

New Mexico Environment Department
September 2003

Navajo Refining Company
RCRA Permit No. NMD048918817

ATTACHMENT 1

NAVAJO REFINING COMPANY ARTESIA REFINERY
RCRA PART B POST-CLOSURE PERMIT APPLICATION
SECTIONS 4.0 THROUGH 9.0, APPENDIX 2 AND APPENDIX 3

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 north and west sides of the NCL are bounded by the refinery property boundary and are fenced as described above. The remaining two sides are enclosed by a five foot , four strand barbed wire fence. 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 a single locked galvanized steel gate on the east side of the NCL, accessible only from within the refinery property. 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. The North Division Foreman, or his designee, must authorize access to the NCL.

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 Figures B2-B4 on the next pages.

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 exterior? _____
3. Any presence of burrowing animals? _____
4. Any deep rooted vegetation (trees, bushes) that need removed? _____

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? _____

Final Vegetative Cover (when placed)

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.

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. 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 SPCC Plan 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 maintains a *Spill Prevention, Control, and Countermeasures (SPCC) Plan* and a *Facility Response Plan* in compliance with 40 CFR Part 112 requirements. 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, therefore no specific changes to these plans are necessary for compliance with this section. The SPCC plan is effective for all units at the refinery.

The *Spill Prevention, Control, and Countermeasures (SPCC) Plan* and *Facility Response Plan* are found in Appendix-2 and -3.

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 is the only unit with potential for release to atmosphere (through wind-blown dust) and the closure/post-closure plan addresses this potential 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 SPCC and Facility Response Plan 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 SPCC and Facility Response Plan provided as Appendix 2 and 3.

**NAVAJO REFINING COMPANY
ARTESIA, NEW MEXICO REFINERY**

**RCRA PERMIT APPLICATION
TECHNICAL RESOURCE DOCUMENTS**

APPENDIX 2

**SPILL PREVENTION, CONTROL,
and
COUNTERMEASURES PLAN
(September 1997)**

June 2001



RECEIVED

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CH2M HILL HOUSTON OFFICE

SPILL PREVENTION CONTROL

AND

COUNTERMEASURE PLAN

NAVAJO REFINING COMPANY

ARTESIA REFINERY

Prepared by

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Waid and Associates
March 2001

Copy No. 11

CERTIFICATION PAGE

Facility Information

- Name of Facility: Navajo Refining Company - Artesia
P. O. Box 159
Artesia, NM 88211-0159
- Physical Address: Navajo Refining Company - Artesia
501 East Main Street
Artesia, NM 88211-0159
- Name and Address of Owner/
Operator: Holly Corporation
100 Crescent Court, Suite 1600
Dallas, TX 75201-1800
- Date of Initial Operation: 1920's
- Designated person accountable for
oil spill prevention at this facility: Randy Howes
Refinery Vice President/Manager
- Directions to Facility: The Facility is located in the northeast quadrant of the city
of Artesia on U. S. Highway 82 in Eddy County, New
Mexico
- This Facility did not experience a reportable oil spill event during the 12 months prior to
January 10, 1974 (effective date of 40 CFR Part 112).

Management Approval

- The spill prevention, control, and countermeasures for the referenced facilities will be implemented and maintained as described in this Spill Prevention, Control, and Countermeasures (SPCC) Plan.

The manpower, equipment, and materials required to control and remove any quantity of oil that may be discharged are hereby authorized.

Signature: _____

Date: _____

Name: Randy Howes

Title: Refinery Vice President/Manager

Certification

I hereby certify that:

- I am familiar with the requirements of 40 CFR Part 112;
- I have examined the facility;
- This Plan has been prepared in accordance with good engineering practice and the requirements of 40 CFR Part 112.

This certification shall in no way relieve the owner/operator of the duty to prepare and fully implement this Plan in accordance with 40 CFR Part 112.

(Seal)



Registered Professional Engineer

Sara A. Hutson

Sara A. Hutson, P.E.

State of New Mexico Registration No: 15037

Date: 3-29-01

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

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1.0 INTRODUCTION AND PLAN CONTENT

1.1 INTRODUCTION

Throughout this Plan the Artesia Refinery is referred to as the Facility. In some areas of this Plan it will be explicitly stated that the data are for one specific area of the Facility. Appendix A details all of the Facility-specific information including location, description of operation, Facility equipment/structures, etc.

The Facility is a petroleum refinery which processes crude oil into asphalt, diesel fuel, naphtha, gasoline, kerosene, and liquefied petroleum gas (LPG). This Facility:

- Processes crude at a rate of 60,000 barrels per day (bbls/day) (currently, but is expanding to 70,000 bbls/day).
- Receives 30,000 bbls/day of this volume from the Lovington Refinery
- Has an approximate total storage capacity of 1,256,902 barrels (bbls).
- Has an average storage volume of 500,000 to 750,000 bbls.

Loading/unloading operations are conducted on a 24 hour, seven (7) day per week basis, and consist of:

Truck Loading

- Asphalt
- Carbon Black Oil
- Diesel Fuel/Gasoline
- LPG

Rail Car Loading

- Asphalt
- Carbon Black Oil
- Diesel Fuel
- Slurry

Truck Unloading

- Asphalt
- Gas Oil
- Crude Oil
- Bulk Chemicals

Rail Car Unloading

- LPG

In the event of a spill, corrective actions would be taken immediately upon discovery in order to eliminate or mitigate a pollution incident. Section 2.0 provides the Notification Procedures and Section 3.0 provides the Spill Response Actions for the Facility. Sections 4.0 through 9.0 address the spill prevention and control practices and procedures in place at the Facility. In addition, the Facility has developed and maintains a Facility Response Plan in accordance with OPA 90.

1.2 PLAN PURPOSE/OBJECTIVES

This Spill Prevention Control and Countermeasures (SPCC) Plan is intended to provide a ready reference and guide to assist Facility personnel in establishing and maintaining an efficient and effective prevention, control, and countermeasures program for potential discharge incidents from the Facility.

1.2 PLAN PURPOSE/OBJECTIVES (Cont'd)

The specific objectives of the Plan are to:

- Define the typical Navajo Refining Company and specific Facility spill prevention control and countermeasures practices and procedures.
- Identify the designated person accountable for oil spill prevention.
- Provide notification and response procedure guidelines for the initial stages of a response effort.

1.3 PLAN DISTRIBUTION PROCEDURES

The Facility office will coordinate the distribution of this Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the cover page. A distribution list is included in the Foreword to facilitate control and to identify the current holders of the Plan.
- The Facility shall maintain a complete copy of the Plan at the Facility. The Plan will be available to the EPA Regional Administrator for on-site review during normal working hours.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

The "Designated Person Accountable for Oil Spill Prevention" (identified on the Certification Page in the Foreword), with support from the Facility office, will coordinate the following Plan review and update procedures.

Facility Changes requiring Plan Revision

- This Plan will be revised when there are changes in the Facility's design, construction, operation, or maintenance that materially affects the Facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. Such amendments shall be implemented as soon as possible, but not later than six (6) months after such change occurs.

Changes requiring revision may include, but are not limited to:

- Commission or decommission of tanks.
- Replacement, reconstruction, or movement of tanks.
- Reconstruction, replacement, or installation of piping systems.

1.4 PLAN REVIEW AND UPDATE PROCEDURES (Cont'd)

- Construction or demolition that might alter secondary containment structures and/or drainage systems.
- Revision of standard operating or maintenance procedures at the Facility.

Triennial Review

- At least once each three (3) years, the Facility will complete a review and evaluation of this SPCC Plan and make amendments within six (6) months of the review. This review will include at a minimum a review of the following:
 - Applicability of new prevention and control technology which may significantly reduce the likelihood of a spill event from the Facility if such technology has been field-proven at the time of the review.
 - Accuracy of the SPCC Plan as compared to the current Facility operation and SPCC Regulations.
 - Capacity and structural integrity of secondary containment structures.
 - Spill prevention inspections and record retention to insure continuity for a minimum period of three (3) years.

Certification of Revisions

- All amendments to this Plan, except for changes to personnel and telephone references, must be certified by a Registered Professional Engineer to satisfy the requirements of 40 CFR Part 112 (see the Certification Page).

Inclusion of Amendments into the Plan

- The Facility office will coordinate the word processing, publication, and distribution efforts of completing the revisions and maintaining the Plan.
- The **Plan holder**, immediately upon receipt of any revisions, shall review and insert the revised pages into the Plan and discard the obsolete pages. This action should then be recorded on the "Revision Record" page in the Foreword.

1.5 REGULATORY COMPLIANCE

This Plan addresses the following regulatory requirements:

- Federal Spill Prevention Control and Countermeasures Regulations: U.S. EPA Final Rule for Oil Pollution Prevention; Non-Transportation Related On-shore and Offshore Facilities (40 CFR Part 112 - as published on December 11, 1973 and modified August 25, 1993, July 1, 1994 and March 11, 1996).

1.5 REGULATORY COMPLIANCE (Cont'd)

A detailed cross reference between the format of this Plan and that of the regulations is provided in Appendix B.

General Applicability

This requirement applies to owners or operators of non-transportation-related onshore and offshore facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing or consuming oil and oil products, and that meet each of the following criteria:

- Due to their location, could reasonably be expected to discharge oil in harmful quantities into or upon the navigable waters of the United States or adjoining shorelines **and**;
- Has a single aboveground storage tank with a storage capacity in excess of 660 gallons or an aggregate aboveground storage capacity in excess of 1,320 gallons **or**;
- Has an underground storage capacity in excess of 42,000 gallons.

Submission of Plan

The Facility shall submit this SPCC Plan along with the necessary documentation (as defined in 40 CFR Part 112.4) to the EPA Regional Administrator within 60 days when the Facility has a discharge event(s) which meets one of the following conditions:

- Discharge more than 1,000 gallons of oil into or upon the navigable waters of the United States or adjoining shorelines in a single spill event **or**,
- Discharges oil in harmful quantities into or upon the navigable waters of the United States or adjoining shorelines in two spill events within any twelve month period.

Documentation to be included with this Plan submission includes the following:

- Name of the facility;
- Name(s) of the owner or operator of the facility;
- Location of the facility;
- Date and year of initial facility operation;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- Description of the facility, including plot plans, flow diagrams, and topographical maps;

1.5 REGULATORY COMPLIANCE (Cont'd)

- A complete copy of the Spill Prevention Plan with any amendments;
- The cause(s) of such spill, including a failure analysis of system or sub-system in which the failure occurred;
- The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements;
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence;
- Such other information as the Regional Administrator may reasonably require, pertinent to the Plan or spill event.

CORPORATE ENVIRONMENTAL POLICY

STATEMENT OF ENVIRONMENTAL AND SAFETY POLICY FOR HOLLY CORPORATION AND SUBSIDIARIES

1. The Company seeks to comply with all applicable laws and regulations that are intended to protect the environment or the safety of people.
2. The Company strives to protect the environment and protect the safety of people both within the Company and in the communities in which the Company operates.
3. The Company devotes substantial resources to compliance with applicable laws and regulations and to the protection of the environment and the safety of employees and the public.
4. The company devotes substantial resources to training its personnel on environmental protection matters and to prevention of and planning for accidents or spillages.
5. Necessary records on environmental and safety matters are kept accurately. Reports filed by the Company on environmental and safety matters are accurate to the best knowledge of the Company personnel involved.
6. The Company seeks to use energy and natural resources efficiently.
7. The Company will diligently investigate any assertion that it is liable for harm or for violation of laws and regulations and will take appropriate corrective action when warranted. The Company will exercise its rights to defend itself against any such assertion that the Company believes to be unjustified.
8. Employees who become aware of a situation that may be a violation of law or of the Company's policies are required to report the situation to their superiors. Company personnel who receive such a report are required in all cases to investigate the report and provide a response to the reporting employee within a reasonable time. Any employee who is dissatisfied with the response he or she receives to a report of a possible violation of law or Company policy should communicate with higher authorities within the Company.

2.0 SPILL NOTIFICATION PROCEDURES

2.1 INTERNAL NOTIFICATIONS

In the event of a reportable spill or discharge (as defined in Appendix H), the following internal notifications should be made.

In no event shall notification be delayed because the immediate supervisor is inaccessible. Authorization is given to bypass management levels if necessary to provide immediate notification to upper management.

Navajo telephone references are provided in Figure 2.2, Internal Notification References.

First Navajo Person Notified/On-Scene.

- Immediately notify **Central Dispatch** by:
- Activating the Emergency Alarm System.
- Announce twice over the operating channel for that location "(type of emergency) at (location)". Example: "Gasoline Spill at Tank 106".
- Refer to the Artesia Refinery Facility Response Plan for additional response guidance.

Shift Foreman / Division Foreman

- Coordinate response with the Safety Department.
- Notify the Environmental Affairs Officer.

Central Dispatch

- Notify the Incident Commander (Process Safety Superintendent) and the Emergency Response Team.

Incident Commander (typically the Fire Chief)

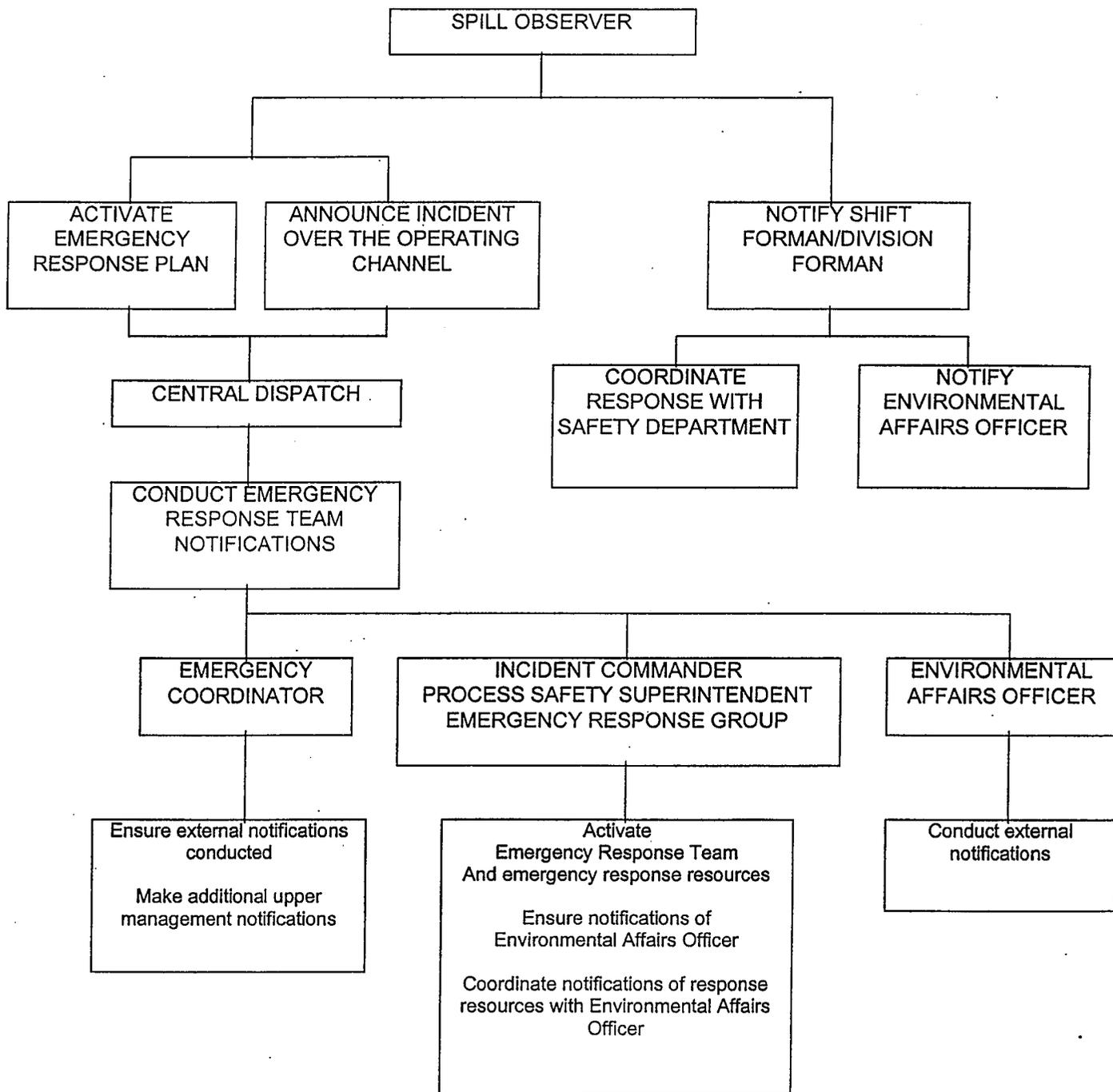
- Activate additional **Emergency Response Team** members, as the situation demands.
- Activate **local emergency response resources (Oil Spill Removal Organizations (OSRO), fire, police, medical, etc.)**.
- Ensure notification of the **Environmental Affairs Officer**.
- **Coordinate** activation of additional response and clean-up resources with the **Environmental Affairs Officer**.

Environmental Affairs Officer

- Ensure that all **regulatory/governmental agencies** and other external organizations as detailed in Section 2.2 and Figures 2.4, 2.5 have been notified.
- Make additional upper management and head office notifications as the situation demands.

