ATTACHMENT E

INSPECTION PLAN

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LIST OF FIGURES

FIGURE NO.	TITLE
E-1	Hazardous Waste Facility Inspection Record Form

ATTACHMENT E
INSPECTION PLAN

This Attachment presents inspection requirements applicable to all hazardous or mixed waste management units (permitted units) at Los Alamos National Laboratory (LANL). Inspection schedules for the units have been developed to identify equipment malfunctions and deterioration, operator errors, and discharges that might cause or lead to a release of hazardous or mixed waste and pose a threat to human health and the environment.

The Permittees shall conduct Inspections at the schedule specified herein to identify problems in time to correct them before they harm human health or the environment. Inspection schedules or methods may differ at certain waste management units based upon worker safety issues or the nature of the safety and emergency equipment.

E.1 GENERAL INSPECTION SCHEDULES AND REQUIREMENTS

The Permittees shall follow this Inspection Plan for the inspection of monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting, and responding to environmental or human health hazards. Inspections may be conducted at any time during the applicable day or week, as specified in the inspection schedule.

A copy of this Inspection Plan, which includes inspection schedules, shall be maintained by the Permittees' hazardous waste compliance personnel and by the site operator (*i.e.*, the division or operating group that is responsible for or manages the permitted unit), as required in Permit Section 2.6 .

The Permittees shall follow the inspection schedules outlining the items to be addressed on the Permittees' Hazardous Waste Facility Inspection Record Form (IRF) and inspection frequencies for the unit types provided in this Attachment's Sections E.2 through E.8, and in TA-specific Attachment E sections. The IRF and instructions for its completion are provided at the end of this Attachment Section; the form may be supplemented, changed, or otherwise replaced through a permit modification pursuant to 40 CFR § 270.42(a). The IRF lists the items to be inspected.

E.1.1 Inspection Records

The Permittees shall insure that permitted unit personnel conduct inspections and record the information on IRFs or equivalent forms. The Permittees shall retain inspection records until closure of the associated permitted unit. The Permittees shall maintain an electronic version of the records through the closure or post-closure periods dependent upon the type of facility. The Permittees shall make inspection records available for review in the event that the Department or the U.S. Environmental Protection Agency inspects the facility for compliance with inspection requirements.

The IRF encompasses requirements for permitted hazardous and mixed waste management units, and additional requirements directed by the Permittees' policy. Instructions included with the IRF provide specific guidance for each inspection item listed.

The Permittees shall complete the IRF or equivalent form according to the daily and/or weekly schedules provided in Attachment Sections E.2 through E.8. The Permittees shall conduct and record inspections in Parts I and II of the IRF for each working day or week that waste is opened, moved, received, stored, treated, removed, or remains open, as appropriate. The Permittees may use other records, such as a memo to file, to document a condition of "No Use" at a unit.

For every item requiring inspection, the Permittees shall enter a response indicating the condition of each item in the column under the appropriate day of the week. Responses may include "OK," "NA" (Not Applicable), or "AR" (Action Required). If the response is AR, the Permittees shall note the action required in Part II of the IRF. If more than one AR is listed, the Permittees shall number the ARs. The Permittees shall identify and number all ARs, even if corrected immediately by the inspector. If inspection results indicate that corrective measures are warranted, the Permittees shall record any and all actions taken (along with time, date, and other pertinent information) in Part II of the IRF and shall note the AR on all subsequent IRFs until corrective measures are completed. When corrective measures have been completed and recorded on an IRF, the Permittees shall enter an "OK" in the "Condition" column on the IRF.

The Permittees shall conduct and document monthly inspections of the items listed below to ensure that the equipment is fully functional for its intended purpose:

1. evacuation alarms;
2. ventilation alarms;
3. fire alarms; and
4. fire pumps.

E.1.2 Actions Resulting from Inspections

If the Permittees discover any defects, deterioration, operator errors, discharges, or potential hazards during an inspection, the Permittees shall complete appropriate corrective measures (*e.g.*, transfer of waste from a defective container to an appropriate container in good condition, repair or replacement of nonfunctioning equipment and/or systems, or removal of any accumulated liquids) promptly so that the problem does not lead to an environmental or human health hazard. The Permittees shall note any action taken in response to an inspection on the IRF or IRF documentation.

If a hazardous condition is imminent or has already occurred, the Permittees shall assess the condition immediately and follow up with appropriate remedial action. If this assessment indicates that human health or the environment may be or may have been adversely affected, the Permittees may implement Permit Attachment D, (*Contingency Plan*). In any case, the Permittees shall document the remedial action that is required and is taken.

E.1.3 Training

The Permittees shall provide inspection training to appropriate Facility personnel, and ensure that training is repeated, as necessary.

E.2 INSPECTION SCHEDULE AND REQUIREMENTS FOR CONTAINER STORAGE UNITS

The Permittees shall inspect container storage units (CSU) according to the schedule provided below.

