

**ATTACHMENT 1**

**NAVAJO REFINING COMPANY ARTESIA REFINERY  
RCRA PART B POST-CLOSURE PERMIT APPLICATION  
SECTIONS 4.0 THROUGH 9.0**

## 4.0 SECURITY

[40 CFR 270.14(b)(4)]

This section describes the means by which Navajo will prevent the unknowing entry and minimize the possibility for unauthorized entry of persons or livestock onto North Colony Landfarm, the closed TEL Site or the Evaporation Ponds in accordance with §264.14.

The North Colony Landfarm and the closed TEL Site are within the fenced boundaries of the refinery. The refinery is completely surrounded by a six foot chain-link, steel post fence topped with three strands of barbed wire. Entry through the fence is through limited access gates controlled by either electronic access card or by security guards posted at the main gate 24 hours per day, 365 days per year. This exterior facility fence, and gates, are posted with signs bearing the warning "Danger - Unauthorized Personnel Keep Out". The signs are legible from at least 25 feet and can be seen from any approach to the refinery. Pictures of the fences, gates and signs around the refinery and each of the units can be found in Attachment A-3 with Part A of the application.

### 4.1 North Colony Landfarm

The refinery boundary fence (6-foot chain link topped by barbed wire) is located adjacent to the northern and western sides of the NCL. A 3-strand barbed wire fence is located along the southern boundary of the NCL. There is no fence located on the eastern side of the NCL, however the NCL is located within the overall refinery fenced enclosure. Warning signs are prominently posted around the perimeter and are noticeable from any approach. The warning legend on these signs is printed in both English and Spanish and states "Danger - Unauthorized Personnel Keep Out." The signs are legible from 25 feet.

The only entry to the NCL is through the east side of the NCL, accessible only from within the refinery property. The North Division Foreman is responsible for supervision of all activities in this plant area. The North Division Foreman, or his designee, must authorize access to the NCL.

The security measures in place for Tank 815 are as follows:

- Emergency cut-off capability is provided by manual operation of product line valving. The flow is monitored by pipeline control systems that are capable of determining if an emergency exists. Upon detection, personnel are directed to close the appropriate vales.
- Tank master flow and drain valves with outward flow of storage tank contents to the surrounding surface area are locked in the non-operating or stand-by status.
- Tank loading or unloading connections are securely capped or blind flanged when not in service for a period of six months.

#### **4.2 TEL Site (closed)**

The TEL Site is a closed hazardous waste management unit currently in Post-Closure care. The TEL Site is located entirely within the main refinery property and does not share the refinery property fence. The TEL Site is completely surrounded by a five foot 4-strand barbed wire fence with a single locked entry gate. Signs are posted on the fence and the gate in English and Spanish warning "Danger - Unauthorized Personnel Keep Out". The signs are visible from any approach and legible from a distance of 25 feet. The locked gate is opened only when Navajo personnel or contractors require entry for sampling, monitoring, maintenance or inspections. The North Division Foreman is responsible for supervision of all activities in this plant area.

#### **4.3 Evaporation Ponds**

The Evaporation Ponds are located three miles east of the main refinery on separate property owned by Navajo. The entrance to the Evaporation Ponds is via a three quarter mile dirt road off of paved state highway 82. The dirt road crosses private property (not owned by Navajo) which is fenced and gated along the highway. The gate providing access to the dirt road leading to the ponds is typically locked but not under Navajo's control and may therefore not always be locked.

The Evaporation Ponds are completely surrounded by a five foot 5-strand barbed wire fence set on steel posts. There is a single entry gate which is kept locked. Warning signs legible from 25 feet are posted in English and Spanish approximately every 1000 feet stating, "Danger - Unauthorized Personnel Keep Out".

## 5.0 INSPECTION REQUIREMENTS

[40 CFR 270.14(b)(5)]

The NCL, TEL and Evaporation Ponds will be inspected at least semiannually, and after severe storm events, per the applicable Post-Closure Plan for that unit as identified below:

- North Colony Landfarm - Tab B, Section 13.1.2; Attachment B-4, Section 3.1.3
- TEL Site - Tab B, Section 13.2.2; Attachment B-6, Section 2.2.3
- Evaporation Ponds - Tab B, Section 13.3.2; Attachment B-7, Section 4.0

The NCL, TEL and Evaporation Ponds have no operating equipment so the inspections are primarily focused on condition of the following items:

- \* Security (fences, gates, locks, signs)
- \* Dikes
- \* Cap or cover (if any)
- \* Run-on/Run-off drainage systems (if any)
- \* Monitoring wells

All inspections will be recorded in an inspection log to be retained for at least three years from the date of the inspection. The inspection log will include the date and time of inspection, the name of the inspector, a notation of the observations made and the date and nature of any repairs or other remedial actions. Examples of inspection logs for the NCL, TEL and Evaporation Ponds are provided in the following Figures B-2 through B-4.