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE



FAX = Facsimile Machine
MBL = Mobile Phone
PGR = Pager

FIGURE 2.2

INTERNAL NOTIFICATION REFERENCES

TITLE	NAME	LOCATION	OFFICE	HOME	CELLULAR
Artesia Refinery	---	501 East Main St. Artesia, NM 88211-0159	(505) 748-3311	---	(505) 748-9077 FAX
Operations Manager	Frank Guinan		Ext. 244	(505) 746-4559	(505) 365-7875
Risk Manager	Duke Younger		Ext. 212	(505) 748-3180	
Refinery Manager	Randy Howes		Ext. 233	(505) 746-1588	
Spill Management Team					
<i>Env. Mgr. for Water & Waste</i>	Darrell Moore	Artesia, NM	(505) 748-3311 Ext. 281	(505) 748-2455	(505) 365-8365
<i>Logistics Section Mechanical Superintendent</i>	Jessie Hilliard	Artesia, NM	(505) 748-3311 Ext. 243	(505) 746-6686	(505) 365-5736 or (505) 365-7084
AMS	David Bolding	Artesia, NM	(505) 748-3311 Ext. 354	(505) 365-2694	(505) 365-7877
Logistics Section Maintenance Department Coordinator	Oscar Sosa	Artesia, NM	(505) 748-3311 Ext. 327	(505) 746-6562	
Finance Section Purchasing Department	Manuel Madrid	Artesia, NM	(505) 748-3311 Ext. 254	(505) 746-4369	

FIGURE 2.3

NOTIFICATION DATA SHEET
SPILL REPORT (SR-2)

1. Time of Spill AM PM Date _____
2. Time Spill Reported to Shift Foreman AM PM Date _____
3. Name of Person on Duty at Time of Spill _____
- 3a. Name of Person Who Discovered Spill If Different from above _____
4. Location of Spill _____
5. Type of Spill (Material) _____
6. Quantity of Spill _____ bbl Size of Spill (Area) _____
7. Time Spill Contained _____ AM PM Date _____
8. Disposition of Spilled Material _____
9. How was the Spill Contained _____
10. Did spill leave the Facility boundary?
Yes No
11. Corrective Action Taken to Prevent Further Spills _____

12. Physical Location of Responsible Person at the Time of Spill _____
13. Department _____
14. Supervisor's Signature _____

NOTE: In order to comply with state and federal laws, the Navajo Refining Company must report spills as soon as possible. Call to report all spills as soon as possible to the refinery Environmental Department. The 24 hour phone number for the Environmental Department is (505) 365-8365 (alternate phone number: Safety Dept. (505) 365-8364). This form must be filled out completely and returned to the refinery Environmental Department whenever a spill occurs.

Form SR-2 - 4-7-95

2.2 EXTERNAL NOTIFICATION

SPILL REPORTING GUIDELINES

- Never include information which has not been verified.
- Never speculate as to the cause of an incident or make any acknowledgment of liability.
- **DOCUMENT:**
 - Agency notified
 - Date/time of notification
 - Person notified
 - Content of message given
- **DO NOT DELAY** reporting due to incomplete information.

The following external notifications should be made in accordance with federal, state, and local regulations for all reportable discharges. A "Notification Data Sheet" (Figure 2.3) should be used to facilitate documentation and data retrieval for these notifications. The Refinery Vice President/Manager shall ensure that the following "Required Notifications" and "Other Notifications" are made as the situation demands. The typical reporting flowchart is demonstrated in Figure 2.1 for internal notifications, with telephone references in Figure 2.2. The external notification flowchart is detailed in Figure 2.4, with telephone references in Figure 2.5.

Except for "ALL CALL" emergencies at night, on weekends, evenings, noon, or interior structure fires, the responsibility for calling outside agencies rests with the Incident Commander (Process Safety Superintendent), and Environmental Affairs Officer (Manager, Safety & Risk Management).

Required Notifications

- Oil Spill Removal Organization (OSRO)

*Immediately for all spills that exceed the Facility's response capabilities.
Figure 2.5 details the OSRO phone references for 24 hour contact.*

2.2 EXTERNAL NOTIFICATION (Cont'd)

- **National Response Center (NRC)**

Verbal: Immediately for all spills that impact or threaten navigable water.

(800) 424-8802 (24 hour number)

(202) 267-2675 (Alternate)

Written: In accordance with the applicable SPCC regulations, within 60 days to the U.S. Environmental Protection Agency for a spill in excess of 1,000 gallons (24 Bbls.) in a single event or two spill events within a twelve month period into or upon navigable waters of the United States or adjoining shorelines.

U.S. Environmental Protection Agency - Region VI
1445 Ross Ave.
12 th Floor, Suite 1200
Dallas, TX 75202
(214) 665-2222

- **Roswell State Police (SERC)**

Immediately for all spills that impact state waters and spills greater than one barrel to land.

(505) 827-9223 (24 hour number)

(505) 622-7200 (alternate)

Written: As requested by the agency.

- **New Mexico Energy, Minerals, and Natural Resources Department - Oil Conservation Division (OCD)**

Verbal: Immediate notification (within 24 hours) of discovery of a major release. A major release fits any of the following criteria:

- (a) *an unauthorized release of a volume, excluding natural gases, in excess of 25 barrels;*
- (b) *an unauthorized release of any volume which:*
 - (i) *results in a fire;*
 - (ii) *will reach a water course;*
 - (iii) *may with reasonable probability endanger public health; or*
 - (iv) *results in substantial damage to property or the environment;*

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

- (c) *an unauthorized release of natural gases in excess of 500 mcf; or*
- (d) *a release of any volume which may with reasonable probability be detrimental to water or cause an exceedance of the standards in 19 NMAC 15.A.19. B(1), B(2) or B(3). [3/15/97]*

Notification shall be made to the OCD District office for the area where the release occurred as well as to the OOD Environmental Bureau Chief (if water is impacted).

(505) 393-6161 (*District 1 - Hobbs, NM*)
(505) 748-1283 (*District 2 - Artesia, NM*)
(505) 334-6178 (*District 3 - Aztec, NM*)
(505) 827-7131 (*District 4 - Santa Fe, NM*)

Written: *A complete written report within 15 days of any release greater than 5 bbl or greater than 50 mcf.*

The report shall include OCD Form C-141 (see Appendix F) and be submitted to the OCD District office. If water is impacted, the report must also be submitted to the OCD Environmental Bureau Chief.

New Mexico Energy, Minerals, and Natural Resources Department - Oil Conservation Division:

District 1
1000 West Broadway
P. O. Box 1980
Hobbs, NM 88240

District 3
1000 Rio Brazos Rd.
Aztec, NM 87410

District 2
811 South 1st Street
Artesia, NM 88210

District 4
2040 South Pacheco
Santa Fe, NM 87501

Bureau of Land Management (BLM)

Verbal: *Immediately [within 24 hours] for oil, salt water, and toxic liquid spills in excess of 100 Bbls that leave the firewall or any spill in a sensitive area (i.e. parks, recreation sites, wildlife refuges, lakes, reservoirs, streams, and urban/suburban areas)*

(505) 438-7501

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

Written: Within 15 days for oil, salt water, and toxic liquid spills in excess of 10 Bbls and less than 100 Bbls or oil, salt water, and toxic liquid spills in excess of 100 Bbls contained within the firewall

Bureau of Land Management
P. O. Box 27115
Santa Fe, NM 87502-7115

Local Emergency Planning Committee (LEPC)

Verbal: Calls to the SERC concerning petroleum spills will usually alert the LEPC, however, it is advisable to notify them directly for any spill that requires notification.

Local Emergency Planning Committee (LEPC)
A. J. Hill
(505) 887-9511
(505) 887-7551

Written: As the agency may request, depending on circumstances.

Other Notifications

New Mexico Department of Game and Fish

The New Mexico Department of Fish and Game will typically be notified by the New Mexico SERC; however, it is advisable to follow up with verification that notice was received.

Occupational Safety and Health Administration (OSHA)

Within eight (8) hours for incidents involving three (3) or more hospitalizations or immediately in the event of one (1) or more deaths.

New Mexico Occupational Safety and Health Administration (OSHA)

Immediately for any hospitalizations or deaths.

U.S. Fish and Wildlife Service (USFWS)

Immediately for Wildlife Protection/Rehabilitation

Local Water Supply System

The New Mexico SERC typically notifies the Local Water Supply System. For incidents involving underground tanks or for any spill of such magnitude that the underground water sources might be impacted, it would be advisable to follow up with verification that notice was received.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications (Cont'd)

Local Emergency Services

Immediately for all Police, Fire, and Medical Emergencies

Dial 911

Artesia Police Department: (505) 746-2703 *(Alternate)*

Eddy County Sheriff - Artesia: (505) 746-9888 *(Alternate)*

Eddy County Sheriff - Carlsbad: (505) 887-7551 *(Alternate)*

Artesia Fire Department: 911 (505) 746-2701 *(Alternate)*

Ambulance Service: 911

Wildlife Rehabilitation Resources

International Bird Rescue Center (Berkeley, CA): (510) 841-9086

Tri-State Bird Rescue (Newark, NJ): (302) 737-9543

Neighbors

Directly or with assistance from local police and fire agencies, inform all adjacent businesses and private citizens that might be immediately impacted.

FIGURE 2.4

EXTERNAL NOTIFICATION FLOWCHART

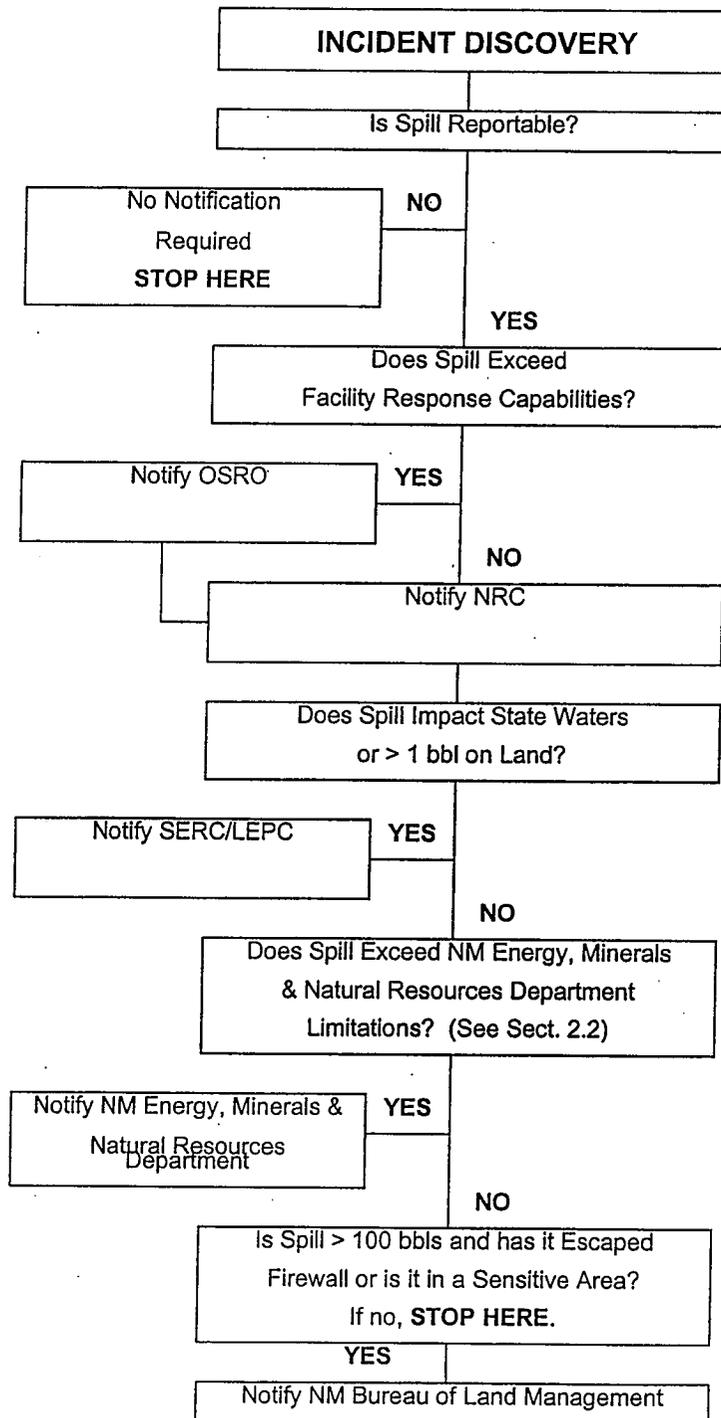


FIGURE 2.5

EXTERNAL NOTIFICATION REFERENCES

REQUIRED EXTERNAL NOTIFICATIONS			
AGENCY	LOCATION	OFFICE	ALTERNATE
National Response Center (NRC)	Washington, DC	(800) 424-8802	(202) 267-2675
Roswell State Police (SERC) - evenings, weekends, holidays	Roswell, NM	(505) 827-9223	(505) 622-7200
SERC	Santa Fe, NM	(505) 827-9223	

ASSISTANCE/ADVISORY NOTIFICATIONS (outside resources)			
AGENCY	LOCATION	OFFICE	ALTERNATE
New Mexico Department of Game and Fish	Roswell, NM	(505) 624-6135	(505) 748-3036
New Mexico OSHA Bureau	Santa Fe, NM	(505) 827-2888	
OSHA (For Reportable Injury or Death)	Washington, DC	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region VI	Dallas, TX	(214) 665-2222	
U.S. Fish and Wildlife Service (USFWS)		(505) 248-6911	
Bureau of Land Management (BLM)	Santa Fe, NM	(505) 438-7501	
New Mexico Health and Environmental Department	Santa Fe, NM	(505) 827-9329	
NM Energy, Minerals, and Natural Resources Department (OCD)	Artesia, NM (District 3)	(505) 748-1283	
New Mexico Fire Marshal	Roswell, NM	(505) 885-2111	
National Weather Service (Recorded Forecasts) (NOAA)	Roswell, NM	(505) 347-5700	
Local Emergency Planning Committee (LEPC)	Carlsbad, NM	(505) 887-9511	(505) 887-7551
Local Water Supply System	Artesia, NM	(505) 746-2122	(505) 746-2703

FIGURE 2.5 (Cont'd)

EXTERNAL NOTIFICATION REFERENCES

LOCAL EMERGENCY SERVICES			
DIAL 911 for All Police, Fire, and Ambulance Emergencies			
SERVICE	LOCATION	OFFICE	ALTERNATE
Artesia Fire Department	Artesia, NM	911	(505) 746-2701
Eddy County Sheriff	Artesia, NM	911	(505) 746-9888
Eddy County Sheriff	Carlsbad, NM	(505) 887-7551	
Artesia City Police	Artesia, NM	911	(505) 746-2703
Artesia Ambulance	Artesia, NM	911	(505) 746-2701
Artesia General Hospital	Artesia, NM	(505) 748-3333	
Eastern New Mexico Medical Center	Roswell, NM	(505) 622-1110	
Guadalupe Medical Center	Carlsbad, NM	(505) 887-4100	

OIL SPILL REMOVAL ORGANIZATIONS (OSRO)			
COMPANY	LOCATION	OFFICE	ALTERNATE
Garner Environmental Services	Dallas, TX	(817) 535-7222	(800) 442-7637
Safety & Environmental Solutions	Hobbs, NM	(505) 392-6167	(800) 390-6167
Indian Fire & Safety	Artesia, NM	(505) 393-3093	(800) 530-8693

ADDITIONAL RESPONSE RESOURCES			
COMPANY	LOCATION	OFFICE	ALTERNATE
I/W Hot Oil - Transports Service	Artesia, NM	(505) 746-4214	
O.K. Hot Oil	Loco Hills, NM	(505) 746-6233	
Gandy Corporation - Transports Service	Lovington, NM	(505) 396-4948	
Jim's Water Service - Transports Service	Artesia, NM	(505) 748-1358	(505) 748-1352

ADDITIONAL RESPONSE RESOURCES			
COMPANY	LOCATION	OFFICE	ALTERNATE
Sweatt Construction - Dirt Equip.	Artesia, NM	(505) 748-1238	
Davis Welding - Dirt Equip.	Artesia, NM	(505) 746-6306	
T & C Tank Rental - Temporary Storage	Artesia, NM	(505) 746-9788	
International Bird Rescue Center	Berkeley, CA	(510) 841-9086	
Tri-State Bird Rescue	Newark, NJ	(302) 737-9543	
KBIM - TV	Roswell, NM	(505) 622-2120	
KSVP - AM Radio	Artesia, NM	(505) 746-2751	

3.0 SPILL COUNTERMEASURES

3.1 SPILL RESPONSE ACTIONS

Protect Yourself

Personal protective equipment shall be worn by all personnel in the spill area. Use testing and sampling equipment to determine potential safety hazards.

Eliminate Ignition Sources and Restrict Access to the Spill Area

e.g., all gasoline/diesel engines (all motor vehicles), smoking, cutting/welding operations, flaming devices, and metal-to-metal contacts that could create a spark.

If Safe, Take Immediate Steps to Shut off the Spill Source

e.g., close valves, shut off pumps, and/or activate Emergency Shutdown (ESD) stations

Contain the Spill Utilizing Facility and/or Locally Available Response Equipment

Section 2.1 outlines contacts for Facility/Navajo resources and Section 2.2 outlines the local external response resources.

Assess the Spill

Utilize Figure 2.3 [Notification Data Sheet Spill Report (SR-2)] as guidance and documentation for the required data.

Notify the Supervisor

Describe the spill and any actions taken that may affect Facility operations. Internal and External Notifications will be made by designated personnel.

Clean up the Spill, as Necessary

Section 2.2 outlines the local external response resources and telephone references.

Remember, Without Exception, PERSONNEL SAFETY IS FIRST PRIORITY. Excessive Exposure to the Vapor and Liquid Stages of the Spilled Product Should Be Avoided.

4.0 TRAINING AND INSPECTIONS

4.1 PERSONNEL, TRAINING, AND SPILL PREVENTION PROCEDURES

Personnel training and spill prevention procedures are in place at the Facility and include the following:

- All maintenance and operating personnel receive on-the-job training on the proper operation and maintenance of the Facility's discharge prevention equipment.
- Navajo has a continuing program of informing operating personnel of the laws and regulations that concern pollution prevention and control. Personnel are kept informed of their obligation to prevent any pollution incident during annual training meetings and regularly scheduled safety meetings.
- All employees who work in operating areas of the refinery or have the potential to be exposed to the operating areas receive an initial 40 hours of comprehensive training emphasizing occupational safety, environmental compliance and process safety management. Each year following, employees are required to complete a computer-based training refresher program which includes a module covering the SPCC Plan. Both the initial 40-hour course and the annual Refresher Training Course are designed to comply with requirements found in:
 - 40 CFR 112.7 (e) - SPCC Plan
 - 40 CFR 112.21 - Facility Response Plan
 - 40 CFR 122.26 - Storm Water Management Plan

Common elements of all three of these programs include prevention, detection, and response to releases of oils and other hazardous materials. Training common to all three also includes emphasis on good house keeping practices (Best Management Practices), secondary containment, and prompt initial notification of an incident.

