Ciniza

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

August 23, 2007

Mr. Ed Rios
Refinery Manager
Western Refining (Giant Refining Company) Ciniza Refinery
Interstate I-40, Exit 39
Jamestown, New Mexico 87347

RE: DISCHARGE PERMIT (GW-032)
GIANT REFINING COMPANY- CINIZA REFINERY

Dear Mr. Rios:

Pursuant to Water Quality Control Commission (WQCC) Regulations (20.6.2.3000 - 20.6.2.3114 NMAC), the Oil Conservation Division (OCD) hereby approves the discharge permit for the Western Refining (**Giant Refining Company), Ciniza Refinery** (GW-032) located in Section 28, Township 15 North, Range 15 West, NMPM, McKinley County, New Mexico, under the conditions specified in the enclosed **Attachment To The Discharge Permit**. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 calendar days of receipt of this letter including permit fees.**

Please be advised that approval of this permit does not relieve the owner/operator of responsibility if operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve the owner/operator of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail: carlj.chavez@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price
Environmental Bureau Chief

LWP/cc
Attachments-1
xc: OCD District Office

ATTACHMENT TO THE DISCHARGE PERMIT
GIANT REFINING COMPANY- CINIZA REFINERY (GW-032)
DISCHARGE PERMIT APPROVAL CONDITIONS

August 23, 2007

Please remit a check for $8,400.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
C/o: Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee. However, the owner/operator still owes the required $8,400.00 renewal permit fee for a refinery.

2. **Permit Expiration, Renewal Conditions and Penalties:** Pursuant to WQCC Regulations (20.6.2.3109.H.4 NMAC), this permit is valid for a period of five years. **The permit will expire on August 1, 2011** and an application for renewal shall be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved. ***Expired permits are a violation of the Water Quality Act {Chapter 74, Article 6, and NMSA 1978} and civil penalties may be assessed accordingly.***

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, Sections 70-2-1 through 70-2-38 NMSA 1978.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its January 20, 2007, discharge plan renewal application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulations 20.6.2.3107.C and 20.6.2.3109 NMAC addresses possible future modifications of a permit. The owner/operator shall notify the OCD of any facility expansion, production increase or process modification that would result in any

significant modification in the discharge, or potential of discharge, of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. **Waste Disposal and Storage:** The owner/operator shall dispose of all oil field exempt and non-exempt non-hazardous wastes at an OCD-approved facility. RCRA non-hazardous, exempt or non-exempt oil field wastes regulated by the OCD may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. **OCD Rule 712 Waste:** Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. **Waste Storage:** The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** The owner/operator shall store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator shall store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. **Process, Maintenance and Yard Areas:** The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas that show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. **Above Ground Tanks:** The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (*e.g.,* liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank, and if interconnected tanks are present, the total volume of all interconnected tanks. The owner/operator shall retrofit all existing secondary containment(s) before this discharge plan permit expires. The owner/operator may propose an alternate plan or schedule to accomplish the above to the Division for approval by October 17, 2007. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system, which is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Lagoons/Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal or by August 1, 2011. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. Aeration lagoons shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future.

C. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future.

D. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds. Where netting is not feasible, routine witnessing and/or discovery of dead wildlife and migratory birds shall be reported to the appropriate wildlife agency with notification to the OCD in order to assess and enact measures to prevent the above from reoccurring.

E The owner/operator shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection upon request. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 working days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 calendar days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection upon request. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation.

13. Class V Wells: The owner/operator shall close all Class V wells (*e.g.,* septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 working days.

16. OCD Inspections: The OCD may place additional requirements on the facility and modify the permit conditions as needed based on OCD inspections. Subsequent to C-141 releases to the treatment system, the following monitoring is required until further notice:

Giant Ciniza Refinery Sampling Schedule Resulting from historical New API Separator Spills

Sampling Location	Sampling Frequency	Analytical Suite	Comments and Additional Parameters
Effluent from AL-2 to EP-1	Quarterly[2]	EPA Methods: 8260, 8015B (include C_6 –C_{10} and C_{10}-C_{36} carbon ranges), 6010 WQCC Metals (totals)	Sampling frequency will be modified as needed.
Effluent from Old API separator (storm water separator effluent)[1]	Monthly flow rate measurements to New API Separator only	Collect monthly flow rate readings from the Old API to the New API Separator.	If effluent is re-routed to any other location than the New API Separator, NMED/OCD must be contacted to determine whether additional sampling and analysis is required.

