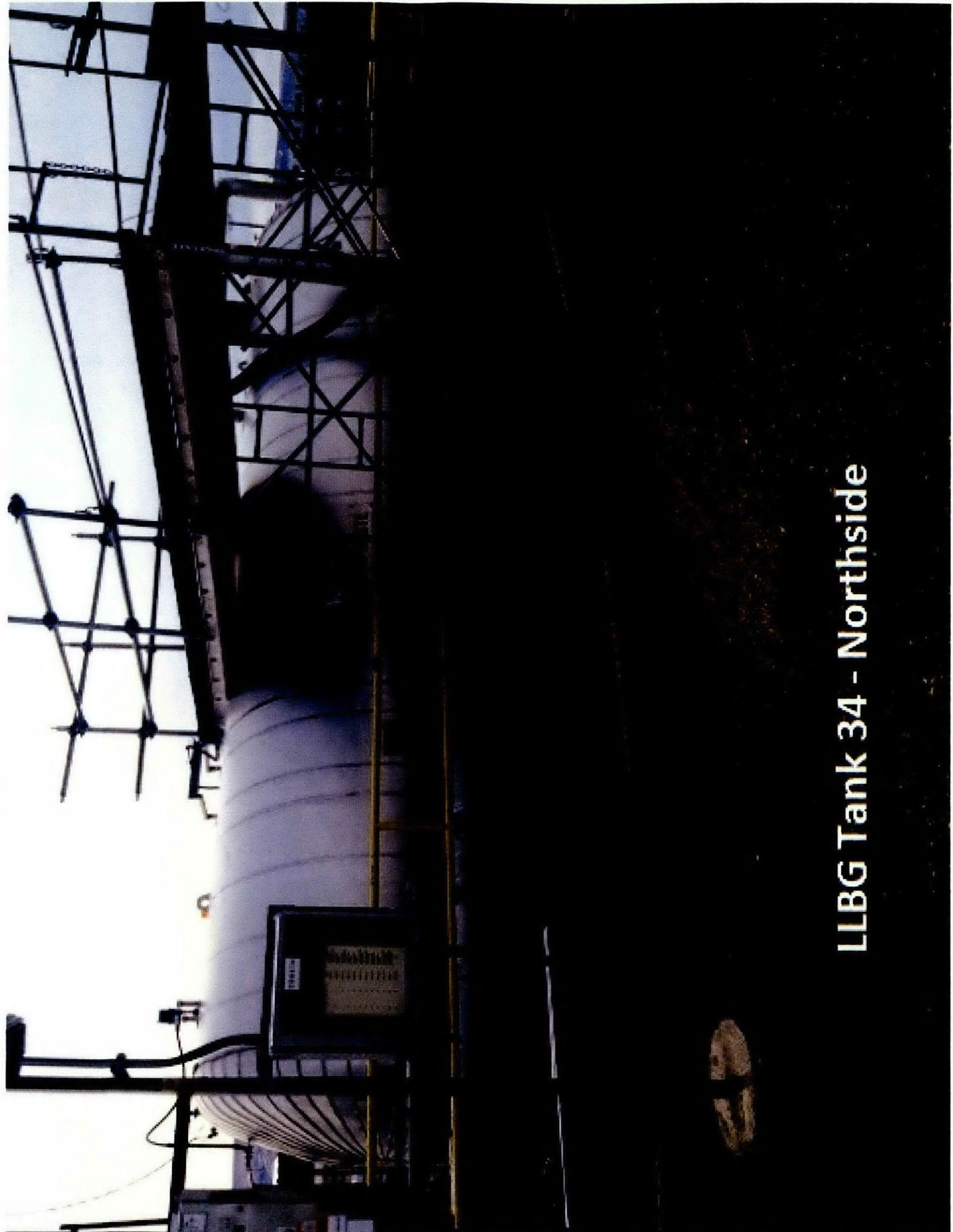
LLBG Tank 31 - Southside



LLBG Tank 31 - Northside



LLBG Tank 34 - Southside



LLBG Tank 34 - Northside

ENCLOSURE 6

COPY OF CHPRC-01908 REV.1 - LLBG WASTE ANALYSIS PLAN, SECTION 7.5
REVISED

Consisting of 3 pages,
Including this cover page

purview of these LDRs per 40 CFR 268, incorporated by reference by, WAC 173-303-140. Waste constituents that are subject to LDRs are identified in 40 CFR 268.40, incorporated by referenced by WAC 173-303-140. Waste must meet certain treatment standards, as specified in 40 CFR 268, incorporated by reference by, WAC 173-303-140, if the waste is to be land disposed.