- Operation and Maintenance Manuals for major equipment are maintained in the Facility office.
- A detailed training syllabus is maintained as a part of the records kept by the Safety Training Coordinator. All training records pertinent to this program are available for inspection during normal business hours by contacting the Safety Training Coordinator.

4.2 INSPECTIONS AND RECORDS

Facility inspection and record keeping requirements are detailed throughout the pertinent sections of this Plan.

- Inspection procedures are provided in procedures manuals for the following:
 - Cathodic protection system inspections.
 - Truck inspections.
 - Tank inspections and tank alarm testing.
 - Mechanical and electrical equipment inspections.
 - Storm water discharges.
- Daily inspections of the Facility are conducted by operating personnel during routine surveillance rounds, and are documented in the Daily Checklist.
- Records of the inspections are maintained on file at the Facility for a minimum period of three (3) years.

5.0 FACILITY DRAINAGE

5.1 DIKED STORAGE AREA DRAINAGE

Drainage of accumulated storm water or other liquids which may be discharged or spilled from the storage facilities into the diked storage area is typically controlled as follows:

- The preferred method of removal of uncontaminated storm water is by natural dissipation (evaporation and percolation) provided that the accumulation does not damage the equipment/ structures or inhibit operations conducted within the containment area. The desert environment will facilitate natural dissipation.
- Accumulated water is visually inspected for oil, oil product, and/or chemical contamination (a sample Secondary Containment Checklist is provided in Appendix G) and discharged only if no contamination is observed.
- In the event that drainage of an area becomes necessary due to uncontaminated accumulated storm water, the containment area drain valves are opened and the water is drained to the Facility's surface drainage system.
- A natural diversion swale situated on the south side of the Eagle Draw provides a natural barrier to the Pecos River. This swale minimizes erosion from natural run-off, as well as uncontaminated discharged storm water, thus providing a redundant containment system.
- In the event that removal of contaminated liquids from a containment area is required, the use of a vacuum truck, pump, or other means will be evaluated for the removal. Contaminated liquids will be transferred to the API separator for oil separation and treatment in the wastewater treatment plant.
- Dike drains are secured in the closed position.
- Flapper-type drain valves are not used to drain diked areas.
- Adequate records are kept of drainage events (refer to Appendix G, Containment Area Drainage).

Loading and Unloading Areas

Drainage from the loading and unloading areas is managed as follows:

- The loading and unloading areas are equipped with open sumps which are capable of holding the contents of the single largest compartment of a rail car (30,000 gallons) or a tank truck (6,000 gallons). These sumps are pumped out via vacuum truck, as needed.

5.1 DIKED STORAGE AREA DRAINAGE (Cont'd)

Loading and Unloading Areas (Cont'd)

- The Facility's central sump system flows to one (1) of three (3) API separators for oil separation.
- Facility effluent water is monitored and discharged via injection well.
- A diagram demonstrating Facility drainage is provided in Appendix G.

5.2 UN-DIKED AREA DRAINAGE

The undiked storage area (including parking areas) are contained as follows:

- The Facility is designed so that the natural drainage would direct spills to secondary containment areas. Redundant containment is provided by a plant ditch and containment pond with a capacity of ~30,000 bbls.
- The undiked process area, as well as the diked storage areas, are visually inspected during daily operating surveillance, usually at two hour intervals.
- In the event that a small spill or discharge is discovered, actions to contain and remove the spilled liquids will commence immediately upon discovery.
- Catchment basins are not located in areas subject to periodic flooding.
- Additional storm water management and spill response measures can be found in the following:
 - Artesia Storm Water Management Plan
 - Artesia Refinery Facility Response Plan.
 - Artesia Emergency Response Plan

5.3 STORM WATER DRAINAGE PROCEDURES

Containment Area Drainage Procedures consist of:

- **Primary:** Natural Dissipation of storm water. The accumulation, however, will not be allowed to significantly impact containment capacity or the operations of facilities within the containment area.
- **Secondary:** Removal of storm water by pumping using vacuum trucks after the water has successfully passed a visual inspection for contamination. Water is pumped to the Facility's Waste Water Treatment System.

6.0 BULK STORAGE TANKS

6.1 TANK DESIGN AND CONSTRUCTION

The Facility's bulk oil and oil products storage tanks have been designed in accordance with industry standards. The tanks have the following design characteristics:

- Tanks are constructed of a material that is compatible with the oil and oil products stored and the conditions of storage.
- Tanks are constructed of welded or bolted steel to API standards.
- Tanks are operated within "Safe Fill" levels positioned below the capacity limits of the tank.
- Tanks are equipped with flame arrestors and pressure/vacuum relief, as appropriate.
- The process facilities are controlled from a control room with pressure and flow safety devices including audio and visual alarms and shut downs. These safety devices are tested regularly to ensure proper operation.
- Oil storage tanks are gaged once per day, at a minimum.
- Visible oil leaks which result in a loss of oil from tank seams, gaskets, rivets and bolts sufficiently large to cause the accumulation of oil in diked areas are promptly corrected.

6.2 SECONDARY CONTAINMENT

Facility bulk oil and oil products storage tanks and associated facilities are situated within secondary containment constructed of compacted earthen or concrete containment walls. The containment areas are designed as follows:

- The containment areas are designed to contain the contents of the single largest tank, plus sufficient freeboard to allow for precipitation.
- Diked areas are sufficiently impervious to contain spilled oil.
- A natural swale on the south face of Eagle Draw provides a barrier against spills entering the Pecos River.
- Some containment is not sufficient on its own to contain the entire volume of the largest tank. However, should the primary containment be breached, additional capacity is provided by the plant ditch and containment pond. All drainage from the plant would flow to the plant ditch and into the containment pond, which has a capacity of ~30,000 bbls. In case of discharge

6.2 SECONDARY CONTAINMENT (Cont'd)

from this containment pond the material would flow onto additional Navajo property which is also diked. The potential for a leak to reach navigable waters is miniscule.

- Additional detail on secondary containment is provided in Appendix A.

6.3 UNDERGROUND AND PARTIALLY BURIED METALLIC STORAGE TANKS

- There are no underground or partially buried metallic storage tanks at the Facility.

6.4 MOBILE OR PORTABLE OIL STORAGE TANKS

- Mobile or portable oil storage tanks are positioned or located so as to prevent spilled oil from reaching navigable waters.
- A secondary means of containment, such as dikes or catchment basins, have been furnished for the largest single compartment or tank.
- These tanks are located where they will not be subject to periodic flooding or washout.

6.5 INTERNAL HEATING COILS

- Internal heating coils are used on asphalt and heavy oil storage tanks.
- Internal heating coils do not discharge into open water courses.

6.6 TANK INSPECTION PROGRAMS

All tanks containing oil and oil products are inspected in the following manner:

- Each storage tank is inspected at least annually by management personnel. Inspection records are retained on file at the Facility for a minimum period of three (3) years. The annual inspection consists of a detailed review of the following:
 - Appurtenances
 - Firewalls
 - Foundation
 - Paint
 - Structure
- The API Procedure, the Guide for Inspection for Refinery Equipment, Chapter XII - Atmospheric and Low Pressure Storage Tanks, provides the basic tank inspection procedures used at this Facility.

6.6 TANK INSPECTION PROGRAMS (Cont'd)

- Tanks are ultrasonically tested every five (5) years at a minimum. More frequent and more in-depth tests are conducted if visual inspections reveal problem areas.
- The outside of the tanks are visually inspected by operating personnel for signs of deterioration, leaks, or accumulation inside the containment areas.
- Tank inspection summaries and recommendations are forwarded to the appropriate management personnel.
- Sample Tank Inspection Checklist and documentation forms are provided in Appendix E. The schedule and records of examinations are maintained on file at the Facility office for a minimum period of three (3) years.

7.0 TRANSFER OPERATIONS, PUMPING AND IN-PLANT PROCESS

7.1 BURIED PIPING INSTALLATIONS

Corrosion protection for buried piping is provided as follows:

- Buried piping installations are coated and wrapped to reduce corrosion.
- When a section of buried pipe is exposed, it is carefully examined for deterioration and corrective action taken as necessary.

7.2 OUT-OF-SERVICE PIPELINES

In the event that a Facility pipeline is removed from service or is placed in standby service for an extended time:

- The terminal connection at the transfer point is capped or blind-flanged.
- The origin of the line is marked.

7.3 ABOVEGROUND VALVES AND PIPELINES

- All aboveground valves, piping, and associated facilities are regularly examined by operating personnel in the following manner.
 - Informal inspections are conducted during daily operating personnel's surveillance. Inspections and testing results are submitted to management for review and corrective action.
 - Aboveground valves and piping are examined (monthly at a minimum) for the general conditions of items such as:
 - Flange joints
 - Valve glands and bodies
 - Drip / catch pans
 - Pipe supports
 - Bleeder and gauge valves
 - Valve locks / seals
 - Expansion joints
 - Metal surfaces

7.3 ABOVEGROUND VALVES AND PIPELINES (Cont'd)

- Records of negative findings from these examinations are documented in the operating personnel logs.
- In the event that a problem is located, the operator would implement repairs or turn in a work authorization request for prompt repair.
- Pipe supports are designed to minimize abrasion and corrosion and allow for expansion and contraction. Insulated lines are typically equipped with guide shoes to permit expansion while un-insulated lines are bare against supports.
- An equipment inspection checklist can be found in Appendix D.
- Records of these examinations are maintained on file at the Facility for a minimum period of three (3) years.

7.4 VEHICLE WARNING PROCEDURES

Vehicular traffic granted entry into the Facility are warned orally or by appropriate signs to be sure that the vehicle, because of its size, will not endanger aboveground piping or other oil transfer operations as follows:

- No vehicles are allowed in the pipe manifold area without supervisory permission and/or a safe work permit (when required).
- Only emergency, maintenance, and other authorized vehicles have access to the processing areas.
- Electrical grounding protection is required on all load-in/load-out operations.
- Access to containment areas by vehicle is restricted.

8.0 TANK TRUCK LOADING/UNLOADING RACK

8.1 LOADING/UNLOADING PROCEDURES

The Facility's tank truck loading/unloading operations are conducted as follows:

- Tank truck loading/unloading procedures meet the requirements and regulations established by the Department of Transportation.
- Operations are monitored periodically to ensure that proper procedures are utilized.
- Prior to filling and departure of any truck, the lower drains and outlets on tank trucks are closely examined for leakage. Any sign of leakage is immediately corrected to prevent liquid leakage while in transit.

8.2 DRAINAGE SYSTEMS

- Sumps and concrete containment pads and curbing is provided at all liquid loading/off-loading locations.
- Load-out sumps drain to the API separator for separation and disposition.

9.0 SECURITY

9.1 FENCES AND ENTRANCE GATES

The security measures in place for the Facility perimeter include fences and gates as follows:

- The refinery property is fully fenced and monitored by contract security guards 24 hours per day, 7 days per week.
- All plant entrances have automatic gates or are staffed with guard 24 hours per day.
- The Facility is manned by operating personnel 24 hours per day, 7 days per week.

9.2 OIL AND OIL PRODUCT STORAGE TANK VALVES

The security measures in place for the oil and oil product storage tank valves are as follows:

- Emergency cut-off capability is provided by manual operation of crude and 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 valves.
- 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.

9.3 OIL, OIL PRODUCT PUMPS AND STARTER CONTROLS

The security measures in place for the oil, oil product pumps and starter controls are as follows:

- All pumps are located within the security system of the Facility and are accessible only to authorized personnel.
- Product pumps are visually monitored and inspected during operating personnel's routine surveillance.
- When tanks and pumps are not operating or on standby status, they are locked or accessible only by authorized personnel. Energy isolation procedures or lockout/tag procedures are employed.

9.4 FACILITY LIGHTING

Facility lighting is commensurate with the type and location of the Facility.

- Process areas and transfer stations are illuminated during periods of darkness.
- Lighting is adequate for spill detection and control, and for the prevention of vandalism.
- Portable lighting and power supplies are available, should additional lighting be required.

**NAVAJO REFINING COMPANY
ARTESIA, NEW MEXICO REFINERY**

**RCRA PERMIT APPLICATION
TECHNICAL RESOURCE DOCUMENTS**

APPENDIX 3

**FACILITY RESPONSE PLAN
(December 1997)**

June 2001

FACILITY RESPONSE PLAN

Navajo Refining Company

Artesia Refinery

Prepared for:

ARTESIA REFINERY
501 East Main St.
Artesia, New Mexico 88211-0159

Prepared by:

Response Management Associates, Inc.
1600 Stuebner Airline, Suite 520
Spring, TX 77379
(281) 251-9200 Phone • (281) 320-9796 Metro • (281) 320-9700 FAX

Copy # _____

Response Plan Cover Sheet

General Information	
Owner/Operator of Facility:	Holly Corporation 100 Crescent Court, Suite 1600 Dallas, Texas 75201-1880
Facility Name:	Navajo Refining Company, Artesia Refinery
Facility's Physical Address:	501 East Main St. Artesia, New Mexico 88211-0159
Facility Phone Number:	(505) 748-3311 (505) 748-9077 FAX
Latitude:	32° 50' 40" N
Longitude:	104° 23' 30" W
Dun & Bradstreet Number:	04 - 891 - 8817
Standard Industrial Classification (SIC) Code:	2911
Number of Aboveground Oil Storage Tanks:	one hundred one (101)
Capacity of Largest Aboveground Oil Storage Tank:	108,000 (Bbls)
Maximum Oil Storage Capacity:	1,796,119 (Bbls)
Worst Case Oil Discharge Amount:	108,000 (Bbls)
Facility Distance to Navigable Water:	<input type="checkbox"/> 0 - ¼ mile <input type="checkbox"/> ¼ - ½ mile <input type="checkbox"/> ½ - 1 mile <input checked="" type="checkbox"/> > 1 mile

FACILITY RESPONSE PLAN

APPENDICES

	<u>Page</u>
A. General Information	A-1
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**CERTIFICATION OF THE APPLICABILITY OF THE
OPA 90 SUBSTANTIAL HARM CRITERIA**

FACILITY NAME: Navajo Refining Company; Artesia Refinery

FACILITY ADDRESS: 501 East Main Street, Artesia, NM 88210

1. Does the facility have a total oil storage capacity greater than or equal to 42,000 gallons? If yes, does the facility transfer oil over water to or from vessels?

YES _____ NO X

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons? If yes, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

YES _____ NO X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons? If yes, is the facility located at a distance¹ such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments²?

YES X NO _____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons? If yes, is the facility located at a distance¹ such that a discharge from the facility would shut down a public drinking water intake³?

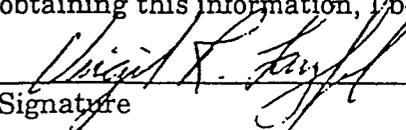
YES _____ NO X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons? If yes, has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

YES X NO _____

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.


Signature

Refinery Vice President / Manager
Title

Virgil Langford
Name (please type or print)

7-10-96
Date

¹ Calculated using the appropriate planning distance calculation provided in 40 CFR 112 (Attachment C-III) or a comparable formula. If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

² For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan.

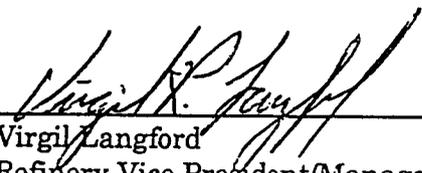
³ For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

ACKNOWLEDGMENT AND PLAN APPROVAL

The information and procedures in this Plan must be treated as guidelines only. The user should determine to what extent it is practical and advisable to follow them. This decision may involve considerations not discussed in this Plan.

The information and procedures contained herein are considered to be accurate as of December, 1995 and are consistent with the National Contingency Plan (NCP) and applicable Area Contingency Plans (ACP) as detailed in Section 1.5.

Plan Approved:



Virgil Langford
Refinery Vice President/Manager
Qualified Individual (QI)
Navajo Refining Company - Artesia Refinery

Date: 7-10-96

NOTE: Response Management Associates, Inc. (RMA) provided consulting and plan development services in the preparation of this plan utilizing data provided by Navajo Refining Company and/or the Facility. RMA assumes no liability for injury, loss, or damage of any kind resulting directly or indirectly from the use of the regulatory interpretation, response planning, or information contained in this plan.

FACILITY RESPONSE PLAN

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FACILITY RESPONSE PLAN

LIST OF AFFECTED PAGES

(December 1997 Change)

To: Plan Holder

Upon receipt of this package, check the attached pages with the "Insert" column to ensure that the package is complete. After checking the pages, move down the list **in order**, removing and adding pages as indicated. For non-agency copies, after removing all of the appropriate pages, send the removed pages along with a copy of this List of Affected Pages to the holder of plan number "1", as indicated on the "Distribution List" of the Plan. Insert this List of Affected Pages behind the Revision Record (Page vi) and any previous Lists of Affected Pages when completed. Finally, make a single entry record of the completed change on the Revision Record.

Item #	Remove	Insert
1	Title page, Response Plan cover sheet, v, vi	Title page, Response Plan cover sheet, v, vi
2	1-4, 1-8, 1-9, 1-10	1-4, 1-8, 1-9, 1-10
3	2-1, 2-3 through 2-6, 2-8, 2-9, 2-11, 2-14, 2-15	2-1, 2-3 through 2-6, 2-8, 2-9, 2-11, 2-14, 2-15
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10	I-5, I-6	I-5, I-6
11	N / A	This List of Affected Pages after page vi

1.0 INTRODUCTION AND PLAN CONTENT

1.1 PLAN PURPOSE/OBJECTIVES

The purpose of this Facility Response Plan (hereinafter referred to as "Plan") is to assist the Navajo Refining Company - Artesia Refinery (hereinafter referred to as "Facility") personnel prepare for and respond quickly and safely to a discharge originating from the Facility. The Plan provides techniques and guidelines for achieving an efficient, coordinated, and effective response to a discharge incident which may occur at the Facility.