*Note: [1] This requirement will end when the Old API Separator is decommissioned.
[2] Sampling may be conducted in coordination with the Item 19 Table below.

Quarterly sampling must begin in June. All data must be submitted to NMED/OCD on a quarterly basis no later than 30 days after receipt of the final laboratory report.

Additional Site Specific Conditions:

A. Old API Separator (OAPIS): In accordance with Item 17 (Storm Water) below, an engineering design to decommission and replace the OAPIS storm water drainage system shall be submitted with a more efficient treatment system by December 31, 2007. This unit is located proximal to and below a flare stack and presents a fire hazard.

B. Leaky New API Separator (NAPIS): This leaky unit shall be repaired by December 31, 2007 so as to contain liquid waste in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. This treatment system shall have secondary containment with leak detection.

C. Treatment System Study and Design: A activated sludge wastewater treatment study and design shall be completed by December 31, 2007 to determine the maximum and operational waste loading capacity and efficiency of the treatment system under variable flow rate conditions. The study shall evaluate the economics of an activated sludge treatment system. Flow meters shall be permanently installed at all locations necessary to record flow rates through the treatment system along with BOD, COD and Phenol monitoring of influent into aeration lagoons (ALs) 1 and 2 and EP-1.

Treatment System Monitoring:

1. Flow meters at all influent lines into the treatment system shall be monitored weekly or as often as needed to determine the maximum wastewater treatment capacity based on pollutant loading under variable flow rate conditions.

2. Grab samples for BOD (Method 405.1), COD (Method 410.1) and Phenol (Method 8270) shall be collected at a minimum monthly or more frequently for the first 6 months and quarterly or more frequently thereafter of influent into Aeration Lagoons 1 and 2 and EP-1. Grab samples for VOC, BOD, COD,

Chlorides (300.1), DRO, GRO, MTBE, pH and Phenol shall be monitored monthly at Evaporation Pond 1 for 12 months or by December 31, 2008 and quarterly thereafter to assess chemicals of concern.

D. Aeration Lagoons: Air blower(s) failure in the lagoons lasting longer than 24 hours shall be reported to the OCD. An engineering design and construction plan with a schedule for implementation for replacement of the existing aeration lagoons (AL) 1 and 2 at a minimum shall be submitted to investigate, decommission, and replace ALs 1 and 2 of the treatment system with a more efficient containment system by June 6, 2008. The engineering design and construction at AL2 or immediately upstream from EP 1 shall include an oil trap to prevent oil flow into EP1 and the rest of the treatment pond network. An alternative to the above may be considered by the Division if submitted by this date.

E. Evaporation Ponds: An engineering design and construction plan with a schedule for implementation for a single lined evaporation pond (EP-1) with leak detection system at a minimum or alternative plan through testing to show the new treatment design eliminates the need for a liner shall be submitted to investigate, decommission, and replace the existing EP-1 evaporation pond with a more efficient containment system by June 6, 2008. EPs shall meet the no-liner requirements of RCRA § 264.221(b).

F. Temporary Landfarms: A closure plan for any temporary landfarm(s) or land treatment area(s) shall be submitted to the OCD by December 31, 2007.

17. Storm Water: The owner/operator shall implement and maintain run-on and run-off plans and controls. The owner/operator shall separate or isolate contact (refinery process) from non-contact (storm water) drainage and/or effluent lines and areas at the plant. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The owner/operator shall notify the OCD within 24 hours of discovery of any contaminated storm water releases and shall take immediate corrective action(s) to remediate and prevent the discharge from migrating off-property.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC and 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. ***Any unauthorized discharge is a violation of this permit.***

19. Surface Water / Ground Water / Vadose Zone Monitoring/ Remediation/ Abatement:

The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000 - 4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports shall be a violation of the permit.