The inspections for the NCL and Tank 815 must incorporate the inspection requirements found in Permit Section 3.2.3.a.

Tank 815 shall be inspected in the following manner:

- A detailed review of appurtenances, firewalls, foundation, paint and structure, shall be inspected semi-annually by management personnel with inspection records retained on file for at least three years.
- The API Procedure, the Guide for Inspection for Refinery Equipment, Chapter XII - Atmospheric and Low Pressure Storage Tanks, provides basic tank inspection procedures must be used at this Facility. Tanks shall be ultrasonically tested at least every five years. More frequent and more in-depth tests must be conducted if visual inspections reveal problem areas.
- Outside of the tanks shall be visually inspected by operating personnel for signs of deterioration, leaks or accumulation inside the containment areas.
- Tank inspection summaries and recommendations shall be forwarded to the appropriate management personnel and copies shall be placed in the Facility Operating Record.
- Tank Inspection and Secondary Containment Checklists (Figures B-5 and B-6, respectively), schedule and records are maintained on file in the Facility

Operating Record for a minimum of ten years.

**FIGURE B-2**  
**INSPECTION LOG: NORTH COLONY LANDFARM**

At least semiannually and after major storm events the following should be inspected, observations recorded, and repairs made if necessary

Dikes:

1. Any surface erosion? \_\_\_\_\_ ; \_\_\_\_\_
2. Is the dike height approximately 3 feet all around the western portion of the NCL? \_\_\_\_\_
3. Any presence of burrowing animals? \_\_\_\_\_
4. Any deep rooted vegetation (trees, bushes) that need removed

Tank 815:

1. Evidence of spills, leaks, deterioration, overfills or accumulation within the containment area?  
\_\_\_\_\_ ; \_\_\_\_\_
2. Is the dike height approximately 6 feet all around the exterior? \_\_\_\_\_
3. Any presence of burrowing animals? \_\_\_\_\_
4. Any 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:

1. Is the integrity of the fence intact? \_\_\_\_\_
2. Are the warning signs in place (any missing) and legible? \_\_\_\_\_
3. Any signs of vandalism or prohibited trespass? \_\_\_\_\_

Monitor Wells: (also inspect at each monitoring event)

1. Any damage to surface casing that would prevent sampling? \_\_\_\_\_
2. Any indication of vandalism? \_\_\_\_\_
3. Any weathering of concrete pad? \_\_\_\_\_
4. Any evidence of standing water or subsidence of well structure? \_\_\_\_\_
5. Are wells locked and locks/caps in good condition? \_\_\_\_\_

Final Vegetative Cover ()

1. Any evidence of standing water? \_\_\_\_\_
2. Any erosion or evidence of burrowing animals? \_\_\_\_\_
3. Is vegetation distressed? Any areas that require re-seeding? \_\_\_\_\_
4. Does grass need mowing, watering, fertilization? \_\_\_\_\_

General:

1. Any standing water on the landfarm? \_\_\_\_\_

2. Does the landfarm need to be tilled? \_\_\_\_\_

3. Does the landfarm need to be watered (evidence of wind erosion extreme dusting)? \_\_\_\_\_

4. Other observations: \_\_\_\_\_

Work Memo Number: \_\_\_\_\_

Date Issued: \_\_\_\_\_ Date Completed: \_\_\_\_\_

Inspection Date: \_\_\_\_\_ Inspection Signature: \_\_\_\_\_

NOTE: this inspection log and any related work orders to be retained for at least three years from inspection date

**FIGURE B-3 INSPECTION  
LOG: TEL SITE**

At least semiannually and after major storm events the following should be inspected, observations recorded, and repairs made if necessary

Security and Control:

1. Is the integrity of the fence and gate intact? \_\_\_\_\_
2. Is the gate locked and the lock in good condition? \_\_\_\_\_
3. Are the warning signs in place (any missing) and legible? \_\_\_\_\_
4. Any signs of vandalism or prohibited trespass \_\_\_\_\_

Monitor Wells: (also inspect at each monitoring event)

1. Any damage to surface casing that would prevent sampling? \_\_\_\_\_
2. Any indication of vandalism? \_\_\_\_\_
3. Any weathering of concrete pad? \_\_\_\_\_
4. Any evidence of standing water or subsidence of well structure? \_\_\_\_\_
5. Are wells locked and locks/caps in good condition? \_\_\_\_\_