The specific objectives of the Plan are to:

- Establish a Spill Management Team, assign individuals to fill the positions on the team, and define the roles and responsibilities of team members.
- Define notification, activation, and mobilization procedures to be followed when a discharge occurs.
- Define organizational lines of responsibility to be adhered to during a response operation.
- Document equipment, manpower, and other resources available to assist with the response.
- Ensure compliance with applicable federal, state, and local oil pollution regulations.
- Ensure consistency with the National Contingency Plan and Area Contingency Plan(s) for the area of operation.

1.2 SCOPE OF PLAN

This Plan contains prioritized procedures for Facility personnel to mitigate or prevent any discharge resulting from in-plant operations. A description of the operations conducted at the Facility has been detailed in Figure 1.3 with additional information provided in the "Hazard Evaluation" in the appendices. Facility spill mitigation procedures and response guidelines are provided in Section 3.0 for discharges that could result from any of the following scenarios:

- Tank overfill/failure
- Piping rupture/leak
- Explosion and/or fire
- Equipment failure (e.g. pumping system failure, relief valve failure, etc.)

1.2 SCOPE OF PLAN (Cont'd)

These scenarios could result in the following discharge volumes (as defined in EPA Final Rule 40 CFR Part 112):

Discharge Scenario	Potential Oil Group	EPA Planning Volumes
Small	1 (Carbon Black Oil, Asphalt)	50 Bbls
Medium	1 (Carbon Black Oil, Asphalt)	857 Bbls
Worst Case	Sour Crude (Tank #439)	108,000 Bbls

These worst case discharge volumes are utilized in calculating the planning volume for response resources. The planning volume is used to determine the necessary on-water recovery capacity to respond within the three tiered response times. The identified oil spill recovery devices should be capable of arriving at the scene of a discharge within the time specified for the applicable response tier. The tier requirements for this non-high volume area are for response in 12 hours (Tier 1), 36 hours (Tier 2), and 60 hours (Tier 3). Appendix G of this Plan demonstrates a series of calculations and planning volume determinations based on guidance provided by the U. S. Environmental Protection Agency (EPA) in 40 CFR Part 112 *Final Rule* dated July 1, 1994. The inclusion of these calculations is for demonstration of the response planning volumes and response capability necessary for on-water and on-shore recovery requirements as the result of the discharge scenarios outlined in the table above.

1.3 PLAN DISTRIBUTION PROCEDURES

The Manager of Environmental Affairs for Water and Waste shall have the responsibility for distribution of the Plan. Distribution will be handled in the following manner:

- Distribution of the Plan is controlled by the number on the cover page. A distribution list is included in the Foreword to facilitate control.
- Company personnel who may be called upon to provide assistance during discharge response activities will have access to a copy of the plan for their use and training.
- It is the responsibility of any person holding a copy of the Plan to ensure that the copy is transferred to their replacement in the event of reassignment or change in responsibility.

1.4 PLAN REVIEW AND UPDATE PROCEDURES

The Manager of Environmental Affairs for Water and Waste will coordinate the following plan review and update procedures.

- At least once each year review and make appropriate revisions as required by operational or organizational changes.
- At least once each year review and make appropriate revisions as required by changes in the names and telephone numbers detailed in Section 2.0.
- The Manager of Environmental Affairs for Water and Waste will coordinate the word processing, publication, and distribution efforts of completing the revisions and maintaining the Plan.
- Plan review opportunities may also occur during:
 - Response Team Tabletop Exercises
 - Actual emergency responses
- The plan holder, immediately upon receipt of any revisions, shall review and insert the revised pages into the Plan and the discard the obsolete pages. This action should then be recorded on the "Revision Record" page in the Foreword.

EPA Revision Requirements

The Facility shall revise and resubmit revised portions of the Plan to the EPA Regional Administrator within 60 days of each facility change that may materially affect the response to a Worst Case Discharge, including:

- Change in the Facility's configuration that materially alters the information included in the Plan.
- Change in the type of oil handled, stored, or transferred that materially alters the required response resources.
- Material change in capabilities of the Oil Spill Removal Organization(s) (OSROs) that provide equipment and personnel.
- Material change in the Facility's spill prevention and response procedures.
- Any other changes that materially affect the implementation of the Plan.

Except as provided above, amendments to the following do not require approval by the Regional Administrator (RA):

- Personnel and telephone number lists included in the Plan.
- OSRO(s) change which does not result in a material change in support capabilities.

The RA shall be provided with a copy of such revisions. Facility shall submit the EPA issued Facility Identification Number with the changes (the Facility Identification Number is listed in Figure 1.3).

1.5 REGULATORY COMPLIANCE

The development, maintenance, and utilization of this Plan implements company policy and addresses the following regulatory requirements and guidelines:

- Federal Oil Pollution Act of 1990: U.S. EPA Final Rule for Non-Transportation Related On-shore Facilities (40 CFR Part 112 - as published on July 1, 1994).

The applicable Area Contingency Plan for the Facility is:

- U.S. Environmental Protection Agency - Region VI, Dallas, TX; published June, 1994.

The applicable National Contingency Plan for the Facility is:

- U.S. Environmental Protection Agency; National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule; published September 15, 1994.

1.6 DISCHARGE CLASSIFICATION

The severity of a discharge will have a bearing on the level of management involvement and the extent of resource mobilization necessary to respond to the incident. The following discussion provides guidance in the early classification of discharges (Response implementation is more fully defined in the "Emergency Response Plan"):

For the purpose of implementation, a distinction is made between spills that are contained on refinery property as opposed to spills that leave or have the potential to leave refinery property. In the latter case, the threat of environmental harm to the public and the waters of the United States is much greater. In addition, the agency reporting requirements and the response personnel and equipment requirements vary depending on the scenario. The initial response actions for these are outlined in Section 3.1 and Figure 3.1 of this plan.

The potential for a spill to migrate out from refinery property is reduced since the Artesia refinery provides secondary containment protection through a process wastewater collection system from each process unit and loading area, as well as, providing secondary containment dikes around the bulk storage tanks. These structures in conjunction with the diversion swale along the south face of Eagle Draw, flat slopes on-site, and a desert environment combine to effectively contain most spills on facility property. However, in the unlikely event that discharges escape the confines of the facility, emergency procedures have been established.

FIGURE 1.1

AREA MAP

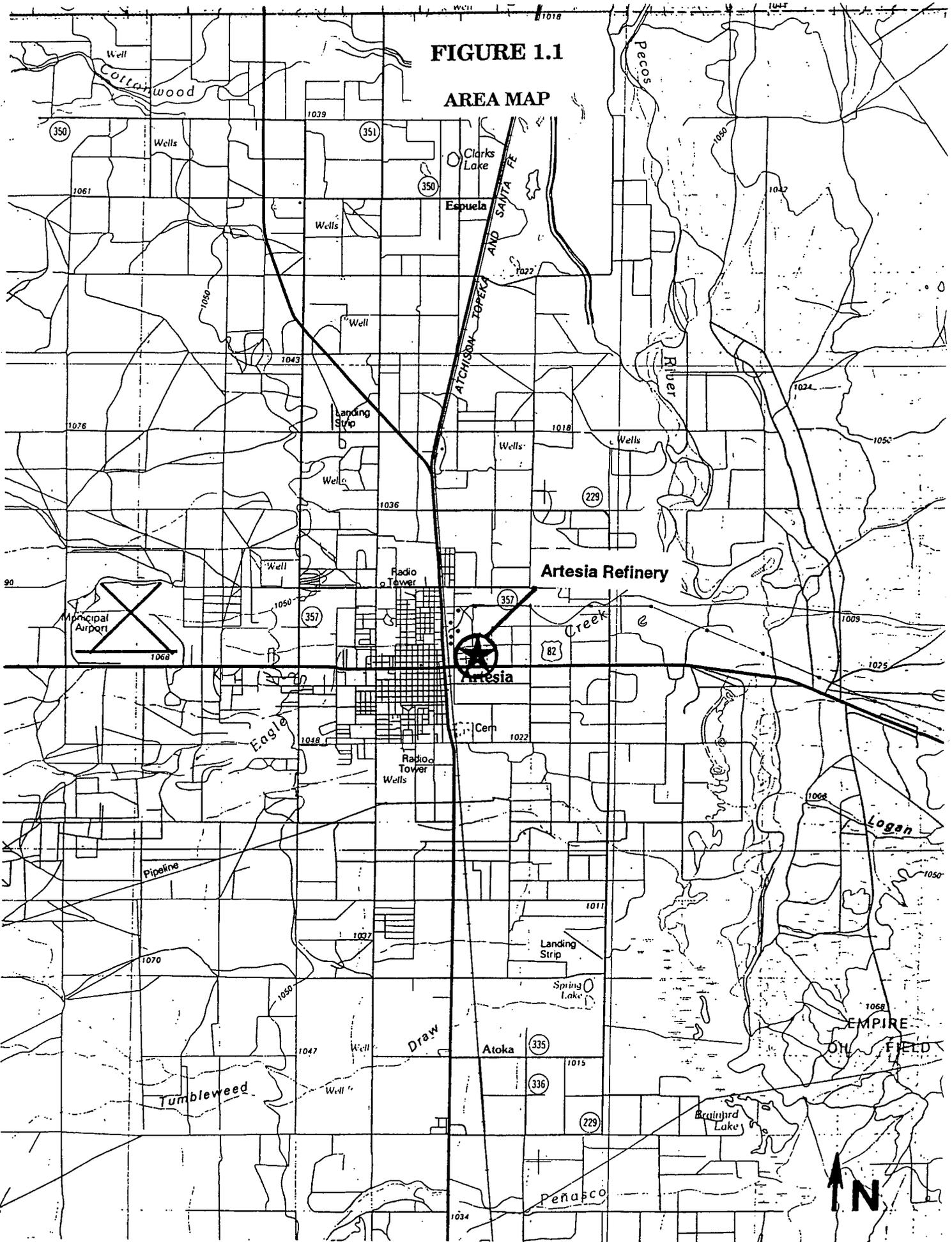


FIGURE 1.3

FACILITY INFORMATION

GENERAL INFORMATION	
Facility Name:	Navajo Refining Company - Artesia 501 East Main Street Artesia, New Mexico 88211-0159 (505) 748-3311 (505) 748-9077 FAX
FRP ID#:	FRP-06-NM-00010
Owner Name:	Holly Corporation 100 Crescent Court, Suite 1600 Dallas, TX 75201-1880
Qualified Individual:	Virgil Langford - VP/Manager of Refinery P.O. Drawer 159 Artesia, New Mexico 88210 (505) 748-3714 (<i>Home</i>) (505) 365-8360 (<i>Cellular</i>)
Alternate Qual. Indiv.:	Scott Beardemphl - Operations Manager P.O. Drawer 159 Artesia, New Mexico 88210 (505) 365-8333
Telephone/FAX:	Additional telephone references, including 24 hour numbers, for the Facility, Owner, and QI/AQI are provided in Figure 2.2.
Primary SIC Code:	2911
Date of Initial Oil Storage:	1920's
FACILITY LOCATION	
County:	Eddy County, New Mexico
Latitude:	32° 50' 40" N
Longitude:	104° 23' 30" W
Area Map:	Provided in Figure 1.1
Facility Diagram:	Provided in Figure 1.2

FIGURE 1.3 (Cont'd)

FACILITY INFORMATION

PHYSICAL DESCRIPTION - GENERAL

Description of Operation:

- The Artesia Refinery is located in the northeast section of the City of Artesia, New Mexico. The facility is bordered on the south by U. S. Highway 82, on the east by farm land, on the north by residential, commercial and farmland. On the west by the Santa Fe - Southern Pacific Railroad.
- The Facility stores Crude Oil, Gasoline, Diesel Fuel, JP-8, Jet-A, Carbon Black Oil, Asphalt, Butane, and Propane.
- The Facility has a total storage capacity of 1,796,119 Bbls, with an average storage volume of 500,000 to 750,000 Bbls. Daily throughput averages 60,000 Bbls..
- Crude is received through pipelines with a volume of 60,000 bpd; 30,000 Bbls of this volume is from the Lovington Refinery, via an 8" pipeline.
- Gasoline, LPG, Diesel, Carbon Black Oil, Molten Sulfur and Asphalt are delivered by tank truck.
- Gasoline Blendstock, Gas Oil, LPG, Asphalt and Crude Oil are received by tank truck at the racks.
- Diesel, Carbon Black Oil, Asphalt, Spent Caustic, and Molten Sulfur are delivered by rail cars at the racks.

Products Handled:

- | | |
|--------------------|------------------|
| ● Gasoline | ● Propane |
| ● Diesel Fuel | ● Molten Sulfur |
| ● JP-8 | ● LPG |
| ● Jet-A | ● Gas Oil |
| ● Carbon Black Oil | ● Bulk Chemicals |
| ● Crude Oil | ● Slurry |
| ● Asphalt | ● Naphtha |
| ● Butane | |

Note: Material Safety Data Sheets (MSDS) are maintained separately at the Facility.

FIGURE 1.3 (Cont'd)

FACILITY INFORMATION

PHYSICAL DESCRIPTION - TRUCK RACK

Description of Operation:

- The Facility is equipped with two (2) loading areas and three (3) pump-off areas
- Five (5) trucks can be loaded and three (3) trucks can be off loaded simultaneously.
- The loading/unloading operations are conducted on a 24 hour/7 day per week basis.

Loading Rate: 500 gpm/truck (*typical*)

Truck Capacity: 6,000 gallons (*maximum*)

Discharge Prevention:

- A combination of sumps, containment areas, diversion swale and connections to the Refinery process sewer system provide secondary containment.
- The loading system is equipped with a loading system shutdown switch, a brake interlock to prevent movement during operation, and is a continuously supervised operation.
- Safe operating procedures are posted.
- Continuous monitoring of loading and unloading operations at the truck racks (except Light Ends) by Navajo personnel; normal manned hours: 0600 - 2200.
- The Light Ends Truck Rack is a 24 hour/day 7 day/week operation and requires a Card Key to gain access to the rack.
- More detailed information is provided in Appendix H.

FIGURE 1.3 (Cont'd)

FACILITY INFORMATION

PHYSICAL DESCRIPTION - RAIL RACK	
<p>Description of Operation:</p> <ul style="list-style-type: none">• The facility is equipped with two (2) loading areas.• Eighteen (18) loadings spots that can load (4) spots simultaneously.• Rail Loading Area A: Loads six (6) - eight (8) rail cars per week with Diesel, Asphalt, spent Caustic and Carbon Black Oil.• Rail Loading Area B: One loading spot that loads 1 car/week with molten sulfur. <p>Loading Rate: 500 barrels per hour (typical)</p> <p>Rail Rack Capacity: 30,000 gallons (maximum)</p> <p>Discharge Prevention:</p> <ul style="list-style-type: none">• The loading/unloading operations are conducted on a 24 hour/day 5 day/week basis. Rack is supervised 0600 - 2200.• Rail Loading Area "A" contains two sumps, one on each end of the rail rack with a capacity for 150% of the largest tank spilled.• Safe operating procedures are posted.• More detailed information is provided in Appendix H.	
DATES AND TYPES OF SUBSTANTIAL EXPANSIONS	
<p>1920's Plant owned by Continental Oil</p> <p>1974 S.D. Crude Unit expansion</p> <p>1976 Plant process added to North Section Refinery</p> <p>1981 FCC Unit added</p> <p>1991 Process expansion including CCR Reformer</p> <p>1992 HF Alkylation Unit addition</p> <p>1993 Process expansion including Diesel Desulfurization</p>	
OTHER FACILITY DATA	
<ul style="list-style-type: none">• Additional facility data (including storage information) is provided in Appendix H and discharge detection and inspection information is provided in Appendix I.	

2.0 NOTIFICATION PROCEDURES

This section is a guide for notification procedures that should be implemented immediately after discovering a discharge incident and securing the source (if at all possible). Internal and external notifications are described separately for clarification purposes only. All notifications are of extreme importance and must be completed in a timely manner.

2.1 INTERNAL NOTIFICATION

The following internal notifications should be made for each emergency incident to the extent that the incident demands (telephone reference is provided in Figure 2.2). In no event shall notification be delayed because the immediate supervisor is inaccessible. **Authorization is given to bypass management levels if necessary to provide immediate notification to upper management.** The typical internal notification responsibilities for each person potentially involved in the initial response are as follows:

First Navajo Person Notified/On-Scene

- Immediately notify Central Dispatch by:
- Activating the Emergency Alarm System.
- Announce twice over the operating channel for that location "(type of emergency) at (location)". Example: "Gasoline Spill at Tank 106".

Shift Foreman / Division Foreman

- Coordinate response with the Safety Department.
- Notify the Environmental Affairs Officer.

Central Dispatch

- Notify the Incident Commander (Process Safety Superintendent) and the Emergency Response Team.

Incident Commander (Process Safety Superintendent)

- Activate additional Emergency Response Team members, as the situation demands.

2.1 INTERNAL NOTIFICATION (Cont'd)

- Activate local emergency response resources (*Oil Spill Removal Organizations (OSRO)*, fire, police, medical, etc.).
- Ensure notification of the **Environmental Affairs Officer**.
- Coordinate** activation of additional response and clean-up resources with the **Environmental Affairs Officer**.

Environmental Affairs Officer

- Ensure that all **regulatory/governmental agencies** and other external organizations as detailed in Section 2.2 and Figures 2.4, 2.5 have been notified.
- Make additional upper management and head office notifications as the situation demands.