Generators are required to determine the treatment standards applicable to the wastes they generate at the point of generation, [40 CFR 268.7(a)], and make an evaluation of whether or not these treatment requirements have been satisfied. Each waste subject to concentration-based treatment standards will be analyzed for those LDR constituents contained in the listed and characteristic waste numbers identified by the generator, including any UHC identified by 40 CFR 268.2(i), if the Knowledge of the generator is not sufficient to make complete constituent determinations. If the LDR waste does not meet the applicable treatment standards, the generator provides waste information with each shipment stating so, in accordance with WAC 173-303-380(1)(j),-(k),-(l),-(m),-(n), or -(o). If the waste meets the LDR standards, the generator must send a certification that the waste meets the treatment standards.

Mixed waste constituents that are subject to LDRs are identified in 40 CFR 268.40 by reference in WAC 173-303-140(2), the extremely hazardous waste disposal requirements for DOE facilities contained in RCW 70.105.050(2), and the state-only LDRs contained in WAC 173-303-140(4)(b)-(d). The mixed waste must meet certain treatment standards, as specified in 40 CFR 268.40, RCW 70.105.050(2), and WAC 173-303-140(4)(b)-(d), if the waste is to be land disposed. Any waste requiring LDR treatment must be treated prior to acceptance into LLBG Trench 31 and 34 for disposal.

7.4 Sampling and Analytical Methods

It is recognized that ALARA concerns may warrant modifications to the methods to ensure appropriate protection of personnel health and safety without impact to the method or sample integrity. Waste analyzed using SW-846 methods modified to address ALARA protection concerns are considered acceptable provided the applicable data quality objectives specified in the modified SW-846 methods will be met.

Samples of waste will be transferred to an onsite laboratory or shipped offsite to a laboratory for analysis. Samples will be collected in accordance with SW-846 and as described in Section 4. Sample storage is provided for waste containers while awaiting laboratory analysis results.

7.5 Waste Treatment

Waste must be treated to meet LDR as specified in WAC 173-303-140.

Waste managed at the LLBG Trenches 31 & 34 must already be treated to meet applicable treatment standards prior to receipt, except when waste described below will be treated in the two associated container storage units. The alternative treatment standards for hazardous debris as specified in 40 CFR 268.45 or for contaminated soil as specified in 40 CFR 268.49 may also be used. When dealing with multiple dangerous waste numbers, both standards may apply, requiring a treatment train for ultimate compliance to LDR.

Treatment authorized in LLBG Trenches 31 & 34 container storage units includes hazardous debris immobilization technologies and macro-encapsulation treatment technology (MACRO). Treatment will be limited to those technologies that can be employed in/on containerized mixed waste, and will not be performed on the operational layer of the trenches. Hazardous debris immobilization technologies (i.e., macroencapsulation, microencapsulation, and sealing) are based on the requirements in 40 CFR 268.45, Table 1 Alternative Treatment Standards for Hazardous Debris. Macro-encapsulation treatment technology (MACRO) requirements are based on 40 CFR 268.42, Table 1 Technology Codes and Description of Technology-Based Standards.

Waste forms that can be treated include mixed waste in unique, large, and/or difficult-to-handle forms (e.g., large boxes, long-length equipment, pumps, valves, columns, and cylinders), radioactive lead solids, and other forms approved by Ecology to use these treatment technologies through appropriate processes

such as 40 CFR 268.42(c) or 40 CFR 268.44(h). Management of the waste containers at or near the mixed waste trenches will not constitute land disposal (per the definition of that term in WAC 173-303-140(3)(b)) until the contractor completes treatment and verification that satisfies the land disposal restriction treatment requirements.