Cap/Cover

1. Any evidence of differential settling of cap (standing water, slumping surfaces, radiating cracks)? \_\_\_\_\_
2. Any cracks ,crevices? \_\_\_\_\_
3. Any erosion or evidence of burrowing animals? \_\_\_\_\_
4. Is vegetation distressed? Any areas that require re-seeding? \_\_\_\_\_
- 5 Does grass need mowing, watering, fertilization? \_\_\_\_\_

General:

1. Is drainage clear of debris, overgrowth or other obstructions? \_\_\_\_\_
2. Is the survey marker present and in good condition? \_\_\_\_\_
3. Other observations: \_\_\_\_\_

Work Memo Number: \_\_\_\_\_

Date Issued: \_\_\_\_\_ Date Completed: \_\_\_\_\_

Inspection Date: \_\_\_\_\_ Inspection Signature: \_\_\_\_\_

NOTE: this inspection log and any related work orders to be retained for at least three years from inspection date.

**FIGURE B-4 INSPECTION LOG:  
EVAPORATION PONDS**

At least monthly (unless otherwise noted) and after major storm events the following should be inspected, observations recorded, and repairs made if necessary

Dikes:

1. Any surface erosion? \_\_\_\_\_
2. Any evidence of wave erosion (while ponds are active)? \_\_\_\_\_
3. Any presence of burrowing animals? \_\_\_\_\_
4. Any deep rooted vegetation (trees, bushes) that need removed? \_\_\_\_\_
5. Any evidence of subsidence or slumping? \_\_\_\_\_
6. Any evidence of seepage or leakage? \_\_\_\_\_
7. Any evidence that erosion of riverbank threatens dikes? \_\_\_\_\_

Security and Control:

1. Is the integrity of the fence and gate intact? \_\_\_\_\_
2. Is the gate locked and the lock in good condition? \_\_\_\_\_
3. Are the warning signs in place (any missing) and legible? \_\_\_\_\_
4. Any signs of vandalism or prohibited trespass \_\_\_\_\_

Monitor Wells: (also inspect at each monitoring event)

1. Any damage to surface casing that would prevent sampling? \_\_\_\_\_
2. Any indication of vandalism? \_\_\_\_\_
3. Any weathering of concrete pad? \_\_\_\_\_
4. Any evidence of standing water or subsidence of well structure? \_\_\_\_\_
5. Are wells locked and locks/caps in good condition? \_\_\_\_\_

General:

1. Any standing water on the interior (after ponds removed from service)? \_\_\_\_\_
2. Can the survey benchmark be located and is it in good condition? \_\_\_\_\_
3. Does the landfarm need to be watered (evidence of wind erosion extreme dusting)? \_\_\_\_\_
4. Other observations: \_\_\_\_\_

Work Memo Number: \_\_\_\_\_

Date Issued: \_\_\_\_\_ Date Completed: \_\_\_\_\_

Inspection Date: \_\_\_\_\_ Inspection Signature: \_\_\_\_\_

NOTE: this inspection log and any related work orders to be retained for at least three years from inspection date.



### FIGURE B-5 TANK INSPECTION CHECKLIST

Facility Tanks are visually inspected daily and are thoroughly inspected annually as detailed in the Facility's ICP Plan. The tanks are inspected against the following checklist at a minimum:

- Check tanks for leaks, specifically looking for:
  - Drip marks
  - Discoloration of tanks
  - Puddles containing spilled or leaked material
  - Corrosion
  - Cracks
  - Localized dead vegetation
  
- Check foundation for:
  - Cracks
  - Discoloration
  - Puddles containing spilled or leaked material
  - Settling
  - Gaps between tank and foundations
  - Damage caused by vegetation roots
  
- Check piping for:
  - Droplets of stored material
  - Discoloration
  - Corrosion
  - Bowing of pipe between supports
  - Evidence of stored material seepage from valves or seals
  - Localized dead vegetation

Records of the annual inspection are maintained as part of the Facility's ICP Plan. These records are available for review at any time at the Facility office.

Inspection Date: \_\_\_\_\_ Inspection Signature: \_\_\_\_\_

NOTE: this inspection log and any related work orders to be retained for at least three years from inspection date.

## FIGURE B-6 SECONDARY CONTAINMENT CHECKLIST

Facility Secondary Containment systems are visually inspected daily and are thoroughly inspected annually as detailed in the Facility's ICP. The Secondary Containment systems are inspected against the following checklist at a minimum:

- Dike or berm system
  - Level of precipitation in dike/available capacity
  - Operational status of drainage valves
  - Dike or berm permeability
  - Debris
  - Erosion
  - Permeability of the earthen floor of diked area
  - Location/status of pipes, inlets, drainage beneath tanks, etc.
  