FIGURE 2.1

INTERNAL NOTIFICATION SEQUENCE

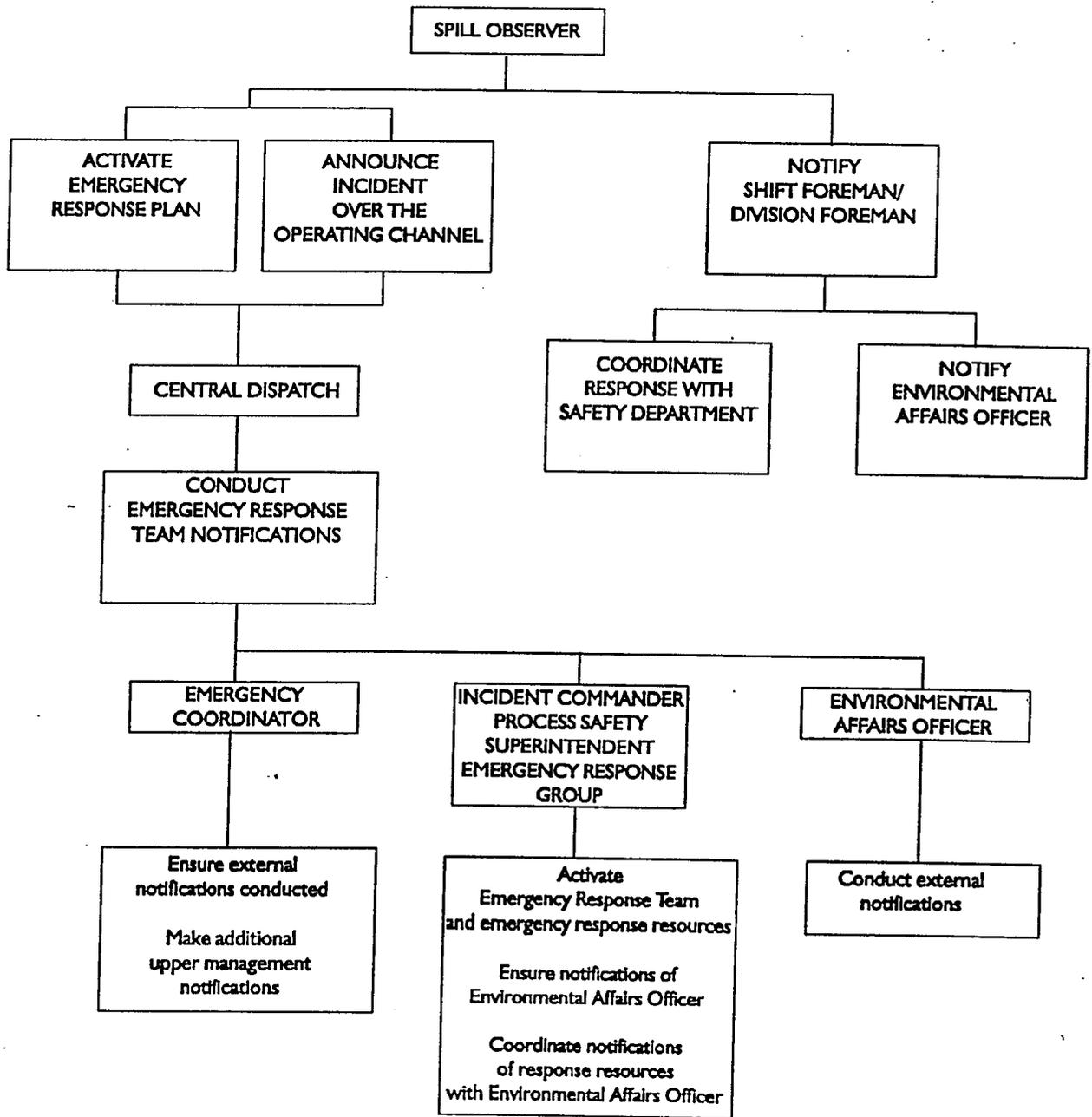


FIGURE 2.2

INTERNAL NOTIFICATION REFERENCES

EMBE = Emergency Phone
 FAX = Facsimile Machine
 MBL = Mobile Phone

INTERNAL NOTIFICATIONS - GENERAL FACILITY			
FACILITY AREA	ADDRESS	OFFICE	FAX NUMBER
Artesia Refinery	501 East Main St. Artesia, NM 88211-0159	(505) 748-3311	(505) 748-9077

INTERNAL NOTIFICATIONS - SPILL MANAGEMENT TEAM						
POSITION/TITLE	NAME	RESPONSE TIME	TRAINING LEVEL	OFFICE	HOME	OTHER
Qualified Individual / Emergency Coordinator Refinery VP/Manager	Wright Randy Flowers	15 minutes	<ul style="list-style-type: none"> ● SPCC Plan / FRP. ● Plant and routine safe operating procedures. 	(505) 748-3311 ext. 234	(505) 748-3311 746-1582	(505) 365-8262 MBL
Alt. Qualified Individual / Process Manager Engineering IV	Scott Beardemphl	15 minutes	<ul style="list-style-type: none"> ● SPCC Plan / FRP. ● Plant and routine safe operating procedures. 	(505) 748-3311 ext. 333	(505) 746-6249	(505) 365-7873 MBL
Incident Commander Process Safety Manager	Joe Ysusi	15 minutes	<ul style="list-style-type: none"> ● HAZWOPER Trained. ● SPCC Plan / FRP. ● Plant and routine safe operating procedures. 	(505) 748-3311 ext. 289	(505) 746-2213	Plectron Notification
Fire Chief	Bob Worthington	15 minutes	<ul style="list-style-type: none"> ● HAZWOPER Trained. ● SPCC Plan / FRP. ● Plant and routine safe operating procedures. 	(505) 748-3311 ext. 334	(505) 746-2533	Plectron Notification
Safety Officer / Medical Officer / Safety Department	Tom Aston	15 minutes	<ul style="list-style-type: none"> ● HAZWOPER Trained. ● SPCC Plan / FRP. ● Plant and routine safe operating procedures. 	(505) 748-3311 ext. 206	(505) 748-3249	

FIGURE 2.2 (Cont'd)

INTERNAL NOTIFICATION REFERENCES

EMBE = Emergency Phone
 FAX = Facsimile Machine
 MBL = Mobile Phone

INTERNAL NOTIFICATIONS - SPIEL MANAGEMENT TEAM						
POSITION/TITLE	NAME	RESPONSE TIME	TRAINING LEVEL	OFFICE	HOME	OTHER
Manager of Director of Environmental Affairs for Water and Waste	David Guillen Phil Young blood	15 minutes	<ul style="list-style-type: none"> HAZWOPER Trained. SPCC Plan / FRP. Plant and routine safe operating procedures. 	(505) 748-3311 ext. 223	(505) 748-3311 505-746-6988	(505) 365-8365 MBL
Logistics Section / Mechanical Superintendent	Jessie Hilliard	15 minutes	<ul style="list-style-type: none"> SPCC Plan / FRP. Plant and routine safe operating procedures. 	(505) 748-3311 ext. 243	(505) 746-6686	(505) 365-5736 MBL or (505) 365-7084 MBL
AMS	Joe Rivera	15 minutes	<ul style="list-style-type: none"> HAZWOPER Trained. SPCC Plan / FRP. Plant and routine safe operating procedures. 	(505) 748-3311 ext. 354	(505) 365-2149	(505) 365-5985 MBL
Planning Section / Mechanical Department	David Bolding	15 minutes	<ul style="list-style-type: none"> HAZWOPER Trained. SPCC Plan / FRP. Plant and routine safe operating procedures. 	(505) 748-3311 ext. 327	(505) 365-2694	(505) 365-7877 MBL
Logistics Section / Maintenance Department Coordinator	Oscar Sosa	15 minutes	<ul style="list-style-type: none"> HAZWOPER Trained. SPCC Plan / FRP. Plant and routine safe operating procedures. 	(505) 748-3311 ext. 327	(505) 746-6562	
Finance Section / Purchasing Department	Wayna Bernice Manuel Madriz	15 minutes	<ul style="list-style-type: none"> HAZWOPER Trained. SPCC Plan / FRP. Plant and routine safe operating procedures. 	(505) 748-3311 ext. 371	(505) 748-3311 505-748-1074	
Finance Section - Expediter / Purchasing Department	Flora Manuel Madriz	15 minutes	<ul style="list-style-type: none"> HAZWOPER Trained. SPCC Plan / FRP. Plant and routine safe operating procedures. 	(505) 748-3311 ext. 371	(505) 748-3311 505-748-1074	

FIGURE 2.3

NOTIFICATION DATA SHEET

SPILL REPORT (SR-2)

1. Time of Spill _____ AM/PM Date _____
2. Time Spill reported to Shift Foreman _____ AM/PM Date _____
3. Name of person on duty at time of spill _____
- 3.a. Name of person who discovered spill if different from above _____
4. Location of Spill _____
5. Type of Spill (Material) _____
6. Quantity of Spill _____ bb. Size of Spill (area) _____
7. Time Spill Contained _____ AM/PM Date _____
8. Disposition of Spilled Material _____
9. How was the Spill contained _____
10. Did spill leave Facility boundary?
 YES NO
11. Corrective action taken to prevent further spills: _____

12. Physical location of responsible person at the time of spill _____

13. Department _____
14. Supervisor's Signature _____

- NOTE -

In order to comply with state and federal laws, the Navajo Refining Company must report spills as soon as possible. Call to report all spills as soon as possible to the refinery Environmental Department. The 24 hour phone number for the Environmental Department is (505) 365-8365 (alternate phone number: Safety Department (505) 365-8364). This form must be filled out completely and returned to the refinery Environmental Department whenever a spill occurs.

Form SR-2 - 4-7-95

FIGURE 2.4

EXTERNAL NOTIFICATION FLOWCHART

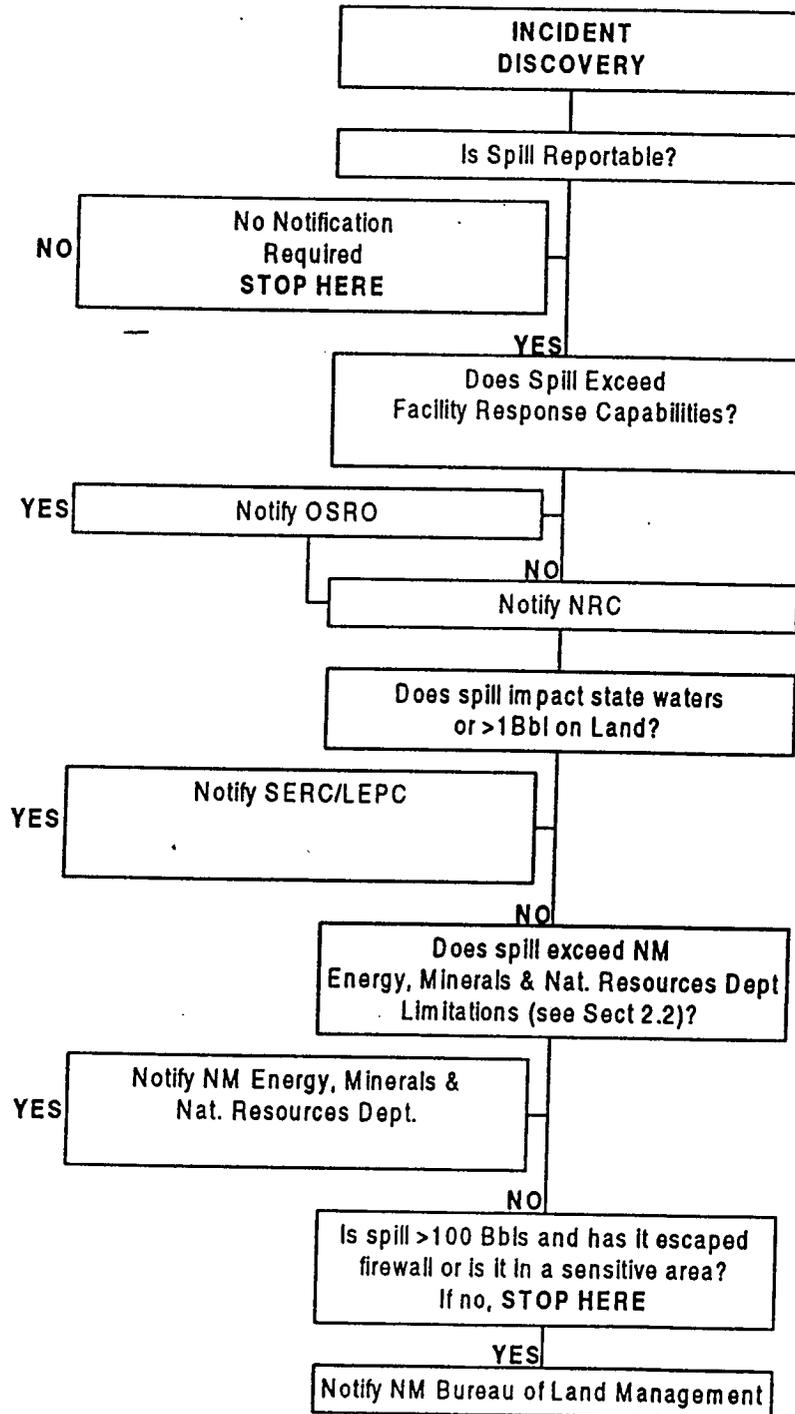


FIGURE 2.5

EXTERNAL NOTIFICATION REFERENCES

REQUIRED EXTERNAL NOTIFICATIONS			
AGENCY	LOCATION	OFFICE	ALTERNATE
National Response Center (NRC)	Washington, D.C.	(800) 424-8802	(202) 267-2675
Roswell State Police (SERC)	Roswell, NM	(505) 827-9223	(505) 622-7200
NM Energy, Minerals, and Natural Resources Department (OCD)	Artesia, NM (District 3)	(505) 748-1283	
Local Emergency Planning Committee (LEPC)	Carlsbad, NM	(505) 887-9511	(505) 887-7551

ASSISTANCE/ADVISORY NOTIFICATIONS (outside resources)			
AGENCY	LOCATION	OFFICE	ALTERNATE
New Mexico Department of Game and Fish	Roswell, NM	(505) 624-6135	(505) 748-3036
New Mexico OSHA Bureau	Santa Fe, NM	(505) 827-2888	
OSHA (For Reportable Injury or Death)	Washington, D.C.	(800) 321-6742	
U.S. Environmental Protection Agency (EPA) Region VI	Dallas, TX	(214) 665-2222	
U.S. Fish and Wildlife Service (USFWS)			
Bureau of Land Management (BLM)	Santa Fe, NM	(505) 438-7501	
New Mexico Health and Environmental Department	Santa Fe, NM	(505) 827-9329	
New Mexico Fire Marshal	Roswell, NM	(505) 885-2111	
National Weather Service (Recorded Forecasts) (NOAA)	Roswell, NM	(505) 347-5700	
Local Water Supply System	Artesia, NM	(505) 746-2122	(505) 746-2703

FIGURE 2.5 (Cont'd)

EXTERNAL NOTIFICATION REFERENCES

LOCAL EMERGENCY SERVICES			
SERVICE	LOCATION	OFFICE	ALTERNATE
DIAL 911 for All Police, Fire, and Ambulance Emergencies			
Artesia Fire Department	Artesia, NM	911	(505) 746-2701
Eddy County Sheriff	Artesia, NM	911	(505) 746-9888
Eddy County Sheriff	Carlsbad, NM	911	(505) 887-7551
Artesia City Police	Artesia, NM	911	(505) 746-2703
Artesia Ambulance	Artesia, NM	911	(505) 746-2701
Artesia General Hospital	Artesia, NM	(505) 748-3333	
Eastern New Mexico Medical Center	Roswell, NM	(505) 622-1110	
Guadalupe Medical Center	Carlsbad, NM	(505) 887-4100	

OIL SPILL REMOVAL ORGANIZATIONS (OSRO)		
COMPANY	LOCATION	OFFICE
Gamer Environmental Services, Inc.	Fort Worth, TX	(888) 654-0111
		(817) 535-7222

ADDITIONAL RESPONSE RESOURCES		
COMPANY	LOCATION	OFFICE
Indian Fire & Safety	Artesia, NM	(505) 393-3093
I/W Hot Oil - Transports Service	Artesia, NM	(505) 746-4214
Gandy Corporation - Transports Service	Lovington, NM	(505) 396-4948
Jim's Water Service - Transports Service	Artesia, NM	(505) 748-1358
O.K. Hot Oil	Loco Hills, NM	(505) 746-6233
		(800) 530-8693
		(505) 748-1352

FIGURE 2.5 (Cont'd)

EXTERNAL NOTIFICATION REFERENCES

ADDITIONAL RESPONSE RESOURCES			
COMPANY	LOCATION	OFFICE	ALTERNATE
Sweatt Construction - Dirt Equip.	Artesia, NM	(505) 748-1238	
Davis Welding - Dirt Equip.	Artesia, NM	(505) 746-6306	
T & C Tank Rental - Temporary Storage	Artesia, NM	(505) 746-9788	
International Bird Rescue Center	Berkeley, CA	(510) 841-9086	
Tri-State Bird Rescue	Newark, NJ	(302) 737-9543	
KBIM - TV	Roswell, NM	(505) 622-2120	
KSVP - AM Radio	Artesia, NM	(505) 746-2751	

2.2 EXTERNAL NOTIFICATION

The following external notifications should be made in accordance with federal, state, and local regulations for all reportable discharges. A "Notification Data Sheet" (Figure 2.3) should be used to facilitate documentation and data retrieval for these notifications. The Refinery Vice President/Manager shall ensure that the following "Required Notifications" and "Other Notifications" are made as the situation demands. Telephone reference is provided in Figure 2.5 and the typical reporting flowchart is demonstrated in Figure 2.4. Except for "ALL CALL" emergencies at night, on weekends, evenings, noon, or interior structure fires, the responsibility for calling outside agencies rests with the Incident Commander (Process Safety Superintendent), and Environmental Affairs Officer (Manager, Safety & Risk Management).

Required Notifications

- Oil Spill Removal Organization (OSRO)**
Immediately for all spills that exceed the Facility's response capabilities. Figure 5.1 details the OSRO response resources with their respective response times and Figure 2.5 details the OSRO phone references for 24 hour contact.

- National Response Center (NRC)**
Verbal
Immediately for all spills that impact or threaten navigable water.

(800) 424-8802 (24 hour number)
(202) 267-2675 (Alternate)

Written
In accordance with the applicable SPCC regulations, within 60 days to the U.S. Environmental Protection Agency for a spill in excess of 1,000 gallons (24 Bbls.) in a single event or two spill events within a twelve month period into or upon navigable waters of the United States or adjoining shorelines.

U.S. Environmental Protection Agency - Region VI
1445 Ross Ave.
12 th Floor, Suite 1200
Dallas, TX 75202
(214) 665-2222

- Roswell State Police (SERC)**
Immediately for all spills that impact state waters and spills greater than one barrel to land.