E.2.1 On Day(s) of Waste Handling

The Permittees shall conduct inspections every day of, or the day after, waste handling, with special attention placed on areas subject to spills, such as loading and unloading areas. Waste handling includes when waste is received at, moved or opened within, treated at, or removed from a CSU. With respect to each container, the Permittees shall inspect and record the following items, as applicable:

1. General IRF information (Items 1-7)
2. Secondary containment structures
3. Run on and runoff control
4. Covers and lids of containers
5. Labels
6. Accumulation start date
7. Compatibility
8. Structural integrity of containers
9. (Un)loading area(s)
10. Presence and condition of shaft cover

E.2.2 Weekly

The Permittees shall conduct weekly inspections of CSUs every week that waste remains in storage. The Permittees shall inspect and record the following items, as applicable:

1. General IRF information (Items 1-7)
2. Communications equipment
3. Warning signs
4. Security
5. Work surfaces/floors
6. Spill/fire equipment
7. Eyewashes/safety showers
8. Wind sock
9. Secondary containment structures
10. Run on and runoff control
11. Covers and lids of containers
12. Labels
13. Accumulation start date
14. Compatibility

15. Structural integrity of containers
16. (Un)loading area(s)
17. Aisle space/stacking
18. Pallets/raised containers
19. Presence and condition of shaft cover

E.3 INSPECTION SCHEDULE AND REQUIREMENTS FOR TANK SYSTEMS

The Permittees shall inspect tank systems according to the schedule provided below.

E.3.1 Daily (During Operation)

The Permittees shall inspect tank systems (including ancillary equipment) at least once each operating day. An operating day includes when waste is present in the tank. The Permittees shall inspect tank systems for the items listed below, as appropriate:

1. General IRF information (Items 1-7)
2. Secondary containment structures
3. Labels
4. Structural integrity of tanks and ancillary equipment
5. (Un)loading area
6. Aboveground portions of tank systems to detect corrosion or releases of waste and to detect any possible malfunctions to overfill and spill control equipment, tank monitoring and leak detection systems, and data from these systems
7. Proper operating condition of treatment tank (if applicable)

E.3.2 Weekly

The Permittees shall conduct weekly inspections of tank systems every week that waste are managed in the systems. Weekly inspection requirements for tank systems include the following items, as appropriate:

1. General IRF information (Items 1-7)
2. Communications equipment
3. Warning signs
4. Security
5. Work surfaces/floors
6. Spill and fire equipment
7. Eyewashes and safety showers
8. Wind sock, if applicable
9. Secondary containment structures
10. Run on and runoff controls, if applicable
11. Labels
12. Accumulation start date, if appropriate
13. Structural integrity of tanks and ancillary equipment
14. (Un)loading areas

15. Aboveground portions of tank systems to detect corrosion or releases of waste, overfill and spill control equipment, tank monitoring and leak detection systems, and data from these systems
16. Proper operating condition of treatment tank (if applicable)

E.4 (Reserved)

E.5 INSPECTION SCHEDULE AND REQUIREMENTS FOR STABILIZATION UNITS

The Permittees shall inspect stabilization units according to the schedule provided below.

E.5.1 Daily (During Operation)

The Permittees shall inspect stabilization units each operating day (*i.e.*, when waste is treated in the unit). The Permittees shall inspect and record the following items, as applicable.

1. General IRF information (Items 1-7)
2. Warning signs
3. Work surfaces and floors
4. Secondary containment structures
5. Covers and lids of containers
6. Labels
7. (Un)loading area
8. Structural integrity of cementation unit

E.5.2 Weekly

The Permittees shall conduct weekly inspections of the stabilization unit including weeks when no treatment occurs. The Permittees shall inspect and record the following items, as applicable:

1. General IRF information (Items 1-7)
2. Communications equipment
3. Warning signs
4. Security
5. Work surfaces and floors
6. Spill/fire equipment
7. Eyewashes and safety showers
8. Secondary containment structures
9. Covers and lids of containers
10. Labels
11. (Un)loading area
12. Structural integrity of cementation unit

E.6 INSPECTION AND MONITORING FOR UNITS SUBJECT TO SUBPART AA REQUIREMENTS

Inspection and monitoring requirements for units subject to 40 CFR Part 264, Subpart AA, are addressed, if applicable, in the TA-specific Sections of this Attachment.

E.7 INSPECTION AND MONITORING FOR UNITS SUBJECT TO SUBPART BB REQUIREMENTS

The Permittees shall inspect units subject to 40 CFR Part 264, Subpart BB, according to the schedule and procedures provided below

E.7.1 Requirements for Pumps in Light Liquid Service

1. The Permittees shall perform leak detection monitoring monthly using Reference Method 21 in 40 CFR Part 60.

2. The Permittees shall perform visual inspection for liquids dripping from the pump seal each week.

3. If a leak is detected, the Permittees shall initiate repairs no later than within 5 days and complete them as soon as possible, but no later than 15 days.

