



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567
www.nmenv.state.nm.us



PETER MAGGIORE
SECRETARY

ENTERED

RED GRCC 101

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

November 2, 2001

Mr. David Pavlich
Environmental Superintendent
Giant Refining Company
Route 3, Box 7
Gallup, New Mexico 87301

Ms. Dorinda Mancini
Environmental Manager
Giant Refining Company
Route 3 Box 7
Gallup, New Mexico 87301

**SUBJECT: REQUEST FOR SUPPLEMENTAL INFORMATION
SWMU ASSESSMENTS
NO FURTHER ACTION REPORT
SWMUs 1 THROUGH 5, 7 AND 9 THROUGH 13
GIANT REFINING COMPANY, CINIZA REFINERY
EPA ID# NMD000333211
HWB-GRCC-01-001**

Dear Mr. Pavlich and Ms. Mancini:

The Hazardous Waste Bureau (HWB) of the New Mexico Environment Department (NMED) has completed a review of the above-referenced No Further Action Report (SWMU assessment report) for technical adequacy as required under 20.4.2.201.7 NMAC.

After reviewing the SWMU assessment report, HWB requests additional information. The information that must be addressed is described in Attachment A.

The requested information must be submitted to HWB within ninety days of receipt of this RSI. Failure to respond within this time period will result in issuance of a Notice of Deficiency.

Giant Refining Company
November 2, 2001
Page 2

Please call this office at 505-428-2553 if you have questions or need additional information regarding this RSI.

Sincerely,



Dave Cobrain
Project Leader

attachment

cc: James Bearzi, NMED HWB
John Kieling, NMED HWB
P. Allen, NMED HWB
James Harris, EPA Region VI
Wayne Price, NMOCD
Bill Olson, NMOCD

file: Red/RSI/11-02-01/SWMU Assessment GRCC-01-001

**ATTACHMENT A
REQUEST FOR SUPPLEMENTAL INFORMATION
TECHNICAL ADEQUACY REVIEW**

**SWMU ASSESSMENT REPORT
(NO FURTHER ACTION REPORT SWMUs 1, 2, 3, 4, 5, 7, 9, 10, 11, 12, 13)
NOVEMBER 2001**

**GIANT REFINING COMPANY CINIZA REFINERY
EPA ID NO. NMD00033321115**

November 2, 2001

The NMED HWB requests the following general information in order to complete the assessment of Solid Waste Management Units (SWMUs) 1, 2, 3, 4, 5, 7, 9, 10, 11, 12 and 13:

1. An estimate of hydraulic conductivity is presented in the report but supporting data from soil and/or aquifer testing was not included in the report. Please provide supporting data to substantiate the hydraulic conductivity value provided in the No Further Action Report or provide data acquired during more recent investigation activities conducted at the facility.
2. The general site geology and groundwater conditions beneath the refinery are not described in the report. Provide a general site-wide description of geologic and hydrologic conditions at the Refinery with regard to the subject SWMUs and refinery process areas.
3. The citation for the wastewater exemption is not included in the report. Please provide the citation for the wastewater exemption as it pertains to the Aeration Ponds (SWMU #1), Evaporation Ponds (SWMU #2) and the Contact Wastewater Collection System (SWMU #12).
4. Provide copies of SWMU survey plats that were submitted to EPA prior to 1997, to NMED HWB
5. Submit the results of April 2001 groundwater monitoring and sampling event. The report should include the results of all wells monitored and sampled throughout the facility during the sampling event.

In addition to the general information regarding facility-wide issues, the following SWMU-specific data is requested to provide for a complete evaluation of current conditions at each listed unit:

SWMU #1 – Aeration Basin

Provide the following post-1991 data:

- A site plan showing the locations of all borings.
- The depths of sample collection.
- The dates of sample collection and depths of samples selected for laboratory analyses.