(505) 827-9223 (24 hour number)
(505) 622-7200 (alternate)

Written
As requested by the agency.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

- New Mexico Energy, Minerals, and Natural Resources Department - Oil Conservation Division (OCD)

Verbal

Immediate notification of any fire, break, leak, spill, or blowout occurring at any oil or gas drilling, producing or refining facility that fits any of the following criteria:

- *Well blowouts and/or fires*
- *25 or more Bbls of crude oil or condensate, or 100 Bbls or more of salt water, none of which reaches a watercourse or enters a stream or lake; breaks, spills, or leaks in which one or more barrels of crude oil or condensate or 25 barrels or more of salt water does reach a watercourse or enters a stream or lake; and breaks, spills, or leaks of hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, gases, or other deleterious chemicals or harmful contaminants of any magnitude which may with reasonable probability endanger human health or result in substantial damage to property*
- *Fires in tanks or other receptacles caused by lightning or any other cause, if the loss is, or it appears that the loss will be, 25 or more barrels of crude oil or condensate, or fires which may with reasonable probability endanger human health or result in substantial damage to property*

(505) 393-6161 (District 1 - Hobbs, NM)
(505) 748-1283 (District 2 - Artesia, NM)
(505) 334-6178 (District 3 - Aztec, NM)
(505) 827-7131 (District 4 - Santa Fe, NM)

Written

A complete written report in duplicate within 10 days of any fire, break, leak, spill, or blowout occurring at any oil or gas drilling or producing facility that fits any of the following criteria (See Appendix K):

- *5 barrels or more but less than 25 barrels of crude oil or condensate, or 25 barrels or more but less than 100 barrels of salt water, none of which reaches a watercourse or enters a stream or lake*
- *Fires in tanks or other receptacles caused by lightning or any other cause, if the loss is, or it appears that the loss will be at least 5 barrels but less than 25 barrels*

2.2 EXTERNAL NOTIFICATION (Cont'd)

Required Notifications (Cont'd)

- New Mexico Energy, Minerals, and Natural Resources Department - Oil Conservation Division (Cont'd)**

District 1
1000 West Broadway
P. O. Box 1980
Hobbs, NM 88240

District 3
1000 Rio Brazos Rd.
Aztec, NM 87410

District 2
811 South 1st Street
Artesia, NM 88210

District 4
2040 South Pacheco
Sante Fe, NM 87501

- Bureau of Land Management (BLM)**

Verbal

Immediately [within 24 hours] for oil, saltwater, and toxic liquid spills in excess of 100 Bbls that leave the firewall or any spill in a sensitive area (i.e. parks, recreation sites, wildlife refuges, lakes, reservoirs, streams, and urban/suburban areas)

(505) 438-7501

Written

Within 15 days for oil, saltwater, and toxic liquid spills in excess of 10 Bbls and less than 100 Bbls or oil, saltwater, and toxic liquid spills in excess of 100 Bbls contained within the firewall

Bureau of Land Management
P. O. Box 27115
Santa Fe, NM 87502-7115

- Local Emergency Planning Committee (LEPC)**

Verbal

Calls to the SERC concerning petroleum spills will usually alert the LEPC, however, it is advisable to notify them directly for any spill that requires notification.

Local Emergency Planning Committee (LEPC)
Ralph Harris
(505) 887-9511
(505) 887-7551

Written

As the agency may request, depending on circumstances.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications

- New Mexico Department of Game and Fish**
The New Mexico Department of Fish and Game will typically be notified by the New Mexico SERC; however, it is advisable to follow up with verification that notice was received.

- Occupational Safety and Health Administration (OSHA)**
Within eight (8) hours for incidents involving three (3) or more hospitalizations or immediately in the event of one (1) or more deaths.

- New Mexico Occupational Safety and Health Administration (OSHA)**
Immediately for any hospitalizations or deaths.

- U.S. Fish and Wildlife Service (USFWS)**
Immediately for Wildlife Protection / Rehabilitation

- Local Water Supply System**
The New Mexico SERC typically notifies the Local Water Supply System. For incidents involving underground tanks or for any spill of such magnitude that the underground water sources might be impacted, it would be advisable to follow up with verification that notice was received.

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications (Cont'd)

- Local Emergency Services**
Immediately for all Police, Fire, and Medical Emergencies

Dial 911

Artesia Police Department
(505) 746-2703 (Alternate)

Eddy County Sheriff - Artesia
(505) 746-9888 (Alternate)

Eddy County Sheriff - Carlsbad
(505) 887-7551 (Alternate)

Artesia Fire Department
(505) 746-2701 (Alternate)

Ambulance Service
911

- Wildlife Rehabilitation Resources**

International Bird Rescue Center (Berkeley, CA)
(510) 841-9086

Tri-State Bird Rescue (Newark, NJ)
(302) 737-9543

2.2 EXTERNAL NOTIFICATION (Cont'd)

Other Notifications (Cont'd)

Neighbors

Directly or with assistance from local police and fire agencies, inform all adjacent businesses and private citizens that might be immediately impacted.

SPILL REPORTING GUIDELINES

- Never include information which has **not been verified.**
- **Never speculate** as to the cause of an incident or **make any acknowledgment of liability.**
- **DOCUMENT:**
 - Agency notified
 - Person notified
 - Time agency notified
 - Content of message given
- **DO NOT DELAY** reporting due to incomplete information.

3.0 INITIAL RESPONSE ACTIONS

3.1 INITIAL RESPONSE ACTIONS

Initial response actions are those taken by local personnel immediately upon becoming aware of a discharge or emergency incident, before the Spill Management Team (described in Section 4.0) is formed and functioning. Timely implementation of these initial steps is of the utmost importance because they can greatly affect the overall response operation.

It is important to note that **these actions are intended only as guidelines**. The appropriate response to a particular incident may vary depending on the nature and severity of the incident and on other factors that are not readily addressed. Note that, **without exception, personnel and public safety is first priority**.

The first Navajo Refining Company person on scene will function as the person-in-charge until relieved by an authorized supervisor who will assume the position of Incident Commander (IC). Transfer of command will take place as more senior management respond to the incident. For response operations within the control of the Spill Management Team, the role of IC will typically be assumed and retained by the Manager, Safety and Risk Management.

The person functioning as Incident Commander during the initial response period has the authority to take the steps necessary to control the situation and must not be constrained by these general guidelines.

INITIAL RESPONSE ACTIONS - SUMMARY

- Personnel and Public Safety is first priority
- Eliminate sources of ignition
- Isolate the source of the discharge, minimize further flow
- Make internal notifications
- Make external notifications
- Activate the Spill Management Team as necessary
- Activate response contractors and other external resources as necessary
- Monitor and control the containment and clean-up effort

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

For the purpose of implementation, a distinction is made between spills that are contained on refinery property as opposed to spills that leave or have the potential to leave refinery property. In the latter case, the threat of environmental harm to the public and the waters of the United States is much greater. In addition, the agency reporting requirements and the response personnel and equipment requirements vary depending on the scenario. The initial response actions for these are outlined in Section 3.1 and Figure 3.1 of this plan.

The potential for a spill to migrate out from refinery property is reduced since the Artesia refinery provides secondary containment protection through a process wastewater collection system from each process unit and loading area, as well as, providing secondary containment dikes around the bulk storage tanks. These structures in conjunction with the diversion swale along the south face of Eagle Draw, flat slopes on-site, and a desert environment combine to effectively contain most spills on facility property. However, in the unlikely event that discharges escape the confines of the facility, emergency procedures have been established.

FIRST NAVAJO PERSON NOTIFIED/ON SCENE

- _____ Follow the appropriate "*Specific Incident Response Checklist*" in Figure 3.1 and "*Product Specific Response Considerations*" in Figure 3.2.
- _____ Notify the **Shift Foreman / Division Forman** of the Incident.
- _____ Sound the Emergency Alarm, if located near an Alarm Station.
- _____ Notify twice over the operating channel for that location, the type and location of the emergency.
- _____ If not located adjacent to the Alarm Station, notify Control Room to sound alarm.
- _____ Immediately begin **controlling the fuel sources and gaining control of the process**

SHIFT FOREMAN/DIVISION FORMAN

- _____ **Notify the Environmental Affairs Officer**, during evenings, weekends, and holidays.
- _____ Utilize local emergency services as necessary (police, fire, medical).
- _____ Respond to site to direct operations.

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

CENTRAL DISPATCH

- ___ Notify Emergency Response Team.
- ___ Sound the Emergency Alarm.
- ___ Respond to incident with equipment (i.e. fire trucks) as appropriate.

INCIDENT COMMANDER /SAFETY SUPERINTENDENT

- ___ Evaluate the Severity, Potential Impact, Safety Concerns, and Response Requirements based on the initial data provided by the first person on scene.
- ___ Assume the role of Incident Commander.
- ___ Confirm safety aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.
- ___ Activate the Spill Management Team and primary response contractors, as the situation demands.
- ___ Initiate and direct the specific response procedures detailed in the Navajo Emergency Response Plan.
- ___ Coordinate/perform activation of additional spill response contractors, as the situation demands (telephone reference is provided in Figure 2.5).
- ___ Coordinate/perform regulatory agency notification, as the situation demands, if unable to reach Environmental Affairs Officer (notification procedures and telephone references are provided in Figures 2.4 and 2.5 respectively).
- ___ Direct containment, dispersion, and/or clean-up operations in accordance with the Product Specific Response Considerations provided in Figures 3.2, 3.3, and 3.4.

EMERGENCY COORDINATOR (typically the Vice President/Manager of Refinery)

- ___ In conjunction with the IC will coordinate the response and arrival of emergency organizations and take status reports from the Fire Chief, Process Superintendent, and Product Movement Superintendent.

3.1 INITIAL RESPONSE ACTIONS (Cont'd)

LOGISTICS SECTION CHIEF (typically the Mechanical Superintendent)

- _____ Report to the Maintenance Foreman's office, and contact the Incident Commander / Coordinator on Channel 5 to advise and await further instruction.
- _____ Provide support and services to keep the on-scene operations going.
- _____ Obtain manpower, supplies, and resources for support necessary to control the incident.
- _____ Stand by at the incident base (maintenance office) in order to provide logistical support as needed.

ENVIRONMENTAL AFFAIRS OFFICER

- _____ Fill out and maintain the spill history form and report to the Oil Conservation Division (telephone reference provided in Figure 2.5), as the situation demands.
- _____ Coordinate with Local, State, and Federal Agencies, Logistics Officer, and the IC to make sure that proper spill control is in place.
- _____ Notify appropriate agencies (NRC, LEPC, SERC, etc.)

SPILL MANAGEMENT TEAM

- _____ Assigned personnel will immediately respond to a discharge from the Facility, as the situation demands.
- _____ Perform response/clean-up operations as directed or coordinated by the Incident Commander.
- _____ Assist as directed at the spill site.

FIGURE 3.1

SPECIFIC INCIDENT RESPONSE CHECKLIST

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

EMERGENCY ALARM SYSTEM

- _____ The Emergency Alarm Button is to be pushed to sound the alarm when an employee discovers an emergency or potential emergency condition.
- _____ **IF ANY DOUBT EXISTS ABOUT WHETHER AN EMERGENCY EXISTS, SOUND THE ALARM.**
- _____ After sounding the alarm the employee should announce twice over the operating channel for that location (type of emergency) AT (location). Example: "GASOLINE SPILL AT TANK 106" or "FIRE AT H-10 IN THE VACUUM UNIT".
- _____ Once the alarm is received, the alarm point will be contacted by CENTRAL DISPATCH (Laboratory) to verify the problem and gather any additional information about the situation. **THE PERSON RESPONSIBLE FOR SOUNDING THE ALARM SHOULD USE THIS OPPORTUNITY TO TELL CENTRAL DISPATCH WHERE THE EMERGENCY IS AND THE NATURE OF THE EMERGENCY (I.E., FIRE, SPILL).**
- _____ **IF A LIMITED RESPONSE IS NEEDED, ASK FOR THE FIRST ALERT STRIKE TEAM.** (The strike team is a select group of the Facility Fire Team who have specialized fire response / victim rescue training. See Appendix B)
- _____ Central Dispatch is to contact the Incident Commander (IC - typically the Safety Superintendent).

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

INITIAL RESPONSE

- ___ Take appropriate personal protective measures.
- ___ Call for medical assistance if an injury has occurred.
- ___ Restrict access to the spill site and adjacent area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.
- ___ Verify the type of product and quantity released (Material Safety Data Sheets are retained separately at the Facility).
- ___ Use testing and sampling equipment to determine potential safety hazards, as the situation demands.
- ___ Identify/Isolate the source and minimize the loss of product.
- ___ Take necessary Emergency Response Plan action.
- ___ Eliminate possible sources of ignition in the near vicinity of the spill.
- ___ Notify the Shift Foreman of the incident.

LINE BREAK OR LEAK, SPECIFIC RESPONSE

- ___ Shut down pumping equipment.
- ___ Close upstream and downstream block valves.
- ___ Mitigate spreading of the product, as the situation demands. Potential containment strategies include:
 - Earthen dike/berm
 - Ditching
 - Spreading absorbents over the spill
- ___ Protect the spill from entering areas such as waterways, sewers, etc.
- ___ If located within containment area, insure that drainage valve(s) is "closed".
- ___ Drain the line section, as the situation demands.
- ___ Apply foam blanket as necessary to suppress vapors.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

STORAGE TANK LEAK, SPECIFIC RESPONSE

- ___ Shut down or divert the product movement operations to / from the tank and isolate the tank.
- ___ Insure that the containment area drainage valve(s) is "closed".
- ___ If near tank bottom, fill tank with water and maintain water bottom to suspend the discharge.
- ___ Stop all traffic in hazardous area (inside and outside of property boundaries), as the situation demands.
- ___ Remove product from within the containment area (at a sump or in a low area) with an explosion proof pump, oil skimmer, and/or vacuum truck.
- ___ Empty tank as soon as possible.
- ___ Apply foam blanket as necessary to suppress vapors.

LEAK OR SPILL AT THE TRUCK RACK AND/OR RAIL RACK , SPECIFIC RESPONSE

- ___ Evacuate personnel from the truck and/or rail rack area, as the situation demands.
- ___ Shut down all loading operations, pump motors and loading valves.
- ___ Stop all traffic from entering rack or hazardous area.
- ___ If a line leak, close off riser valves and/or tank valves.
- ___ Clean area with sorbent material, flush (with water) all remaining product into the separator system.
- ___ Resume truck and/or rail loading operations as directed by the Manager, Safety and Risk Management.
- ___ Apply foam blanket as necessary to suppress vapors.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

TRUCK LEAKS/SPILLS OUTSIDE PLANT, SPECIFIC RESPONSE

- ___ Notify local fire and police departments, as appropriate.
- ___ Keep all traffic away from the area.
- ___ Notify the Manager, Safety and Risk Management of the incident with the following information:
 - Location of spill.
 - Size of spill.
 - Product type.
 - Present situation.
 - If assistance/equipment is required for cleanup.
- ___ If product spilled on highway and/or service station driveway, clean area with sorbent material, vacuum truck, or other clean-up equipment as available; wash down (Fire Department with water) all remaining product as the situation demands. If product entered sewer system, advise the local Fire Department.
- ___ Apply foam blanket as necessary to suppress vapors.

EXPLOSIONS AND/OR FIRE, SPECIFIC RESPONSE

- ___ Shut down Facility operations and mitigate fuel sources, as the situation demands.
- ___ Utilize applicable Facility firefighting capability after conducting safety assessment of the area.
- ___ Notify local fire department(s), as the situation demands (telephone references for Fire Departments are provided in Figure 2.5).
- ___ Evacuate area, as the situation demands.
- ___ Apply foam blanket as necessary to suppress vapors.

FIGURE 3.1 (Cont'd)

SPECIFIC INCIDENT RESPONSE CHECKLIST

FINAL RESPONSE

- Make all necessary repairs.
- Return the line/tank/rack to service when repairs are complete.
- Clean up product spill to eliminate any possible environmental problems.
- Complete follow-up and written reporting, as the situation demands.

FIGURE 3.2

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for DIESEL / FUEL OIL SPILLS / CRUDE / CARBON BLACK OIL / JP-8 / Jet-A

Flash Point Range: **Above 100 °F**

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note how that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that the procedures followed may differ somewhat from those listed below. The following are intended for guideline purposes only.

These materials are not extremely flammable and the preferred response is containment and mechanical recovery.

- ___ Identify source and stop discharge if possible.
- ___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- ___ If spill occurs in Tank Farm, every effort must be made to block any drainage to ditches to prevent product from escaping the containment area. Commence containment efforts for any product which has escaped.
- ___ Deploy spill response equipment and personnel in an attempt to contain and recover as much product as possible.
- ___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operations such as utilities, telephone company, railway, and tunnels as the situation demands.
- ___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.
- ___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.
- ___ Request local authorities to establish traffic control in the area, as the situation demands.
- ___ If the spill escapes the containment area, review the location of socio-economic and environmental sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.3

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for JP-4/ GASOLINE SPILLS

Flash Point Range: *Below 100 °F*

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. The following are intended for guideline purposes only.

These materials float on water and are extremely flammable. Containment of these materials may allow explosive concentrations to accumulate. The preferred response is to minimize impact to water and protect shorelines (storm sewers, creeks, rivers, etc.) from contamination, allow evaporation to occur, and contain/clean-up remaining product.

- ___ Identify source and stop discharge if possible.
- ___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- ___ Eliminate sources of vapor ignition.
- ___ Stay upwind and evacuate nonessential personnel.
- ___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demands.
- ___ Recover the product and affected soil. Be alert for underground cables and water bearing formations. Remember that product may penetrate deeper if impermeable natural layers are disturbed.
- ___ Due to the low flash point of these products: (1) Use non-sparking systems, (2) Have fire truck or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate to the greatest extent possible.
- ___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.
- ___ Request local authorities to establish traffic control in the area and to post a - "High Flammability" advisory, as the situation demands.
- ___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

FIGURE 3.4

PRODUCT SPECIFIC RESPONSE CONSIDERATIONS for ASPHALT SPILLS

Flash Point Range:

Above 100 °F

Remember, Without Exception, Personnel Safety Is First Priority. Excessive Exposure To The Vapor And Liquid Stages Of The Spilled Product Should Be Avoided.