4. A delay of repair is allowed if the repair is technically infeasible without shutting down the unit, and/or if the leaking equipment is isolated from the unit and does not contain or contact hazardous waste with greater than or equal to 10% by weight organics.

E.7.2 Requirements for Pressure Relief Devices In Gas/Vapor Service

1. The Permittees shall measure and monitor devices to ensure that they are operated with no detectable emissions (less than 500 parts per million (ppm) above background) using Reference Method 21 in 40 CFR Part 60.

2. The Permittees shall perform measurement and monitoring as soon as practicable, but no later than 5 days after a pressure release.

3. A delay of repair is allowed if the repair is technically infeasible without shutting down the unit, or if the leaking equipment is isolated from the unit and does not contain or contact hazardous waste with greater than or equal to 10% by weight organics.

E.7.3 Requirements for Open-ended Valves or Lines

1. The Permittees shall ensure that open-ended valves or lines are equipped with a cap, blind flange, or plug.

2. The Permittees shall ensure that all caps, blind flanges, or plugs are sealed except during operations requiring movement of hazardous waste through the open-ended valve or line.

E.7.4 Requirements for Valves in Gas/Vapor or Light Liquid Service

The Permittees shall perform leak detection monitoring monthly using Reference Method 21 in 40 CFR Part 60. If no leaks are detected for two successive months, monitoring frequency may be changed to the first month of every succeeding quarter unless a leak is detected. Should that occur, monitoring frequency shall return to monthly until no leaks are detected for two successive months.

Alternatively, and following notification to the Department, if 2% or fewer valves are found to be leaking after two consecutive quarters, monitoring frequency may be changed to once every six months. If 2% or fewer valves are found to be leaking after five consecutive quarters, monitoring frequency may be changed to annually. Should the percentage of leaking valves exceed 2%, the Permittees shall perform monitoring monthly.

Alternatively, and following notification to the Department, no more than 2% of valves may be allowed to leak if the Permittees conduct performance testing pursuant to 40 CFR § 264.1061 initially, annually, and upon the Department's request to ensure that the leak percentage is being met. Should use of this alternative discontinue, the Permittees shall notify the Department within 15 days.

If a leak is detected, the Permittees shall initiate repair(s) no later than within 5 days and complete them as soon as possible, but no later than 15 days. A delay of repair is allowed if the repair is technically infeasible without shutting down the unit, if the leaking equipment is isolated from the unit and does not contain or contact hazardous waste with greater than or equal to 10% by weight organics, if purged emissions from immediate repair would exceed emissions from delaying repair, or if insufficient valve repair supplies exist although adequately stocked normally and the next unit shutdown is within 6 months.

E.7.5 Requirements for Pressure Relief Devices in Light Liquid Service, Flanges and Other Connectors

The Permittees shall conduct monitoring within 5 days of identifying a potential leak by visual, audible, olfactory, or other method. If a leak is detected by an instrument reading of 10,000 ppm or greater, the Permittees shall initiate repairs within 5 days and complete them as soon as possible, but no later than 15 days. No monitoring is required for inaccessible, glass, or glass-lined connectors.

E.8 INSPECTION AND MONITORING FOR UNITS SUBJECT TO SUBPART CC REQUIREMENTS

The Permittees shall inspect units subject to 40 CFR Part 264, Subpart CC, according to the schedule and procedures provided below.

Container Levels that may be present at the storage areas are defined as follows:

Container Level 1- The volume of the container in direct contact with waste is greater than $0.1m^3$ and less than or equal to $0.46m^3$, or the volume of the container is greater than $0.46m^3$ and not in light material service. The container must also be either: (1) compliant with the applicable Department of Transportation (DOT) regulations (40 CFR § 264.1086(f)); (2) equipped with a cover and closure devices that form a continuous barrier so that, when closed, no visible holes, gaps, or open spaces into the interior of the container are evident; or (3) an open-top container with an organic vapor suppressing barrier that precludes exposure of waste to the atmosphere.

Container Level 2- The volume of the container in direct contact with waste is greater than $0.46m^3$ and is in light material service. The container also must be either: (1) compliant with the

applicable DOT regulations (40 CFR § 264.1086(f)); (2) capable of operation with no detectable organic emissions as determined by the procedure specified at 40 CFR § 264.1086(g); or (3) demonstrated to be vapor-tight within the past 12 months using 40 CFR 60, Appendix A, Method 27 and the procedure specified at 40 CFR § 264.1086(h).

Container Level 1 Inspection Requirements

The Permittees shall inspect and maintain containers in Container Level 1 as follows:

If waste is already in the container when received:

1. On or before the date the container is accepted at the facility, the Permittees shall perform a visual inspection of the container, cover, and closure devices for visible cracks, holes, gaps, and other open spaces into the interior when cover and closure devices are secured in closed position.

