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GRC 97  
State of New Mexico

**ENVIRONMENT DEPARTMENT**  
**Hazardous & Radioactive Materials Bureau**  
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MARK E. WEIDLER  
SECRETARY

EDGAR T. THORNTON, III  
DEPUTY SECRETARY

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

January 14, 1997

Ms. Pam Castle, Library Director  
Artesia Public Library  
306 West Richardson  
Artesia, NM 88210



**RE: Public Notice of Proposed Permit Modifications for the RCRA  
Permit for Navajo Refining Co.**

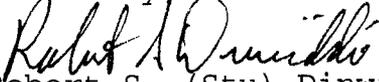
Dear Ms. Castle:

Please make the enclosed "Resource Conservation and Recovery Act" (RCRA) Statement of Basis available to the public from January 20, 1997 to March 6, 1997. Public Notice in the Artesia Daily Press states that this document will be available at the main public library in Artesia. You will be contacted to verify if you did in fact receive this transmittal and the above mentioned enclosures.

Please return this copy to the New Mexico Environment Department's Hazardous and Radioactive Materials Bureau at the above address after the comment period closes.

Your cooperation in this matter will be appreciated.

Sincerely

  
Robert S. (Stu) Dinwiddie, Manager  
RCRA Permits Management Program

Enclosure

cc: File - NAVA Red 97, and Reading



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**STATEMENT OF BASIS  
INTENT TO APPROVE  
CLASS 3 MODIFICATION  
NAVAJO REFINING COMPANY  
ARTESIA, NEW MEXICO**

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**NMED ANNOUNCES STATEMENT OF BASIS/INTENT TO APPROVE**

In this Statement of Basis, the New Mexico Environment Department (NMED) is proposing to approve the Navajo Refining Company (Navajo) request for a Class 3 permit modification to discontinue the annual soil monitoring requirement for the Truck Bypass Landfarm (TBL) Solid Waste Management Unit (SWMU).

**Facility or  
Unit Type:**

Land application area, called the Truck Bypass Landfarm.

**Possible**

**Contaminants:** Solid wastes formerly deposited at the TBL included unleaded tank bottoms, separated wastewater and spilled hydrocarbons, and hydrocarbon contaminated materials.

**Media:**

The primary media that can be impacted by a release are soils.

**Remedy:**

NMED has determined that no further soil investigation is required at the listed SWMU.

**A. FACILITY DESCRIPTION**

Artesia, New Mexico is located in the southeastern part of the state. Navajo's refinery is on the eastern edge of Artesia. The plant facilities are in the Western half of Section 9, Township 17 South, Range 26 East.

The refinery processes crude oil into asphalt, carbon black, oil, fuel oil, diesel fuel, jet fuel, gasoline and liquified petroleum gas. Hazardous waste generated at Navajo are oily wastes typical of the refining industry, including dissolved air flotation, slop oil

emulsion solids, heat exchanger bundle cleaning sludge, leaded tank bottoms, and primary oil/solids/water/ separation sludge.

The Truck Bypass Landfarm (TBL) SWMU is approximately three acres in plan and is located adjacent to East 5th Street, immediately east of the central part of the refinery facility. Solid wastes formerly deposited at the TBL included unleaded tank bottoms at 40 tons per year, separated wastewater and spilled hydrocarbons at 80 tons per year, and hydrocarbon contaminated materials at 40 tons per year. The years of operation of the TBL were 1980 to 1993.

The TBL is immediately underlain by silty loams of moderately low permeability. Shallow ground water occurs in 0.5 to 4.0 foot thick saturated zones approximately 12 to 25 feet below land surface, and is not a drinking water source, due to levels of Total Dissolved Solids (TDS) as high as 16,000 mg/L in many wells. Ground water flows in an easterly direction.

## **B. HISTORY OF INVESTIGATION**

Navajo released a Preliminary Assessment report on April 14, 1986 which listed the TBL as a SWMU. Navajo was issued a Hazardous and Solid Waste Amendments (HSWA) Corrective Action Permit by the EPA on February 17, 1988, which also listed the TBL as a SWMU, and required that it be investigated as part of a RCRA Facility Investigation Workplan (RFI). Under the corrective action process Navajo was required to determine the type, concentration and extent of hazardous waste released into the environment at all SWMU sites. Once the delineation was complete Navajo was required to recommend corrective action options to remove hazardous waste from the affected media.