Suggested physical response actions for these products are detailed below. It is important to note however, that each situation is unique and must be individually responded to. These procedures are considerations only. Actual circumstances may dictate that procedures followed may differ somewhat from those listed below. The following are intended for guideline purposes only.

- ___ Identify source and stop discharge if possible.
- ___ Obtain explosimeter and other air sampling measurements to assure that areas are safe to enter for continued response operations.
- ___ Eliminate sources of vapor ignition.
- ___ Stay upwind and evacuate nonessential personnel.
- ___ Advise people in the area of any potential threat and/or initiate evacuation. Inform local operators such as utilities, telephone company, railway, and tunnels as the situation demand
- ___ Recover the product and affected soil. Be alert for underground cables and water bearing formations.
- ___ If material sinks, a clam shell or other dredging device may be required to remove product from river bed.
- ___ Due to the potential hazards involved with this product: (1) Use non-sparking systems, (2) Have fire trucks or firefighting equipment nearby, (3) Warn all involved of the product's flammability, and (4) Allow product to evaporate/cool to the greatest extent possible.
- ___ Determine the direction and expected duration of spill movement. Refer to the maps provided in Figure 6.1 for an overview of the area.
- ___ Request local authorities to establish traffic control in the area and to post a - "Flammability advisory, as the situation demands.
- ___ If the spill escapes the containment area, review the location of socio-economic and environmentally sensitive areas identified in Section 6.0. Determine which of these may be threatened by the spill and direct the response operation to these locations. Initiate protection and recovery actions.

4.0 RESPONSE TEAMS

4.1 INTRODUCTION

Navajo Refining Company utilizes the Incident Command System (ICS) to manage emergency response activities. The ICS is a management tool which is readily adaptable to very small incidents as well as those of considerable significance. The ICS shall be implemented for all discharge incidents with staffing levels adjusted as required to meet the specific needs (size and severity) of the incident. Response to a discharge originating from the Facility will be provided by the Spill Management Team.

A detailed explanation of the Incident Command System and the roles and responsibilities for primary members of the Spill Management Team is provided in Appendix B.

4.2 QUALIFIED INDIVIDUAL

Vital duties of the Qualified Individual (QI) include:

- Activate internal alarms and hazard communication systems to notify all Facility personnel.
- Notify all response personnel, as needed.
- Identify the character, exact source, amount, and extent of the release, as well as the other items needed for notification.
- Notify and provide necessary information to the appropriate Federal, State, and Local authorities with designated response roles, including the National Response Center (NRC), State Emergency Response Commission (SERC), and local response agencies.
- Assess the interaction of the spilled substance with water and/or other substances stored at the Facility and notify response personnel at the scene of that assessment.
- Assess the possible hazards to human health and the environment due to the release. This assessment must consider both the direct and indirect effects of the release (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion).
- Assess and implement prompt removal actions to contain and remove the substance released.
- Coordinate rescue and response actions as previously arranged with all response personnel.

4.2 QUALIFIED INDIVIDUAL (Cont'd)

- Use authority to immediately access company funding to initiate clean-up activities.
- Direct clean-up activities until properly relieved of this responsibility.

The Refinery Vice President/Manager serves as Qualified Individual (QI) and the Process Superintendent serves as the Alternate Qualified Individual (AQI). Arrangements will be made to ensure that either one or the other is available on a 24-hour basis and is able to arrive at the Facility in a reasonable time. The AQI shall replace the QI in the event of his absence and have the same responsibilities and authority.

4.3 SPILL MANAGEMENT TEAM

The first Navajo Refining Company person on scene will function as the person-in-charge until relieved by an authorized supervisor who will assume the position of Incident Commander (IC). Transfer of command will take place as more senior management respond to the incident. For response operations within the control of the Spill Management Team, the role of IC will typically be assumed and retained by qualified management personnel.

The number of positions/personnel required to staff the Spill Management Team will depend on the size and complexity of the incident. The duties of each position may be performed by the IC directly or delegated as the situation demands.

Refer to the job descriptions detailed in Appendix B (the "Emergency Response Plan") for the primary response team positions. The IC is always responsible for directing the response activities and will assume the duties of all the primary positions until the duties can be delegated to other qualified personnel.

The Spill Management Team is shown on the organization chart in Figure 4.1. Telephone reference is provided in Figure 2.2. Detailed job descriptions of the primary response team positions are provided in Appendix B.

4.4 RESPONSE TEAM TRAINING

Navajo has designated a Safety Training Coordinator in light of the enormous training and record keeping requirements by the many different government agencies (i.e. DOT, OSHA, EPA and various state and local agencies). The training coordinator's duties include conducting, training and maintaining records for all employees which documents the content of and the applicable regulatory requirement for the training. In addition to training records, the coordinator also maintains records of safety meetings and other meetings related to environmental and safety transportation regulations.

All employees who work in operating areas of the refinery or have the potential to be exposed to the operating areas receive an initial 40 hours of comprehensive training emphasizing occupational safety, environmental compliance and process safety management. Each year after the initial 40 hours of training, there is a four (4) day Refresher Training Course conducted. Both the initial 40 hour course and the annual Refresher Training Course are designed to comply with requirements found in:

- 40 CFR 112.7 (e) - SPCC Plan
- 40 CFR 112.21 - Facility Response Plan
- 40 CFR 122.26 - Stormwater Management Plan

Common elements of all three of these programs include prevention, detection, and response to releases of oils and other hazardous materials. Training common to all three also includes emphasis on good house keeping practices (Best Management Practices), secondary containment, and prompt initial notification of an incident.

Volunteers

- Volunteers will not be utilized by Navajo Refining Company for responding to spills and no provisions are in place to accommodate for their training.

Training Records

- A detailed training syllabus is maintained as a part of the records kept by the Safety Training Coordinator. All training records pertinent to this program are available for inspection during normal business hours by contacting the Safety Training Coordinator.
- Navajo Refining Company has a program in place to insure that each OSRO has a comprehensive maintenance program and applicable training/drills programs in place.

4.5 RESPONSE TEAM EXERCISES

Spill Management Team members, various agencies, contractors and other response resources will participate in emergency response exercises as required by federal, state, and local regulations and as detailed in the "National Preparedness for Response Exercise Program" (PREP). Navajo Refining Company will utilize announced and unannounced notification exercises, equipment deployment exercises, tabletop exercises, and/or various combinations to ensure that each component of the Plan is exercised as required. At least one equipment deployment exercise or one tabletop exercise will be unannounced annually. The Plant Manager will coordinate exercise planning and logistics in accordance with the following guidelines. The following table depicts the minimum triennial cycle for exercises at the Facility.

Triennial Cycle		
Total Number	Frequency	Exercise Type/Description
3	Annual	Response Team Tabletop Exercise
3	Annual	Equipment Deployment Exercise (<i>for facilities with OSRO's</i>)
3	Annual	Unannounced Exercise (<i>this Exercise may take the place of a required Tabletop or an Equipment Deployment Exercise</i>)
1 (maximum)	Once every 3 years	Government-initiated Unannounced Exercise (<i>credit may be taken for a required Notification and an Equipment Deployment Exercise</i>)

Note: Each component of the response plan must be exercised at least once in the Triennial Cycle.

4.5 RESPONSE TEAM EXERCISES (Cont'd)

Quarterly QI Notification Exercise

- **Scope:** Exercise communication between facility personnel and the Qualified Individual(s) and/or designated alternate(s). At least once each year, one of the notification exercises should be conducted during non-business hours.
- **Objective:** Contact must be made with a Qualified Individual or designated alternate, as identified in the Plan.
- **General:** All personnel receiving notification shall respond to the notification and verify their receipt of the notification. Personnel who do not respond should be contacted to determine whether or not they received the notification.

Semi-Annual Equipment Deployment Exercise (for facilities with equipment)

- **Scope:** Deploy and operate facility response equipment identified in the response plan. The equipment to be deployed must include the following at a minimum:
 - 1,000' of each type of boom (solid log flotation, air inflated, self inflated, fire boom, and special purpose)
 - One (1) of each type of skimming system.or the equipment necessary to respond to a Small Discharge at the Facility, whichever is less.
- **Objective:** Demonstrate the ability of the personnel to deploy and operate response equipment. Ensure that the response equipment is in proper working order.
- **General:** The Facility may take credit for actual equipment deployment to a spill or training sessions as long as the activities are properly documented.

4.5 RESPONSE TEAM EXERCISES (Cont'd)

Annual Equipment Deployment Exercise (for facilities with OSRO's)

- **Review:** The Facility should ensure that the OSRO(s) has completed the equipment deployment exercise requirements and has maintained the necessary documentation. The OSRO is not required to deploy equipment at the Facility, they may deploy equipment at any location so long as it occurs within a similar operating environment.
- **Scope:** OSRO shall deploy and operate response equipment (OSRO) identified in the response plan. The equipment to be deployed must include the following at a minimum:
 - 1,000' of each type of boom (solid log flotation, air inflated, self inflated, fire boom, and special purpose boom)
 - One (1) of each type of skimming system.
- **Objective:** OSRO shall demonstrate the ability of the personnel (OSRO) to deploy and operate response equipment (OSRO). Ensure that the response equipment (OSRO) is in proper working order.

NOTE: The Facility does not maintain an inventory of spill response equipment.

Annual Response Team Tabletop Exercise

- **Scope:** Exercise the response team's organization, communication, and decision making in managing a spill response. Each team identified within the plan is required to conduct an annual Response Team Tabletop Exercise.
- **Objective:** Exercise the response team in a review of the following:
 - Knowledge of the Plan.
 - Proper notifications.
 - Communications system.
 - Ability to access an OSRO.
 - Coordination of internal spill response personnel.
 - Review of the transition from a local team to a regional, and national.
 - Ability to effectively coordinate response activity with the National Response System (NRS) Infrastructure.
 - Ability to access information in the Area Contingency Plan.
- **General:** A minimum of one Response Team Tabletop Exercise in a triennial cycle will involve simulation of the Worst Case Discharge scenario.

4.5 RESPONSE TEAM EXERCISES (Cont'd)

Government-Initiated Unannounced Exercise

- **Scope:** The Facility is required to participate in only one unannounced exercise every 36 months from the date of the last government-initiated unannounced exercise. These unannounced exercises are limited to a maximum of four exercises per agency region/area per year.

Exercises are limited to approximately four hours in duration.

Exercises would involve response to an Average Most Probable Discharge scenario.

Exercise would involve equipment deployment to respond to a spill scenario.

- **Objective:** Conduct proper notifications to respond to unannounced scenario of an Average Most Probable discharge.

Demonstrate that the response is timely, conducted with an adequate amount of equipment for the scenario, and properly conducted.

- **General:** This exercise is only applicable to those facilities which are randomly chosen.

Exercise Records

- These exercises should be documented on a log form and should contain the following information (sample log forms are included in Appendix K):
 - The type of exercise;
 - Date and time of the exercise;
 - A description of the exercise;
 - The objectives met in the exercise;
 - The components of the response plan exercised; and
 - Lessons learned.
- Records of these exercises will be maintained on file at the Facility for a minimum period of five (5) years.

4.6 INCREASING THE SPILL RESPONSE

In the event that the requirements are beyond the response capability of the Spill Management Team:

- The Incident Commander will notify appropriate internal and external parties.
- The Incident Commander will authorize and implement the activation of any response/clean-up contractor that may be required.

4.7 SITE SAFETY AND HEALTH PLAN(S) DEVELOPMENT

The Incident Commander or Safety Representative will be responsible for preparing a Site Safety and Health Plan that will establish site specific policies, practices, and procedures to protect workers and the public from coming into contact with potential chemical and/or physical hazards. A Site Safety and Health Plan will contain the following information:

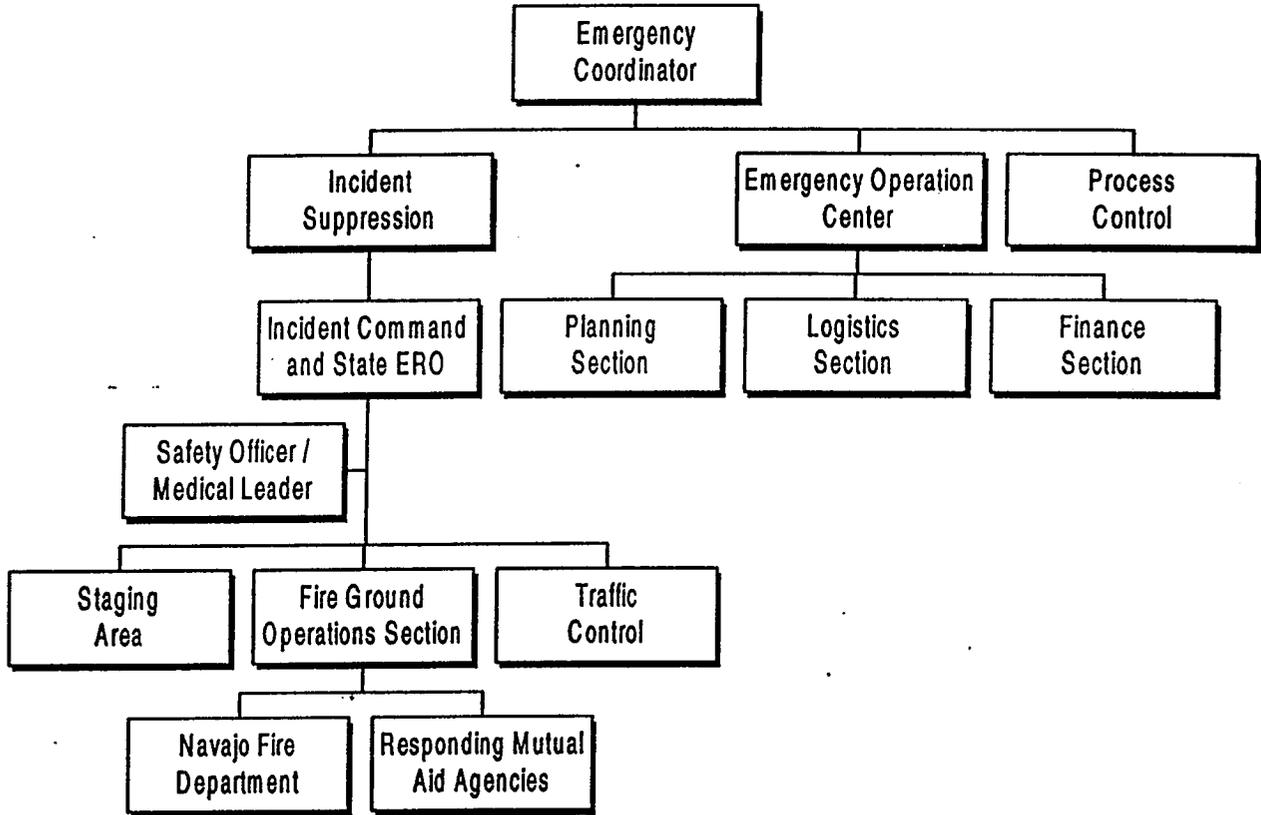
- Guidance on who is responsible for monitoring site safety.
- A characterization of the risks associated with each operation that will be conducted in the area covered by the plan.
- A description of known chemical and physical hazards, and the measures that have been instituted to eliminate the hazards or reduce them to an acceptable level.
- Guidance on the level of HAZWOPER training required for workers commensurate with their job responsibilities.
- A definition of site control measures, including a site map.
- A description of decontamination procedures for personnel and equipment.

The Site Safety and Health Plan format that will be used is presented in Appendix K.

FIGURE 4.1

SPILL MANAGEMENT TEAM

Emergency Response Team



5.0 RESPONSE EQUIPMENT/RESOURCES

The following sections outline the various response equipment / resources available from the Facility, other Navajo Refining Company facilities, Oil Spill Removal Organizations, and other outside resources.

5.1 FACILITY RESPONSE EQUIPMENT

The Facility does not have spill response equipment; a general equipment list is included in Appendix C. However, the Navajo Refining Co. Pipeline Division has spill response equipment which can be accessed (Appendix C). Additionally, the Facility has a contract in place with an Oil Spill Removal Organization and other clean-up contractors for response to a discharge.

The Qualified Individual has the authority to activate other Navajo Refining Company resources or that of private contractors and other experts and consultants as the situation demands.

5.2 OTHER COMPANY RESOURCES

Additional Navajo Refining Company spill response equipment and manpower resources may be available to supplement the response operation. These resources include the Navajo Refining Company - Lovington Refinery spill response equipment which is located within a reasonable distance of the facility.

5.3 CONTRACT RESOURCES

In the event of a discharge which is beyond the initial response capabilities of the Spill Management Team, contract manpower and equipment resources can be obtained through Oil Spill Removal Organization(s) (OSRO). These OSRO's can provide manpower and containment / clean-up equipment for the response operation on land, water, or adjacent shorelines. The resources will be secured from a Navajo Refining Company approved contractor. Notification / implementation of these resources will typically be handled by the Refinery Vice President / Manager (QI). Figure 5.1 provides a quick reference to the Oil Spill Removal Organizations and details their response capability and estimated response times. Additional OSRO data, including equipment inventories and/or USCG certification data, is provided in Appendix C. Telephone reference is provided in Figure 2.5.

5.4 MUTUAL AID RESOURCES

Mutual Aid Resources are not currently available to the Facility.

5.5 EXPERTS AND CONSULTANTS

Navajo Refining Company maintains a relationship with various environmental and technical consultants that can provide support in the event of an emergency incident. These consultants can provide expertise and support in the areas of emergency response management, environmental services, site assessment, permitting, waste treatment, recycling, dewatering, hazardous waste disposal, and remediation. Implementation of these services should be coordinated through the Environmental Manager.

5.6 VOLUNTEERS

Volunteers will not be utilized by Navajo Refining Company for responding to spills originating from the Facility. All volunteers will be referred to the State or Federal On-Scene Coordinator (EPA).

5.7 COMMUNICATIONS

Effective and efficient communications systems are essential for emergency response at every level. The communications system will be utilized to gather information and current status reports as well as to provide coordination and direction to widely separated work groups involved in search, containment/ diversion, repair, traffic control, public control or evacuation, and restoration.