2. If a defect is detected, the Permittees shall initiate repair(s) within 24 hours and complete them as soon as possible, but no more than 5 days. If defect(s) are not completely repaired within 5 days, the Permittees shall remove waste and the container shall not be used until the defect(s) has been repaired.

If waste remains in storage for greater than or equal to 1 year:

1. The Permittees shall perform a visual inspection of the container at initial receipt and at least once every 12 months.

2. If a defect is detected, the Permittees shall initiate repair(s) within the 24 hours and complete them as soon as possible, but no later than 5 days. If the defect(s) is not completely repaired within 5 days, the Permittees shall remove the waste and the container shall not be used until the defect(s) have been repaired.

Container Level 2 Inspection Requirements

The Permittees shall inspect and maintain containers in Container Level 2 as follows:

If waste is already in the container when received:

1. On or before the date the container is accepted at the facility, the Permittees shall perform a visual inspection of the container, cover, and closure devices for visible cracks, holes, gaps, and other open spaces into the interior when cover and closure devices are secured in a closed position.

2. If a defect(s) is detected, the Permittees shall initiate repair(s) within 24 hours and complete them as soon as possible, but no later than 5 days. If defect(s) are not completely repaired within 5 days, the Permittees shall remove waste and the container shall not be used until the defect(s) have been repaired.

If waste remains in storage for greater than or equal to 1 year:

1. The Permittees shall perform a visual inspection of the container at initial receipt and at least once every 12 months.

2. If a defect(s) is detected, the Permittees shall initiate repair(s) within 24 hours and complete them as soon as possible, but no later than 5 days. If defect(s) are not completely repaired within 5 days, the Permittees shall remove the associated waste and the container shall not be used until the defect(s) have been repaired.

The Permittees shall minimize exposure of hazardous waste to the atmosphere in the process of waste transference in or out of containers.

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HAZARDOUS AND MIXED WASTE FACILITY INSPECTION RECORD FORM

[1] FACILITY:	[2] Site ID #:	TREATMENT, STORAGE, OR DISPOSAL UNIT (TSD)	[3] START DATE:	[4] END DATE:

[5] ☐Containers ☐Landfill ☐Chemical Treatment ☐Tank ☐Miscellaneous Unit (OB/OD, Cementation)

PART I- Enter condition of the item inspected (i.e. **OK**, **NA** [Not Applicable], or **AR** [Action Required]) in column for day inspected.

ITEM	INSPECTED FOR:	MON	TUE	WED	THU	FRI	SAT	SUN
All TSDs								
[6] NO UNIT USE	No waste stored							
[7] NO WASTE HANDLING	No waste handled/treated (see instructions)							
[8] COMMUNICATIONS EQUIPMENT	Availability and proper operating condition							
[9] WARNING SIGNS	Posted, legible, and bilingual							
[10] SECURITY	Good condition of fences, gates, locks, and other access control equipment							
[11] WORK SURFACES/ FLOORS/ROADS	Absence of conditions that could lead to an accident or spill							
[12] SPILL/FIRE EQUIPMENT	Present, appropriate, and in proper operating condition							
[13] EYEWASHES/ SAFETY SHOWERS	Proper operating condition							
[14] WIND SOCK	Proper operating condition and no damage							
[15] SECONDARY CONTAINMENT	Integrity- No standing water/waste, erosion, or other signs of a spill							
[16] (UN)LOADING AREA	No spills or deterioration							
[17] RUN-ON/OFF CONTROL	Integrity- no ponding, erosion, or damage							
Container Storage Units and/or Tanks (see instructions)								
[18] COVERS/LIDS OF CONTAINERS	Closed and secured properly							
[19] LABELS	Proper labels with start date, present & legible							
[20] COMPATIBILITY	Separated according to compatibility							
[21] INTEGRITY	No leakage, deterioration, corrosion, or damage							
[22] AISLE SPACE/STACKING	Appropriateness and adequacy							
[23] PALLETS AND RAISED CONTAINERS	Absence of conditions that could result in failure							
[24] TANK SYSTEMS	Discharge controls and fill level and no corrosion or leakage							
Other TSDs								
[25] SHAFTS/LANDFILL COVERS	Presence and condition of cover							
[26] OPEN BURNING UNITS	Condition of cover, and no erosion, leakage, or deterioration							
[27] OPEN DETONATION UNITS	Unit and vegetation condition and no erosion							
[28] CEMENTATION UNITS	Structural integrity and condition of equipment and systems							

HAZARDOUS AND MIXED WASTE FACILITY INSPECTION RECORD FORM

FACILITY:	Site ID #:	START DATE:	END DATE:

	MON	TUE	WED	THU	FRI	SAT	SUN
[29] DATE							
[30] TIME							
[31] INSPECTOR(S)							

Part II- For any AR (Action Required) in PART I, describe below: action required, action taken, date, and time of action. Attach additional sheets if necessary. If more than one action is required, number each AR.

[32]

Part III- Comments.