Navajo performed the RFI investigation in 1990. In 1992 the U.S. EPA established an Annual Soil Monitoring Requirement. Navajo supplied to EPA Annual Soil Monitoring Reports in 1993, 1994 and 1995. In March of 1996, Navajo applied for a Class 3 Permit Modification to discontinue the Annual Soil Monitoring requirement.

Because NMED received full Corrective Action authority from EPA in January, 1996, the Class 3 modification request was processed by NMED.

## **C. INVESTIGATION RESULTS**

Navajo's 1986 Preliminary Assessment stated that there is no record of an aboveground release from the TBL. The report also states: "Because of the lack of geologic and hydrogeologic data for the truck bypass landfarm, it is not possible to determine the potential for release of hazardous constituents to ground water. In addition, no conclusions regarding water quality could be drawn from the analytical results of the single set of ground water samples."

In the 1990 RFI Phase 1 Investigation, Navajo took 12 ten foot deep soil samples. Also, from six monitor wells Navajo collected

ground water samples, measurements of physical parameters, and water levels.

These samples were tested for volatiles, semi-volatiles, metals and inorganics.

Significant findings from this study are:

- 1) Monitor wells near the TBL contain up to four feet of floating product. Since this plume has been documented upgradient of the landfarm, it is unlikely that landfarms operations significantly degrade water quality;
- 2) Soil samples collected from the Truck Bypass Landfarm record no significant impact below four feet except for one sample (NLF-SB-011-04) which contains low levels of various volatile and semivolatile compounds; and,
- 3) No public drinking water source is endangered because the potable aquifer is at depth with considerable artesian head. The shallow aquifer in the area of the refinery is not used for any known purpose.

Following review of this investigation, EPA dropped further investigation except for an Annual Soil Monitoring requirement, which was first included in Navajo's revised RFI Phase 2 Workplan of June, 1992. EPA revised the Annual Soil Monitoring requirements in a letter dated October 13, 1993, which also approved the 1993 Soil Monitoring report.

In a letter dated August 17, 1995, EPA approved the 1995 Annual Soil Monitoring Report, and agreed that yearly soil monitoring is not necessary. EPA set the following conditions for the TBL:

- 1) If waste disposal is continued, then Navajo must contact EPA and NMED. Yearly soil monitoring will be reinstated;
- 2) A survey plat of the TBL must be submitted to the authority with jurisdiction over local land use, and the Secretary of NMED, according to the procedures in 40 CFR §264.116, with a deed restriction for Industrial land use only; and,
- 3) If in the future a different land use is requested, Navajo or any future owner(s) must contact EPA Region 6 and NMED. Additional information or conditions may be required by EPA and NMED; and,
- 4) Navajo must submit a Class 3 permit modification request to EPA requesting no further investigation for the TBL.

#### **D. STABILIZATION MEASURES IMPLEMENTED**

No stabilization measures are necessary.

#### **E. EXPOSURE PATHWAYS**

The media for potential impacts to the environment are soil and groundwater.

#### **F. ENVIRONMENTAL JUSTICE INDEX**

New Mexico has a minority population that is 49 percent of the total population of the state.

The minority population within 50 square miles of the study area is 39.5 percent. The economically stressed minority population within 50 square miles of the study area is 34.6 percent.

#### **G. SELECTED REMEDY**

NMED's determination for no further investigation is based on analytical results which show no or insignificant release(s) of hazardous waste into the environment.

#### **H. INNOVATIVE TECHNOLOGIES CONSIDERED**

No innovative technologies are required under this determination.

#### **I. PUBLIC PARTICIPATION**

Navajo published a Public Notice on March 10, 1996, and held a public meeting on April 11, 1996 at the Alamogordo Public Library. The Public Comment period ran from March 10 to May 9, 1996. No comments were received by HRMB during the Public Comment period. NMED is now Public Noticing the State-required Public Comment Period and Intent to Approve the Modification request from January 20, 1997 to March 6, 1997.

#### **J. NEXT STEPS**

NMED will consider all written comments submitted on these proposed modifications before formulating a final decision. NMED will notify Navajo, and each person who submitted a written comment during the public comment period, of the final decision or of any public hearing which may be scheduled. The final decision will become effective thirty (30) days after service of notice of the decision unless a later date is specified by the Secretary of NMED as per 20 NMAC 4.1 Subpart 902.A.10..

#### **CONTACT:**

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