

ATTACHMENT C

ATTACHMENT C: INSPECTION SCHEDULE

The North Colony Landfarm (NCL), Tetraethyl Lead (TEL) Site, and Evaporation Ponds (EPs) 1 through 6 will be inspected at least semi-annually and after storm events yielding four or more inches of precipitation in 24 hours or less (i.e., the 24-hour 25-year rain event for Artesia, NM). Inspections will focus on identifying potential malfunctions, deterioration, operator errors, and discharges which may be causing (or may lead to) release of hazardous waste constituents to the environment or a threat to human health.

C.1 HAZARDOUS WASTE MANAGEMENT UNIT (HWMU) INSPECTIONS

The NCL, TEL, and EPs 1 through 6 do not have operating equipment so the inspections are primarily focused on the condition of the following items:

- a. security (fences, gates, locks, signs);
- b. dikes;
- c. cap or cover;
- d. run-on/run-off drainage systems;
- e. monitoring wells; and
- f. Tank 815 and ancillary equipment/structures (NCL only).

All inspections shall be recorded in an inspection log to be retained for at least three years from the date of the inspection in accordance with Permit Section II.D.1.b (Record Retention). Example inspection logs for the NCL, TEL Site, and EPs 1 through 6 are presented as Figures C-1 through C-3.

C.2 INSPECTION REQUIREMENTS FOR TANK 815 AT THE NCL

The inspections for the NCL and Tank 815 must incorporate the inspection requirements as follows:

- a. inspect the tank daily for signs of deterioration, leaks, or accumulation inside the containment areas;
- b. note daily if any overflow high alarms were sounded. If so, document all details of the event;
- c. inspect the locations where piping penetrates the secondary containment berm (south of Tank 815) weekly; and
- d. inspect appurtenances, firewalls, foundation, paint, and structure annually with inspection records retained on file for at least three years.

The Example Tank 815 Inspection Log and the Example Tank 815 Secondary Containment Inspection Log are presented as Figures C-4 and C-5, respectively, and are maintained on file in the Facility Operating Record for a minimum of ten years with the schedule and records.

Figure C-1. Example North Colony Landfarm Inspection Log

At least semi-annually and after major storm events¹ – the following should be inspected, observations recorded, and repairs made if necessary.

Inspection Item	Yes	No	N/A	Comments
Dikes				
1. Is there evidence of surface erosion?				
2. Is the dike height approximately 3 feet all around the exterior as compared to exterior grade?				
3. Is there evidence of burrowing animals?				
4. Is there deep-rooted vegetation (trees, bushes) that needs removal?				
Tank 815				
5. Is there evidence of spills, leaks, deterioration, overfills or accumulation within the containment area?				
6. Is the dike height approximately 6 feet all around the exterior?				
7. Is there evidence of leakage from above-ground piping or piping that penetrates through the earthen berm on the south side of the tank?				
Security and Control				
8. Is the integrity of the fence intact?				
9. Are the warning signs in place and legible?				
10. Any signs of vandalism or prohibited trespass?				
Monitoring Wells				
11. Is there damage to surface casing that would prevent sampling?				
12. Is there any indication of vandalism?				
13. Is there deterioration of the concrete pad?				
14. Is there evidence of standing water or subsidence of well structure?				
15. Are wells locked and locks/caps in good condition?				

Figure C-1. Example North Colony Landfarm Inspection Log (continued)

At least semi-annually and after major storm events¹ – the following should be inspected, observations recorded, and repairs made if necessary.

Inspection Item	Yes	No	N/A	Comments
Final Vegetative Cover				
17. Is there evidence of standing water?				
18. Is there erosion or evidence of burrowing animals?				
19. Is vegetation distressed? Are there areas that require re-seeding?				
20. Does grass need mowing, watering, or fertilization?				
General				
21. Is there standing water on the landfarm?				
22. Does the landfarm need to be watered (evidence of wind erosion or extreme dusting)?				
Other Observations:				
Work Memo Number:	Date Issued:		Date Completed:	
Inspection Date:	Inspector Signature:			

NOTE: This inspection log and any related work orders must be maintained for at least 3 years from the date of inspection.

¹ A major storm event is defined as yielding four or more inches of precipitation in 24 hours or less (i.e., the 24- hour 25-year rain event for Artesia, NM).

Figure C-2. Example Tetraethyl Lead Site Inspection Log

At least semi-annually and after major storm events¹ – the following should be inspected, observations recorded, and repairs made if necessary.