[33]

Part I

Weekly and daily inspection of TSDs will be conducted in accordance with the inspection plan in the LANL Hazardous Waste Facility Permit, (Attachment E) or in the most recent permit application for interim status units, as appropriate. Not all items in this section will apply to all facilities. An "NA" (not applicable) is required if the item does not apply. Facilities may shade parts of the form to indicate items that need to be completed only on a weekly basis. Holidays and Laboratory closures may also be noted (e.g., by writing "H" (for holidays) or "Closed" in the first box and drawing a line all the way down the page).

All boxes within the column for the day of the inspection are required to be filled. However, a column may be left blank on days when operations are not conducted.

1. Location information, including TA, building, room (if applicable), and any other location descriptors that may be necessary (*e.g.*, TA-59-3-114 or TA-59-1-S, Dock).
2. A site identification number is assigned to every facility by the Resource Conservation and Recovery Act (RCRA) compliance personnel. This allows for ease in identification.
3. Start date of Monday for the week of record.
4. End date of Sunday for the week of record.
5. Check the appropriate box for the type of operation. Several boxes may be checked, if necessary, for those locations where inspections are combined on a single sheet. You must have prior approval from RCRA compliance personnel to combine inspections for more than one unit.
6. For container storage units only – "NO UNIT USE" may be checked (or marked "OK") if waste was not stored at the unit for the week in question. When this box is checked, the individual responsible for the inspection must only complete this box, the items related to site location (Items 1-5), and the inspector name section for that week (Items 29-31). If any hazardous or mixed waste is subsequently placed at the site for any reason, a full inspection must be performed immediately and then subsequently according to the appropriate inspection plan.
7.
    a. At a container storage unit if waste is in storage but no waste is handled at the unit for the week– "NO WASTE HANDLING" may be checked, but a weekly inspection in accordance with the appropriate inspection plan must be conducted.
    b. If a treatment unit is not conducting treatment for the week – "NO WASTE HANDLING" may be checked, but a weekly inspection in accordance with the appropriate inspection plan must be conducted.
    c. For a tank storage system unit, if no waste is being stored and the tank system is empty, "NO WASTE HANDLING" may be checked. However, a weekly inspection in accordance with the appropriate inspection plan must be conducted. (If any hazardous or mixed waste is subsequently placed in the tank for any reason, full inspection must be performed immediately and then subsequently according to the appropriate inspection plan.

8. Communication equipment must be inspected in order to ensure availability and proper operating condition for each piece of equipment (*e.g.*, telephones, radios, and alarms). Equipment must be present in accordance with the appropriate contingency plan.
9. Required signs must be legible and prominently posted in accordance with 40 CFR § 264.14(c) and/or the permit as applicable. Warning signs at all gates and perimeter fences where present around permitted units, must be posted in bilingual (In English and Spanish), must be visible from a distance of at least 25 feet and from all angles. Warning signs along shared boundaries with the Facilities permitted unit and the pueblo of San Ildefonso shall be posed in the appropriate dialect of Tewa, equivalent to the bilingual warning signs (See Permit Section 2.5.1 (Warning Signs)). Signs at large outdoor storage areas will be inspected no less than two times per year to evaluate for deterioration.
10. Site security must be verified. Items such as fences, gates, locks, and other access control equipment (as appropriate) should be checked for proper operating condition or mitigative measures (e.g., attendants, locks, prohibited or controlled roadway access). (See Permit Section 2.5 (Security))
11. Roads, process floors, and other work surfaces at TSDs must be inspected for any conditions that could lead to a spill or an accident. Inspection includes structures and base materials and malfunctions, deterioration (e.g., tears in dome fabric), operator errors, and discharges.
12. Hazardous or mixed waste TSDs must have fire control and spill control equipment. Equipment must be present, in proper operating condition, and appropriate for the material in question. Hose bibs, where present, should be inspected for proper operating condition and adequate pressure. Outdoor fire-water supply systems must be checked for freezing and damage. Equipment must be inspected and present in accordance with the appropriate inspection and contingency plans. (Attachment D (contingency Plan) of the Permit includes a list of required equipment specific to each permitted unit.)
13. Where present, eyewashes and safety showers must be inspected to ensure proper operating condition or that scheduled routine inspections have been conducted and documented as indicated at the eyewash or safety shower. Outdoor locations must be checked for freezing.
14. Wind socks, where present at outside TSDs, must be inspected to ensure that they are in proper operating condition/functional and checked for damage.
15. Secondary containment structures for hazardous or mixed waste operations must be inspected to verify proper operating condition and to ensure adequate capacity. Structures must also be inspected for the presence of standing water or hazardous/mixed waste or any other indication of a spill (*i.e.* discolored vegetation, soil, or concrete). For certain operations, secondary containment includes inspection of gloves, gloveboxes, hoods, and ventilation systems. For locations where inflatable "Porta Berms" are used, inspectors must ensure that they are adequately inflated. All monitoring and leak detection systems must also be checked. (Note: Dome 224 must be checked for liquids even though a liner is not considered secondary containment.)
16. Loading and unloading areas must be inspected daily when in use for signs of damage or deterioration that may lead to an accident or spill. This includes asphalt covered areas and areas where containers or tanks are handled or the contents thereof are transferred, including doorways or entry ways (Permit Section 2.6.1).