- The laboratory analyses performed, laboratory methods, results and dates of analyses and any data quality exceptions for soil samples.
- The boring logs for each soil boring completed at the unit
- The moisture content of soils adjacent to, and underlying the aeration ponds if available.
- Aeration Basin influent and effluent sampling results

SWMU #2 – Evaporation Ponds

Provide the following post-1991 data:

- The locations of all borings.
- The depths of sample collection.
- The dates of sample collection and depths of samples selected for laboratory analyses.
- The laboratory analyses performed, laboratory methods, results and dates of analyses and any data quality exceptions for soil samples.
- The moisture content of soils adjacent to, and underlying the evaporation ponds, if available
- Evaporation Pond influent sampling results.

SWMU #3 – Empty Container Storage Area

The site was formerly covered with gravel and served as a storage area for empty drums. The site was converted for use as a heat exchanger bundle cleaning pad. A concrete containment pad has been installed and is currently used as a heat exchanger bundle cleaning pad. Heat exchanger bundle cleaning operations generate sludge that is listed as K050 hazardous waste [formerly associated with hexavalent chromium]. Provide the following information:

- Process information on heat exchanger additives (corrosion inhibitors) to cooling water from the date of initial use of the pad to the present, if available.
- Analytical data for heat exchanger bundle cleaning sludge disposal characterization, if available.
- The year that the concrete pad was installed.

SWMU #4 – Old Burn Pit

The site was used to burn acid soluble oils. Soil samples were collected for laboratory analysis at depths up to ten feet below the ground surface. The site has been covered with an approximately three-foot thick soil cap. Provide the following information:

- The estimated depth of the Old Burn Pit is ten to twelve feet. Indicate whether soil samples were collected from the native soil located directly beneath the pit. Provide analytical data obtained from the soil samples if samples of the native soils were collected.
- The cap construction details.
- The locations and logs for all soil borings.
- The drilling and sampling dates and the depths of soil sample collection.

SWMU #5 – Landfill Areas

The SWMU consists of four landfills. Three of the landfills are contiguous and the fourth landfill is located approximately 50 feet north of the other landfills. The landfills are covered with four to eight foot-thick engineered earthen caps consisting of native soil that are sloped to control surface water run on and runoff. Provide the following information:

- The locations and logs for the 9.5-foot borings.
- The dates of drilling and soil sampling.

The EPA approval letter for Phase III RCRA Facility Investigation (RFI) with modifications (dated January 5, 1994) required additional borings to 20 feet with sample collection at depths of 11, 16 and 20 feet. Provide the following information:

- The locations and logs for the 20-foot borings.
- The dates of drilling and sampling.
- Soil field screening and chemical analytical data for the 20-foot borings.

SWMU #7 – Fire Training Area

The fire training area is an active training unit. The area is currently equipped with a fire training tank and ancillary equipment located on a concrete containment pad. Diesel contaminated soil was removed from the area in 1999 and replaced with clean fill prior to the placement of the concrete containment pad. Total petroleum hydrocarbons (TPH) and oil and grease were not detected in soil samples obtained at depths of 7 and 11 feet below the ground surface in 1994. Provide the following information:

- The sample locations and a summary of soil removal and sample collection activities for the June 1999 soil remediation event.
- A site plan showing Fire Training Area features and soil confirmation sample locations.
- Indicate whether the 1999 samples were confirmation samples collected at the time of contaminated soil removal.

SWMU #9 – Drainage Ditch Near the Inactive Land Treatment Area

The SWMU includes an inactive land treatment area and an associated drainage ditch. The land treatment area was used to degrade oily wastes prior to the early 1980s. Provide the following information:

- Site plan showing boring /sample locations from the 1990 investigation.
- The boring logs for the 1990 investigation and the dates of soil sampling and laboratory analyses.