Inspection Item	Yes	No	N/A	Comments
Security and Control				
1. Is the integrity of the fence intact?				
2. Is the gate locked and is the lock in good condition?				
3. Are the warning signs in place and legible?				
4. Any signs of vandalism or prohibited trespass?				
Monitoring Wells (also inspect at each monitoring event)				
5. Is there damage to surface casing that would prevent sampling?				
6. Is there any indication of vandalism?				
7. Is there deterioration of the concrete pad?				
8. Is there evidence of standing water or subsidence of well structure?				
9. Are wells locked and locks/caps in good condition?				
Cap/Cover				
10. Is there evidence of differential settling of cap (standing water, slumping surfaces, radiating cracks)?				
11. Are there cracks or crevices?				
12. Is there erosion or evidence of burrowing animals?				
13. Is vegetation distressed? Are there areas that require re-seeding?				
14. Does grass need mowing, watering, or fertilization?				
General				
15. Is drainage clear of debris, overgrowth or other obstructions?				
16. Is the survey marker present and in good condition? ²			X	Use GPS surveying methods
Other Observations:				
Work Memo Number:		Date Issued:		Date Completed:
Inspection Date:		Inspector Signature:		

NOTE: This inspection log and any related work orders must be maintained for at least 3 years from the date of inspection.

¹ A major storm event is defined as yielding four or more inches of precipitation in 24 hours or less (i.e., the 24-hour 25-year rain event for Artesia, NM).

² Note that with the use of global positioning system (GPS) surveying methods at the Refinery, survey benchmarks are no longer used.

Figure C-3. Example Evaporation Pond Inspection Log

At least semiannually (unless otherwise noted) and after major storm events¹ – the following should be inspected, observations recorded, and repairs made if necessary.

Inspection Item	Yes	No	N/A	Comments
Dikes				
1. Is there evidence of surface erosion?				
2. Is there evidence of wave erosion (while ponds are active)?			X	Ponds are not active.
3. Is there evidence of burrowing animals?				
4. Is there deep-rooted vegetation (trees, bushes) that needs removal?				
5. Is there evidence of subsidence or slumping?				
6. Is there evidence of seepage or leakage?				
7. Is there evidence that erosion of the riverbank threatens dikes? ²				
Security and Control				
8. Are the integrity of the fence and gate intact?				
9. Is the gate locked and is the lock in good condition?				
10. Are the warning signs in place and legible?				
11. Any signs of vandalism or prohibited trespass?				
Monitoring Wells				
12. Is there damage to surface casing that would prevent sampling?				
13. Is there any indication of vandalism?				
14. Is there deterioration of the concrete pad?				
15. Is there evidence of standing water or subsidence of well structure?				
16. Are wells locked and locks/caps in good condition?				
General				
17. Is there standing water on the interior?				
Other Observations:				
Work Memo Number:	Date Issued:		Date Completed:	
Inspection Date:	Inspector Signature:			

NOTE: This inspection log and any related work orders must be maintained for at least 3 years from the date of inspection.

¹ A major storm event is defined as yielding four or more inches of precipitation in 24 hours or less (i.e., the 24-hour 25-year rain event for Artesia, NM).

² Dikes are threatened once riverbank erosion is at or inside the fence line.

Figure C-4. Example Tank 815 Inspection Log

Tank 815 is visually inspected daily for signs of leaks and deterioration and is thoroughly inspected annually as detailed in the Refinery's SPCC/FRP Plans and against the following checklist at a minimum.

Item	Present	None	N/A	Comments
Check Tank for Leaks, Specifically Looking For:				
1. Drip Marks				
2. Discoloration of Tank				
3. Puddles Containing Spilled or Leaked Material				
4. Corrosion				
5. Cracks				
Check Foundation For:				
6. Cracks				
7. Discoloration				
8. Puddles Containing Spilled or Leaked Material				
9. Settling				
10. Gaps Between Tank and Foundations				
11. Evidence of Vegetation				
Check Piping For:				
12. Droplets of Stored Material				
13. Discoloration				
14. Corrosion				
15. Bowing of Pipe Between Supports				
16. Evidence of Stored Material Seepage from Valves or Seals				
17. Evidence of Vegetation (Note if vegetation is stressed.)				
Other Observations:				
Work Memo Number:		Date Issued:		Date Completed:
Inspection Date:		Inspector Signature:		

NOTE: This inspection log and any related work orders must be maintained for at least 3 years from the date of inspection.

Figure C-5. Example Tank 815 Secondary Containment Inspection Log

Tank 815 Secondary Containment is visually inspected daily for accumulation in the containment area and is thoroughly inspected annually as detailed in the Refinery's SPCC/FRP Plan and against the following checklist at a minimum. Piping that penetrates the containment berm is inspected weekly.

Item	Present	None	N/A	Comments
Dike or Berm System				
1. Level of Precipitation in Dike/ Available Capacity				
2. Operational Status of Drainage Valves				
3. Puddles Containing Spilled or Leaked Material				
4. Corrosion				
5. Cracks				
6. Localized Dead Vegetation				
Secondary Containment				
7. Cracks				
8. Discoloration				
9. Puddles Containing Spilled or Leaked Material				
10. Corrosion				
11. Valve Conditions				
Retention and Drainage Ponds (as applicable)				
12. Erosion				
13. Available Capacity				
14. Presence of Spilled or Leaked Material				
15. Debris				
16. Evidence of Vegetation (Note if vegetation is stressed.)				
Other Observations:				
Work Memo Number:	Date Issued:		Date Completed:	
Inspection Date:	Inspector Signature:			

NOTE: This inspection log and any related work orders must be maintained for at least 3 years from the date of inspection.