17. Run-on and runoff controls, wherever present, must be checked. The integrity should be inspected by looking for signs of damage, erosion, ponding, or any other conditions that could lead to a spill or an accident.
18. All tanks and containers used for storing hazardous or mixed waste must have the cover or lid securely in place. Containers are not considered to be closed until the lid/cover is fastened in the manner the manufacturer originally intended. However, the lid may be off of a tank or container while waste is being placed into or removed from a container.
19. All containers and tanks containing hazardous or mixed waste must be labeled with the words "HAZARDOUS WASTE," and EPA Hazardous Waste Numbers or hazardous waste constituents. They must also be marked with a legible accumulation start date. All containers must be dated when they arrive at the facility and no hazardous or mixed waste may be stored for over one year, unless specifically exempted. All containers holding mixed waste shall be labeled "Radioactive" and all containers with any amount of free liquids must be labeled as such.
20. All hazardous or mixed waste containers holding materials that may be incompatible with any other materials at that location must be separated from those materials by dikes, berms, or other physical barriers to prevent a possible reaction (e.g., when ignitable or corrosive wastes are segregated by signage or other physical boundary or marking).
21. All containers and tanks must be checked for structural integrity, leakage, corrosion, or damage that may impact integrity. This includes checking the condition of all construction materials, fixtures, seams, and auxiliary equipment. There are special inspection criteria for tank systems (see Item 24 below).
22. Adequate aisle space must be maintained to allow for inspection and for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency. Containers of hazardous and mixed waste must be stored in a manner that ensures a minimum 2-foot aisle space and containers may not be stacked more than 3 high, unless otherwise specified for the facility (*i.e.* some units within the LANL Hazardous Waste Facility Permit must have an aisle space of 28 inches and only 55 gallon drums may be stored three high). Please consult RCRA compliance personnel for permit related questions.
23. Hazardous or mixed waste containers stored at TSDs must be on pallets, elevated, or otherwise raised to be protected from contact with accumulated liquid.

TANKS SYSTEMS:

24. For tank systems used for treatment or storage of hazardous or mixed waste, all aboveground portions of the tank system, including any and all ancillary plumbing, must be inspected for signs of leaking, corrosion, deterioration, or improper operation. Tanks must be operated with a minimum freeboard of 6 inches. If the tank system includes discharge controls, overtopping controls, tank level alarms, or other monitoring equipment, including leak detection equipment, all controls and relevant data must be checked to ensure they are operating properly and that operation is within design specifications for the system.

SHAFTS:

25. Shafts used for retrievable storage should have their covers securely in place and the surrounding area should show no evidence of erosion. Disposal shafts and shafts used for retrievable storage should have their covers securely in place and, during waste handling operations, guard rails must be installed and in good condition. Landfill covers must be inspected at least weekly and after storms for evidence of erosion, subsidence, and water intrusion.

OPEN BURNING UNITS:

26. Open burning units must be inspected for deterioration, leakage, vegetation in the immediate vicinity that could catch fire, and assure that the unit is covered when not in use. Inspectors must also look for explosives and debris not consumed during the burn.

OPEN DETONATION UNITS:

27. Open detonation units must be inspected for deterioration, leakage, or vegetation in the immediate vicinity that could catch fire. Inspectors must also look for explosives and debris not consumed by the detonation.

STABILIZATION UNITS:

28. The structural integrity and condition of equipment and systems must be inspected on stabilization units. Units must also be inspected for signs of leaking, corrosion, deterioration, or improper operation.

FOR ALL INSPECTIONS:

29. Record of the date of the current inspection. Only one date is given for each inspection, whether a team or an individual performs the inspection.
30. Record of the time of the current inspection. Only one time is given for each inspection, whether a team or an individual performs the inspection.
31. Legible and/or printed name of each inspector involved in the current inspection.

PART II

List any action required.

32. Document any action taken immediately and express any plans for future action to be taken. Also, ensure that previous ARs are closed out with completed actions described. If the AR has not been resolved, ensure that it is carried over to the current inspection. Status should be provided for both open and closed items. If necessary, attach additional sheets to inspection record form to efficiently cover the action taken or required. Printouts and data base or other documentation may be included as necessary. Initial any information or comments added, and if more than one action is required or conducted, assign a number to each AR.

PART III

Identify any comments.

33. Document informational comments and any status associated with the current inspection that does not require specific regulatory action or remedies applicable to the LANL Hazardous Waste Facility Permit specific to permit application (in the case of interim status units).