Lines of communication between the Incident Commander and Spill Management Team members are demonstrated in the organization chart shown in Figure 4.1. Communication of the overall spill response operation between the Facility and the responsible government agencies in the Federal Regional Response Team (RRT) will occur between the Incident Commander and the Federal On-Scene Coordinator. Appendix J provides additional detail on the Federal Response Organization.

- **Central Communications System**

Prearranged communication channels are of the utmost importance in dealing with Facility emergencies. The notification procedures and telephone contacts documented in Section 2.0 will be reviewed in accordance with the earlier documented updating procedures. The predetermined communications channels include the following:

- A list of emergency telephone numbers for internal management and emergency response personnel (Figures 2.2 and 2.5).
- A list of emergency telephone numbers for various external resources such as the fire and police department, medical, and regulatory agencies (Figure 2.5).
- A list of emergency telephone numbers for contract response resources (Figure 2.5).

- **Communications Equipment**

Field communications during a spill response to a small or medium discharge will be handled via the existing Facility communications network. This network will utilize existing radios, telephones, beepers, FAX machines, and computers and will be maintained by Facility personnel (see Appendix C). In the event of a Worst Case Discharge, field communications will be enhanced with other Navajo Refining Company and contract resources as the situation demands.

- **Communication Types**

- **Radios** - Handheld and vehicle mounted radio sets are the most effective means of communication for the field response operation. The units are battery operated, multi-channelled, and have a typical range that will cover the area of the response operation. Additional radio sets and battery packs/charges will be necessary in the event of a prolonged response operation.
- **Telephone (Conventional)** - Conventional land line telephones are the most effective means of communication for regulatory and advisory notifications during a spill response operation. Additional telephone lines can be installed in the event of a prolonged response operation.
- **Telephone (Cellular)** - Cellular telephones allow for added mobility and response effectiveness. Cellular phones are commonly maintained by certain Facility personnel. Additional cellular phones can be secured in the event of a prolonged response operation.
- **Pagers** - Pagers are used for rapid notification to field personnel when radio and telephone resources are limited. Most response team members carry a pager. The pagers are activated by a system called the Plectron System.
- **FAX Machines** - FAX machines allow for a rapid transfer of information/documentation such as status reports/updates, written notifications, and purchase orders.
- **Computers** - Computers are commonly used in networks which allow access to various other locations and company personnel. Computers also speed the consolidation of information and preparation of written reports.

FIGURE 5.1

EXTERNAL RESPONSE RESOURCES

Los Angeles/Long Beach Captain of the Port (COTP) Zone

USCG Classified Oil Spill Removal Organization (OSRO)								
OSRO Name	Contract Number	Environment Type	Facility Classification Level					Shoreline Cleanup
			A	B	C	D	E	
Garner Environmental Services, Inc.	Under development	Rivers/Canals	X	X	X	X	X	Yes
		Inland/Nearshore	X	X	X	X	X	

Additional Response Resources		
Contractor Name	Contract Number	Response/Mobilization Time
Indian Fire & Safety	-----	Within one (1) hour

Note: USCG Classification letters are provided in Appendix C and telephone numbers are provided in Figure 2.5.

FIGURE 5.1 (CONT'D)

EXTERNAL RESPONSE RESOURCES

Oil Spill Removal Organizations

Environmental Spill Control Hobbs, NM		
USCG Classification:	River/Canal:	N / A
	Inland/Nearshore:	N / A
Agreement Number:	N / A	
Response/Mobilization Time:	1-2 hours	
Maximum Daily Recovery:	2,400 Bbls/Day	
Temporary Storage:	2,500 Bbls	

Note: Classification and recovery/storage capabilities are based on USCG NVIC 12-92 Interim Classification Guidelines. Additional detail is provided in Appendix C and telephone reference is provided in Figure 2.5.

FIGURE 5.1 (CONT'D)

EXTERNAL RESPONSE RESOURCES

Oil Spill Removal Organizations

Indian Fire & Safety Artesia, NM		
<i>USCG Classification:</i>	River/Canal:	N / A
	Inland/Nearshore:	N / A
<i>Agreement Number:</i>	N / A	
<i>Response/Mobilization Time:</i>	within 1 hour	
<i>Maximum Daily Recovery:</i>	12,000 Bbls/Day	
<i>Temporary Storage:</i>	10,000 Bbls.	

Note: Classification and recovery/storage capabilities are based on USCG NVIC 12-92 Interim Classification Guidelines. Additional detail is provided in Appendix C and telephone reference is provided in Figure 2.5.

6.0 SPILL IMPACT CONSIDERATIONS

6.1 CRITICAL AREAS TO PROTECT

The critical areas to protect are classified as high, moderate, and low sensitivity to oil for non-coastal/inland environments. The Federal, State, and local authorities will further clarify these categories at the time of the response. The categories are defined as follows:

HIGH SENSITIVITY

- Areas which are high in productivity, abundant in many species, extremely sensitive, difficult to rehabilitate, or inhabited by threatened/endangered species.
- Areas which consist of forested areas, brush/grassy areas, wooded lake areas, freshwater marshes, wildlife sanctuaries/refuges, and vegetated river/stream banks.

MODERATE SENSITIVITY

- Areas of moderate productivity, somewhat resistant to the effects of oiling.
- Areas which consist of degraded marsh habitat, clay/silt banks with vegetated margins, and gravel/cobble beaches.

LOW SENSITIVITY

- Areas of low productivity, man-made structures, and/or high energy.
- Areas which consist of gravel, sand, or clay material, barren/ rocky riverbanks and lake edges, man-made structures, and concrete/compacted earthen drainage ditches.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES

Environmental/Socio-economic Sensitivities are of extreme importance when planning a response effort. The health and safety of the public and the environment, as well as the protection of the various socio-economic sensitivities, must be promptly addressed in order to mitigate the extent of damage and minimize the cost of the clean-up effort.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

All environmental/socio-economic sensitivities are worthy of protection, but must be prioritized during a response effort. When making decisions on which areas to designate as collection areas and which to protect, the following sources may be consulted:

- U.S. Fish and Wildlife Service and related state agencies
- Applicable Area Contingency Plans
- Other industry and private experts

The environmental and socio-economic sensitivities in the vicinity of the Facility can be divided into a number of categories. The following environmental/socio-economic sensitivity summary describes these categories which may be impacted by a discharge and should be addressed in the response:

Environmental:

- Environmentally sensitive areas are prevalent throughout any marine and/or terrestrial environment and may be effected by any potential discharge incident.
- Environmentally sensitive areas subjected to stress and sudden change may be severely damaged. All means of exclusion/diversion should be utilized during a response effort to minimize the impact on these areas.

Historical Areas:

- Properties listed in the National Register of Historic Places & Natural Landmarks are included in this category.
- These areas may need to be boomed off or otherwise protected to minimize impact.

Major Recreational Areas:

- A discharge effecting these areas may pose a public safety/health risk during a response effort.
- Shoreline access for personnel and equipment deployment (boats, boom, etc.) is typically available in these areas.

Marinas:

- These areas have a high degree of public exposure (personal and property) and should be boomed for protection.
- Boats and other water deployed equipment can often be deployed and/or obtained in these areas.

6.2 ENVIRONMENTAL/SOCIO-ECONOMIC SENSITIVITIES (Cont'd)

Residential Areas:

- These are areas with high public impact and may warrant evacuation in extreme cases.
- Cleanup must be performed with extreme caution due to extensive public exposure.

Commercial Farming/Ranching Areas:

- Commercial Farming/Ranching Areas have the potential of human and livestock impact, as well as socio-economic impact in the potential loss of crops or loss of property use.

Water Intake Points:

- Commercial, industrial, municipal, and private water intakes are subject to impact.
- These areas may need to be boomed off or otherwise protected to minimize impact.

Wildlife Management Areas and Refuges:

- These areas have a high degree of exposure to threatened/endangered species and many other types of wildlife.
- Protection booming and clean-up efforts are high priority in these areas.

6.3 WILDLIFE PROTECTION AND REHABILITATION

Navajo Refining Company will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate birds and wildlife affected by an oil spill, as necessary. Oversight of Navajo Refining Company's wildlife preservation activities and coordination with Federal, State, and local agencies during an oil spill is the responsibility of the Incident Commander.

Special consideration should be given to the protection and rehabilitation of endangered species and other wildlife and their habitat in the event of an oil spill and subsequent response. Jurisdictional authorities should be notified and worked with closely on all response/clean-up actions related to wildlife protection and rehabilitation. Laws with significant penalties are in place to ensure appropriate protection of these species.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

Endangered/Threatened Species

The U.S. Fish and Wildlife Service (USFWS) and related state agencies classify the status of various wildlife species in the potentially effected states. A summary of critical birds, reptiles, mammals, and plant species status as related to the Facility's operating areas (area of highest oil spill potential) is presented in Fig 6.2.

Wildlife Rescue

Navajo Refining Company will work with Federal, State, and local agency personnel to provide labor and transportation to retrieve, clean, and rehabilitate wildlife affected by an oil spill, as the situation demands.

The following are items which should be considered for wildlife rescue and rehabilitation during a spill response:

- Bird relocation can be accomplished using a variety of deterrents, encouraging birds to avoid areas of spilled oil. Bird relocation can be accomplished by utilizing deterrent methods including:
 - Use of visual stimuli, such as inflatable bodies, owls, stationary figures, or helium balloons, etc.
 - Use of auditory stimuli, such as propane cannons, recorded sounds, or shell crackers.
 - Use of herding with aircraft, boats, vehicles, or people (as appropriate).
 - Use of capture and relocation.

Wildlife Search and Rescue - Points to Consider

- Navajo Refining Company's involvement should be limited to offering assistance as needed or requested by the agencies.
- Prior to initiating any organized search and rescue plan, authorization must be obtained from the appropriate federal/state agency.
- Initial search and rescue efforts, if needed, should be left up to the appropriate agencies. They have the personnel, equipment, and training to immediately begin capturing contaminated wildlife.
- With or without authorization it must be anticipated that volunteer citizens will aid distressed/contaminated wildlife of their own. It is important to communicate that it may be illegal to handle wildlife without express authority from appropriate agencies. Provisions should be made to support an appropriate rehabilitator, however, no support should be given to any unauthorized volunteer rescue efforts.

6.3 WILDLIFE PROTECTION AND REHABILITATION (Cont'd)

Wildlife Search and Rescue - Points to Consider (Cont'd)

- The regulatory agencies and response personnel should be provided the name and location of a qualified rehabilitator in the event contaminated wildlife is captured.
- Resources and contacts that can assist with wildlife rescue and rehabilitation and provided in Section 2.0. This list includes:
 - Outside rehabilitation organizations
 - Local regulatory agencies
 - Other resources

6.4 STAGING AREAS

When establishing personnel and equipment staging areas for a response to a Facility discharge, the following criteria should be evaluated:

- Access to waterborne equipment launching facilities and/or land equipment.
- Access to open space for staging/deployment of heavy equipment and personnel.
- Access to public services utilities (electricity, potable water, public phone, restroom and washroom facilities, etc.)
- Access to the environmental and socio-economically sensitive areas which are projected for impact.

6.5 SPILL VOLUME ESTIMATES

Quality spill volume estimates are required in order to evaluate the equipment and manpower requirements necessary to handle the response. The primary and most accurate method of estimating the spill volume is from tank gauging and/or pump rate estimates (depending on the type of incident which caused the spill). In the event that tank or pump estimates are not available, the secondary method of visual estimation can be performed by analyzing the color and size of the slick and converting that data with the following chart:

APPEARANCE	APPROXIMATE THICKNESS (mm)	BARRELS IN ONE SQUARE MILE
Barely Visible	0.00005	0.8
Silvery Sheen	0.0001	1.6
First Trace of Color	0.00015	2.4
Rainbow of Color	0.003	4.9
Dull Brown	0.01	14.0
Dark Brown	1.0	31.0

6.6 TRAJECTORY ANALYSIS

Oil spilled on water will react primarily to the effects of wind and current. The oil will tend to spread to a thin layer under the influence of gravity (primary) and chemical (secondary) forces. The following describes the behavior of oil on water:

- Oil will move in the direction and at the rate of the current under negligible wind conditions.
- Oil will move in the direction and at approximately 3.4 % of the velocity of the wind under negligible current conditions.
- The combined effects of wind and current on the oil should be carefully analyzed. A method of vector analysis can be performed to determine the net direction of movement (wind forces can work in addition to, against, or in many other combinations with the current).
- The primary method of surveillance for the Facility will be visual. Visual surveillance is not effective however in rain, fog, darkness, or heavy cloud cover. It is difficult to observe a slick on the water from a boat, dock or land due to the angle of observation. Aerial surveillance is the preferred method of visual surveillance because of the elevated view and the ability to cover a large area in a short period.

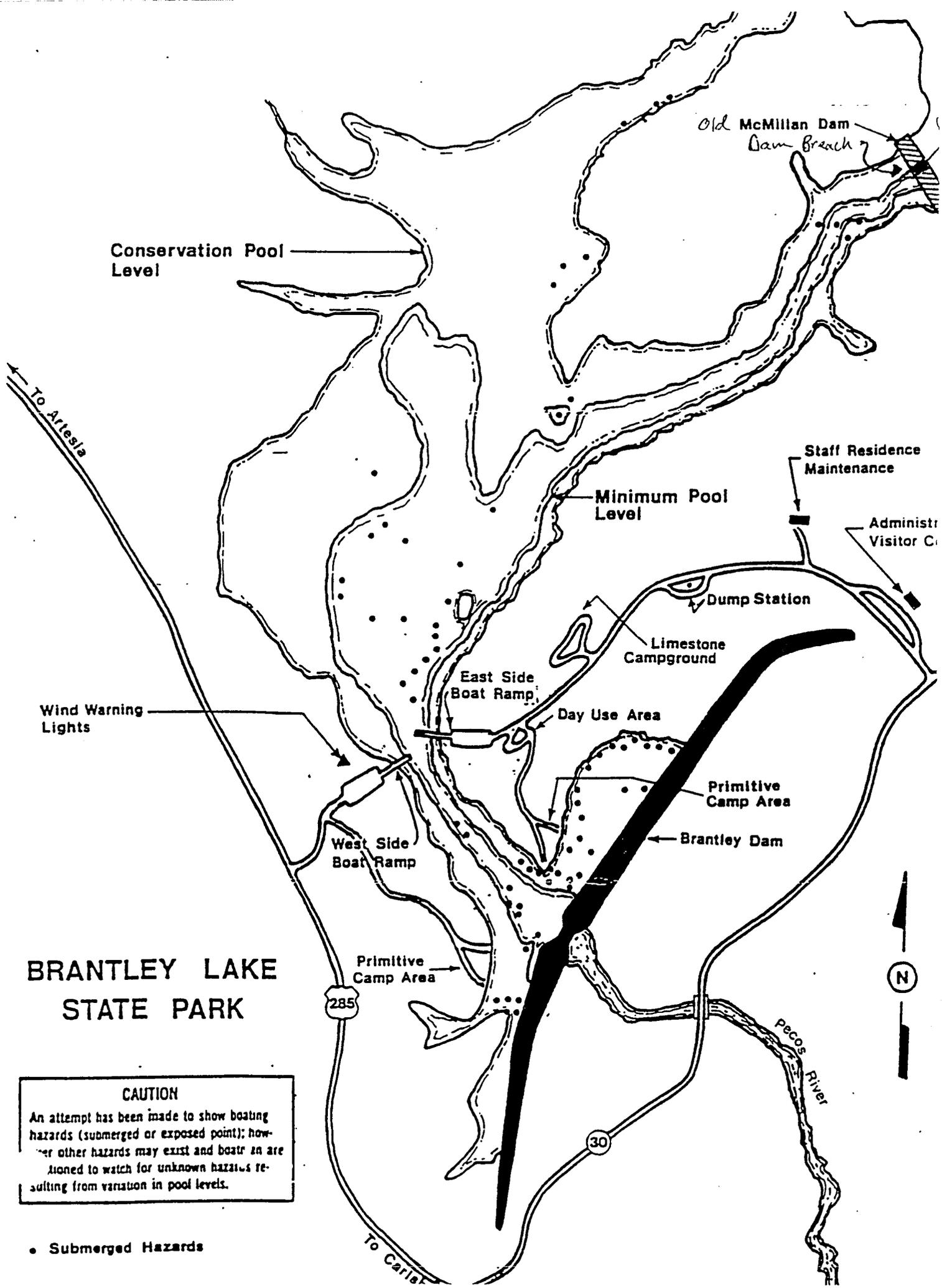
FIGURE 6.1

ENVIRONMENTAL SENSITIVITY MAPS

The following Environmental Sensitivity Maps have been prepared utilizing U.S. Geological Survey 7.5 Minute Quadrangle Maps as the base. The maps include a key to the reference symbols located on each map.

Remember these maps are to be utilized as guidelines only. During a real response effort Federal, State, and Local agencies should be contacted to provide further assistance in the proper identification and protection of the various environmental and socio-economic sensitive areas.

The following maps are intended as guidelines only.
Response Management Associates, Inc. assumes no liability for injury, loss, or damage of any kind resulting directly or indirectly from the use of these guidelines.



BRANTLEY LAKE STATE PARK

CAUTION
 An attempt has been made to show boating hazards (submerged or exposed point); however other hazards may exist and boaters are cautioned to watch for unknown hazards resulting from variation in pool levels.

• Submerged Hazards

FIGURE 6.2

ENDANGERED/THREATENED SPECIES LISTING

The following is a listing of endangered/threatened species with known or possible occurrence in the area of the Facility.

Federally Listed Species

Pecos Gambusia
Pecos Bluntnose Shiner
Pecos Pupfish
Interior Least Tern
Bald Eagle
Brown Pelican
Peregrine Falcon
White-faced Ibis
Swainson's Hawk
Ferruginous Hawk
Western Snowy Plover
Long-billed Curlew
Western Yellow-billed Cuckoo

State Listed Species

Greenthroat Darter
Olivaceous Cormorant
Least Shrew
Pecos Sunflower