- Secondary containment
  - Cracks
  - Discoloration
  - Presence of spilled or leaked material (standing liquid)
  - Corrosion
  - Valve conditions
  
- Retention and drainage ponds (as applicable)
  - Erosion
  - Available capacity
  - Presence of spilled or leaked material
  - Debris
  - Stressed vegetation

Records of the annual inspection are maintained as part of the Facility's ICP Plan. These records are available for review at any time at the Facility office.

Inspection Date: \_\_\_\_\_ Inspection Signature: \_\_\_\_\_

NOTE: this inspection log and any related work orders to be retained for at least three years from inspection date.

## 6.0 PREPAREDNESS AND PREVENTION

[40 CFR 270.14(b)(6)]

Navajo has no active hazardous waste treatment, storage, or disposal facilities. The North Colony Landfarm received its last application of waste in September 1990, and no waste remains stored at the site. Closure activities are complete at the North Colony Landfarm and the site is undergoing post-closure care. At the North Colony Landfarm, existing Tank 815 is used to store ultra low sulfur diesel (ULSD) fuel. The TEL Site was closed in 1989 and is in post-closure care. The Evaporation Ponds no longer receive any wastewater. Wastes are no longer handled at these facilities so there are no hazards posed which could require any of the preparedness and prevention measures identified in §264 Subpart C. Requirements of this section are generally satisfied by the facility ICP and Contingency Plan presented in the following Section 7.0, therefore Navajo requests a waiver from the preparedness and prevention requirements of part 264 Subpart C.

**7.0 CONTINGENCY PLAN**  
[40 CFR 270.14(b)(7)]

The facility has developed and maintains an Integrated Contingency Plan (ICP) designed to satisfy requirements of the Spill Prevention, Control, and Countermeasure (SPCC) Plan and a Facility Response Plan (FRP) rules at 40 CFR Part 112 requirements. This document is relevant to the RCRA permit in that it guides emergency and spill prevention, preparedness and response activities at the site and specifically addresses these issues relative to Tank 815 (. The ICP replaces the previous SPCC and FRP, The facility also maintains a contingency plan in compliance with any generator standards required by 40 CFR 262. There are no active hazardous waste treatment, storage or disposal operations at the facility. At the North Colony Landfarm, existing Tank 815 is used to store ultra low sulfur diesel (ULSD) fuel.

## 8.0 HAZARD PREVENTION

[40 CFR 270.14(b)(8)]

This permitting requirement (40 CFR 270.14(b)(8)) requires a description of hazard prevention measures that will be taken at the facility when operating hazardous waste units. Specifically, it requires a description of procedures, structures, or equipment used at the facility to:

- (i) Prevent hazards in unloading operations;
- (ii) Mitigate effects of equipment failure and power outages;
- (iii) Prevent contamination of water supplies;
- (iv) Prevent releases to atmosphere;
- (v) Prevent run-off from hazardous waste handling areas, or to prevent flooding; and
- (vi) Prevent undue exposure of personnel to hazardous waste.

The Navajo refinery is a hazardous waste generator only. Since there are no hazardous waste TSD operations, none of the above items are applicable to ongoing TSD operations. This information is not specifically required for post-closure permit applications.

Several of these items are (or will be) addressed in Closure and/or Post-Closure plans for the NCL, TEL and Evaporation Ponds (Tab-B, Section 13). Contamination of groundwater is being addressed through Corrective Action on NCL and the Evaporation Ponds. The TEL has an approved cap which prevents percolation of rainwater through the unit and potential contamination of water supplies. All three units have post-closure groundwater monitoring. The NCL has potential for a release to atmosphere (through wind-blown dust). The potential for dust generation is addressed through placement of a vegetative cover and watering. Run-on and run-off from all units is addressed through design of dikes, berms or caps, and in post-closure care requirements.

The refinery has in place a variety of safety and risk management procedures intended to minimize hazards associated with operating the refinery. These include various training programs and unit operating procedures as well as ICP provided as Appendix 2 and 3.

**9.0 PREVENTION OF ACCIDENTAL IGNITION / REACTION**  
[40 CFR 270.14(b)(9)]

Navajo has no active hazardous waste management units and therefore manages no ignitable, reactive, or incompatible wastes for which this section would be applicable.

The refinery has in place a variety of safety and risk management procedures intended to minimize hazards associated with operating the refinery. These include various training programs and unit operating procedures as well as ICP provided as Appendix 2 and 3.