TA-50

ATTACHMENT E

INSPECTION PLAN

WCRRF STORMWATER DRAINAGE

ATTACHMENT E

INSPECTION PLAN

This Attachment Section presents additional inspection requirements applicable to the waste management units at Technical Area (TA) 50-69. The Permittees shall conduct inspection at the frequency specified in the General Inspection Section to identify problems in time to correct them before they harm human health or the environment.

E.1 WCRRF STORMWATER DRAINAGE

The WCRRF storm water drainage swales located in the vicinity are utilized to divert storm water away from the TA-50-69 pad. One drainage swale is located just south of the permitted unit or, between it and the Material Disposal Area (MDA) C. A second drainage swale is located on the west side of the permitted unit between Pecos Drive and the TA-50 fence line.

E.1.1 STORAGE TANK SYSTEM

The Permittees shall inspect the WCRRF storm water drainage annually. The drainage swales must be inspected for signs of deterioration to ensure that potential run-on is directed away from the facility for the following areas:

- South of TA-50-69 between TA50-69 and Material Disposal Area (MDA) C
- West of TA-50-69 between Pecos Drive and the TA-50 fence line

MONTHLY AREA L, DOME 215 HOLDING TANK INSPECTION FORM

Month	Fluids detected in Dome 215 holding tank?	Printed Name of Inspector	Signature of Inspector	Date of Inspection
January	☐ YES ☐ NO			
February	☐ YES ☐ NO			
March	☐ YES ☐ NO			
April	☐ YES ☐ NO			
May	☐ YES ☐ NO			
June	☐ YES ☐ NO			
July	☐ YES ☐ NO			
August	☐ YES ☐ NO			
September	☐ YES ☐ NO			
October	☐ YES ☐ NO			
November	☐ YES ☐ NO			
December	☐ YES ☐ NO			

Comments: _____

_____

_____

_____

_____

_____

Reviewed By:

_____ / _____ / _____ / _____

SOM/Designee (print) Signature Z# Date

ANNUAL WCRRF STORMWATER DRAINAGE INSPECTION FORM

Date: _____

Inspection	SAT / UNSAT
Drainage swales south of TA-50-69 between TA-50-69 and Material Disposal Area (MDA) C show no signs of deterioration and will direct potential stormwater away from the facility.	☐ SAT ☐ UNSAT
Drainage swales west of TA-50-69, between Pecos Drive and the TA-50 fence line show no signs of deterioration and will direct potential stormwater away from the facility.	☐ SAT ☐ UNSAT

Comments: _____

Performed By:

Inspector Name (print)	Signature	Z#	Date

Reviewed By:

RCRA Compliance (print)	Signature	Z#	Date

Reviewed By:

SOM/Designee (print)	Signature	Z#	Date

February 2016

TA-54

ATTACHMENT E

INSPECTION PLAN

TA-54
ATTACHMENT E
INSPECTION PLAN

This Attachment Section presents additional inspection requirements specific to the container storage units at Technical Area (TA) 54. The Permittees shall conduct inspections at the frequency specified in the general inspection Section to identify problems in time to correct them before they harm human health or the environment.

E.1 INSPECTION REQUIREMENTS FOR TRUPACT-II CONTAINERS

The Permittees shall visually inspect waste containers prior to their placement in the TRUPACT-II containers to ensure their integrity. The inspection shall include a close examination of the cover and closure devices for visible cracks, holes, gaps, or other open spaces into the interior of the waste container when the cover and closure devices are secured in the closed position. The TRUPACT-II shall be loaded with waste containers and sealed with a locking-ring closure mechanism. After the TRUPACT-II has been sealed, the Permittees shall inspect the outside of the TRUPACT-II to ensure its integrity and that there has been no human intervention.

E.2 INSPECTION REQUIREMENTS FOR TA-54 DOME 215 HOLDING TANK

The 10,000 gallon holding tank is located at Area L, Dome 215. The tanks is used to collect liquid that may result from fire-suppression activities and that is in excess of the capacity inside the rind wall located around the dome to prevent run-on into the dome. The Permittees shall inspect the storage tank for any detectable fluids each month. If any fluids are detected in the holding tank, the Waste Management Coordinator and the Shift Operations Manager to ensure that a chemical analysis of the fluid is performed and fluid is removed within 3 days. The following inspection requirements should be applied to the monthly inspections conducted on the 10,000 gallon holding tank and shall be documented on separate forms.

TA-55

ATTACHMENT E

INSPECTION PLAN

TA-55
ATTACHMENT E
INSPECTION PLAN

This Attachment Section presents additional inspection requirements applicable to the waste management units at Technical Area (TA) 55. The Permittees shall conduct inspections at the frequency specified in the General Inspection Section to identify problems in time to correct them before they harm human health or the environment.

The Permittees shall perform daily inspections for the fences at TA-55 and document them on separate forms.

E.1 TA-55 VAULT

The Vault is a container storage unit (CSU) located in the basement at TA-55-4 and waste containers in the Vault shall only contain mixed waste. The following inspection requirements are applicable to those rooms in the Vault that store mixed waste.