SWMU #10 – Sludge Pits

SWMU 10 consists of two former API separator sludge pits. The sludge was reportedly removed from the pits in 1980 and the excavations were backfilled with clean soil and covered with a layer of clean soil of unspecified thickness. Based on the depths of the detected contaminants, it appears that the sludge was not completely removed from the pits during the 1980 removal activities. Provide the following information:

- The original depths of the sludge pits and the estimated maximum depths of excavations (or depressions created by vacuuming) during the 1980 removal operations.
- Dates of drilling and the boring logs for the 1990 and 1995 investigations.
- A site plan(s) showing the locations of the 1990 and 1995 borings.
- The SWMU No Further Action Report states that residual soil contamination is present in a “20-foot soil layer beneath the cover”. Provide the depth interval of the soil layer.
- The laboratory analytical data results including sample locations, dates of sampling and depths for the 1990 and 1995 investigations.
- The method of collection of soil samples for volatile organic compound (VOC) analysis as described in the (1995?) investigation report indicates that there may have been a loss of volatiles during sample collection, therefore the analytical results may not be representative of the actual VOC concentrations. Provide additional information on the sample collection methods used during the investigation.

SWMU #11 – Secondary Oil Skimmer

The secondary oil skimmer consisted of a steel box centered over a storm water drainage ditch that collected floating oil suspended on storm water flowing to the evaporation ponds. The secondary oil skimmer and surrounding contaminated soil were removed in 1998 or 1999. Provide the following information:

- A site plan showing the limits of the remedial excavation and the dates of soil excavation.

- The depth of the remedial excavation and the estimated volume of contaminated soil removed.
- A dated site plan presenting the boring/sample locations.
- The boring logs for the 1992 and 1994 drilling investigations.
- The laboratory analytical results for the 1994 investigation (ten-foot borings required by the EPA).
- The current use of the unit is as a storm water drainage ditch. Determine if contaminants are present in the surface soils of the ditch, if remedial excavation details are not available

SWMU #12 – Contact Wastewater Collection

The contact wastewater collection system (CWWCS) is a plant-wide network receiving process and storm water. The CWWCS is currently being upgraded. Subsurface investigations have not been conducted at the unit. Giant Refining Company requests that the unit be regulated under the New Mexico Department of Energy, Minerals and Natural Resources Oil Conservation Division (OCD). Provide the following information:

- Copies of CWWCS investigation work plans submitted to the OCD.
- Copies of all reports of CWWCS investigations submitted to the OCD, if submitted.
- A copy of the OCD discharge plan currently in effect for the CWWCS.

SWMU #13 – Drainage Ditch between API and Evaporation Ponds

SWMU #13 consists of an overflow lagoon and an associated drainage ditch located northeast of evaporation pond #2. The ditch conveys overflow water from evaporation pond #10 to evaporation pond #13 in the northern portion of SWMU #2 (Evaporation Ponds). Provide the following information:

- The description of the ditch (120 feet long) does not appear to match the site plan provided in the SWMU report. The ditch does not appear to be connected to either pond #10 or pond #13 on the site plan. Provide a description of the ditch conveyance system including the total length, influent and effluent locations and any additional connecting piping or ditches. A labeled site plan showing the ditch details may be substituted for a written description.
- Information regarding the different influent sources (Neutralization Tank vs. API Ponds and storm water discharge) to the ponds. If there was not more than one source of wastewater to the evaporation ponds, include a statement that the exclusive influent source of wastewater discharged to the Evaporation Ponds is the aeration ponds.
- Indicate whether samples of the water in the ditch were ever collected for laboratory analysis and, if so, provide the analytical data for the water sample(s).

Giant Refining Company
SWMU Assessment Report RSI
November 2, 2001
Page 6

- Indicate whether samples of the sludge or sediments that have accumulated at the base of the ditch were ever collected for laboratory analysis and, if so, provide the analytical results for the sludge or sediment sample(s).
- The boring logs for 1991 and 1996 sampling events.
- The depths of soil sample collection for the 1996 sampling event.