7.6 Land Disposal Restriction Certification of Treatment

When LDR treatment has been completed and required treatment has been verified (either through analytical results, for LDR treatment standards expressed as constituent concentrations, or documentation that the required treatment method has been applied successfully for treatment standards expressed as a method of treatment), certification of the LDR treatment is prepared by either the generator or treatment unit which could include the LLBG Trenches 31 & 34 operating organization. The certification statement will be prepared in accordance with 40 CFR 268.7(b, d, and e). A copy of the certification will be placed in the Handord Facility Operating Record, LLBG Trenches 31 & 34 unit-specific portion.

When an LDR waste does not meet the applicable treatment standards set forth in 40 CFR 268.40 and WAC 173-303-140, or exceeds the application prohibition levels set forth in 40 CFR 268.32, this information is placed in the Handord Facility Operating Record, LLBG Trenches 31 & 34 unit-specific portion, in accordance with WAC 173-303-380(1).

ENCLOSURE 7

COPY OF CHPRC-01908 REV.1 - LLBG WASTE ANALYSIS PLAN, SECTION 2.5
REVISED

Consisting of 2 pages,
Including this cover page

Operational Knowledge is used to characterize these waste materials for the purposes of waste designation. Waste generated by LLBG Trenches 31 & 34 and the associated container storage units is considered accepted for storage at LLBG Trenches 31 & 34 when the waste is generated and may meet disposal requirements. All Knowledge and confirmation of Knowledge concerning LLBG Trenches 31 & 34 generated wastes will be documented in accordance with Section 8, Recordkeeping.

2.4.1 Waste Stream Approval Process

Documenting operational Knowledge constitutes the waste stream approval process.

2.4.2 Waste Transfer Approval Process

No transfer occurs while the waste resides in LLBG Trenches 31 & 34. If the waste is transferred to another SWOC unit, the requirements for a SWOC transfer in Section 2.3 apply.

2.4.3 Verification

Any container is exempt from verification requirements when the container resides in LLBG Trenches 31 & 34. Verification requirements include the container receipt inspection, physical screening, the PES, and chemical screening.

2.5 Waste Receipt Discrepancies

If discrepancies, such as improper container labeling, improper packaging, nonconformance issues, or manifest inconsistencies, are discovered during the container receipt inspection, the discrepant containers or shipment will be evaluated for entrance into a discrepant container management program and will not be accepted into LLBG Trenches 31-34-94 until the discrepancies have been resolved using one or more of the following alternatives:

- Incorrect or incomplete entries on the Uniform Hazardous Waste Manifest or onsite shipping or transfer paperwork can be immediately corrected with the concurrence from the generator. Corrections are made by drawing a single line through the incorrect manifest entry. Corrected entries are initialed and dated by the individual making the correction.
- The waste package(s) can be held at LLBG Trenches 31 and 34 container storage units, segregated from other stored waste, and the generator must provide written instructions for use in correcting the discrepancies.
- The waste package may be returned to the generator.

If a discrepant (nonconforming) waste container or shipment is received from an offsite generator and is nonreturnable because of container condition deficiencies, and if an agreement cannot be reached among the parties to resolve the noncompliant condition, then the Washington State Department of Ecology (Ecology) will be notified in writing within 15 days after receiving the noncompliant shipment. A copy of the manifest at issue will accompany the notification (WAC 173-303-370, "Manifest System"). Pending resolution, the nonreturnable package will be segregated from other waste and will not be accepted at LLBG Trenches 31 and 34.

2.6 Sampling and Analysis Plans

A sampling and analysis plan (SAP) may be developed outside the WAP to support the characterization of waste for various projects. A SAP provides sufficient detail to ensure that sampling personnel and the analytical laboratory correctly implement the DQOs and quality assurance project plan requirements pursuant to TPA action plan, Section 6.5. SAPs can utilize existing Knowledge, historical information, and/or additional analytical data in combination with sampling requirements as identified in the SAP to