E.1.1 Non-Intrusive Inspection Systems

Inspection requirements are satisfied in part by the use of continuous air monitors (CAM) located in each individual storage room within the Vault to continuously monitor airborne radioactivity levels. If a problem with a container is identified by a CAM, the Permittees shall remove that container from the Vault and inspect it in an open-front hood.

The Permittees shall ensure that information obtained during inspections and all container transfers are noted on the Vault Traffic Log Book maintained at TA-55. The Permittees shall inspect the Vault Traffic Log Book weekly to verify receipt or transfer of mixed waste from the Vault. If mixed waste is not currently being stored in the Vault and the weekly inspection indicates that no mixed waste has been received, the Permittees shall mark the Inspection Record Form (IRF) “No Use” and complete it according to the IRF instructions.

E.1.2 Intrusive Inspection Procedures

The Permittees shall ensure that the central hallway of the Vault is inspected weekly when mixed waste is in storage. The Permittees shall inspect and note the following items in weekly inspections:

1. Vault Traffic Log Book (inspected for receipt or transfer of waste)
2. Communications equipment
3. Warning signs
4. Security
5. Work surfaces and floors in central corridor
6. Spill and fire equipment
7. Secondary containment

8. (Un)loading area
9. Visual inspection of storage rooms from hallway
10. Nuclear Materials Custodian contacted to verify no alarms or problems

When containers are placed into or removed from a storage room within the Vault, the Permittees shall inspect the following items in that storage room, as appropriate:

1. Vault Traffic Log Book (inspected for receipt or transfer of waste)
2. Communication equipment
3. Warning signs
4. Security
5. Work surfaces and floors
6. Spill and fire equipment
7. Secondary containment
8. (Un)loading area
9. Nuclear Materials Custodian contacted to verify no alarms or problems
10. Emergency equipment/lighting
11. Covers/lids of containers
12. Labels
13. Accumulation start date
14. Compatibility
15. Structural integrity of containers
16. Aisle spacing/stacking
17. Pallets/raised containers

The Permittees shall record inspection results on the IRF maintained at TA-55.

E.2 STORAGE TANK SYSTEM

The Permittees shall inspect the storage tank system components located at TA-55-4, Room 401, according to the schedule provided below.

E.2.1 Daily (During Operation)

The Permittees shall inspect the storage tank system components (including ancillary equipment) at least once each operating day. An operating day includes when waste is present in the tank. In daily inspections, the Permittees shall inspect and note the following items, as applicable:

1. Work surfaces and floors
2. Secondary containment structure
3. Structural integrity of tanks and ancillary equipment
4. Labels
5. (Un)loading areas
6. All portions of tank systems to detect corrosion or releases of waste and to detect any possible malfunctions to overfill/spill control equipment, tank monitoring, and leak detection systems and data from these systems
7. Proper operating condition of tank

E.2.2 Weekly

The Permittees shall inspect storage tank system components weekly for the following items, as applicable:

1. Warning signs
2. Work surfaces and floors
3. Secondary containment structures
4. Covers and lids of tanks
5. Labels
6. Structural integrity of tanks and ancillary equipment
7. (Un)loading areas
8. All portions of tank systems to detect corrosion or releases of waste and to detect any possible malfunctions to overfill/spill control equipment, tank monitoring, and leak detection systems and data from these systems
9. Proper operating condition of tank

E.3 STABILIZATION UNIT

The Permittees shall inspect the stabilization unit located at TA-55-4, Room 401 according to the schedule provided below.

E.3.1 Daily (During Operation)

The Permittees shall inspect the stabilization unit each operating day (*i.e.*, when mixed waste is treated in the unit). In the daily inspection of the stabilization unit, the Permittees shall inspect the following items, as applicable:

1. Work surfaces and floors
2. Secondary containment structures
3. Labels
4. Structural integrity of cementation unit
5. (Un)loading area
6. Communication equipment

E.3.2 Weekly

The Permittees shall inspect the stabilization unit weekly for the following items, as applicable:

1. Warning signs
2. Work surfaces and floors
3. Secondary containment structure
4. Labels
5. Structural integrity of cementation unit
6. (Un)loading area
7. Communication equipment

E.4 ADDITIONAL INSPECTION ITEMS

The Permittees shall ensure that the items listed below are inspected monthly and documented on a separate IRF:

1. Evacuation alarms
2. Ventilation alarms
3. Fire alarms
4. Fire pumps
5. Fire extinguishers
6. Eyewashes and safety showers

Additionally, the Permittees shall inspect the fences and TA-55 access controls daily.

E.5 INSPECTION AND MONITORING FOR UNITS SUBJECT TO SUBPARTS AA AND BB REQUIREMENTS

The TA-55 CSUs are not subject to the requirements of 40 CFR Part 264, Subparts AA and BB, because they do not operate applicable process vents or equipment.