The owner/operator shall sample, analyze and report water contamination to the OCD and NMED-Hazardous Waste Bureau in accordance with the Resource Conservation and Recovery Act (RCRA) and Environmental Protection Agency sampling and analytical test. Permanent and/or temporary monitoring changes must be approved in writing by the OCD.

Location	Frequency	Measurement[4] / Analysis
BW-1-A[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-1-B[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-1-C[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-2-A[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-2-B[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-2-C[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-3-A[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-3-B[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
BW-3-C[3]	Annual	General chemistry / VOC / SVOC / MTBE / WQCC Metals
GWM-1[1]	Quarterly Annual	Q: Water level measurement A: General chemistry / VOC / SVOC / MTBE / WQCC Metals
GWM-2[1, 9]	Quarterly	Check for water (indication of aeration basin leakage)
GWM-3[1, 9]	Quarterly	Check for water (indication of aeration basin leakage)
MW-1	Annual	General chemistry / RCRA list constituents[5]
MW-4	Annual	General chemistry / RCRA list constituents[5] Modified skinner list metals & organics
MW-5	Annual	General chemistry / RCRA list constituents[5] Modified skinner list metals & organics
NAPIS-1[9]	Quarterly	Check for water (indication of NAPIS leakage)
NAPIS-2[9]	Quarterly	Check for water (indication of NAPIS leakage)
NAPIS-3D[9]	Quarterly	Check for water (indication of NAPIS leakage)
OW-1	Quarterly	Visual check for artesian flow conditions
OW-10	Quarterly	Level measurement of the Sonsela Aquifer water table
OW-11	Annual	General chemistry / VOC / MTBE / SVOC / WQCC Metals
OW-12	Annual	VOC / MTBE
Location	**Frequency**	**Measurement[4] / Analysis**

OW-13[2]	Annual	VOC / MTBE
OW-14	Semi Annual	VOC / MTBE
OW-29	Annual	VOC / MTBE
OW-30	Annual	VOC / MTBE
PW-2	2008, then every 3 ~ thereafter	VOC / SVOC / WQCC Metals / Cyanide / Nitrates
PW-3	Every 3 years starting with 2008	VOC / SVOC / WQCC Metals / Cyanide / Nitrates
PW-4	Every 3 years starting with 2007	VOC / SVOC / WQCC Metals / Cyanide / Nitrates
RW-1	Annual	Measurement of product layer thickness, if present
RW-2	Annual	Measurement of product layer thickness, if present
RW-5	Annual	Measurement of product layer thickness, if present
RW-6	Annual	Measurement of product layer thickness, if present
SMW-2	Annual	General Chemistry / RCRA list constituents[5] Modified skinner list metals & organics
SMW-4	Annual	General Chemistry / RCRA list constituents[5] Modified skinner list metals and organics
Effluent from Pilot Gas Station to the Aeration Lagoon	Quarterly	VOC / DRO extended / GRO / BOD / COD / WQCC Metals
Effluent from the new API separator	Quarterly	General Chemistry / VOC / SVOC including Phenol / DRO extended / GRO / WQCC Metals
Pond 1 Inlet (EP1-IN)[6]	Semi Annual	General Chemistry / VOC / SVOC / DRO extended / GRO / Phenol / WQCC Metals
Pond 2 Inlet (EP2-IN)[7]	Annual	VOC / MTBE / DRO extended / GRO / BOD / COD / TDS
Boiler Water inlet to EP-2	Semi Annual	General Chemistry
Evaporation Ponds 1 through 8[10, 11]	Quarterly (first year & annually thereafter)	General Chemistry / VOC / WQCC Metals / BOD / COD / E. coli Bacteria
NE OCD Landfarm[8]	--	See Item 21 "Refinery Landfarm(s)" below.

1 Wells installed down gradient from the aeration basins.
2 When OW-14 is cleaned up, the monitoring at OW-13 shall be discontinued.
3 These are the wells installed at the northwest corner boundary of the refinery. BW-1 -A, BW-1-B, and BW-3-A were dry at the time of drilling.
4 Water table depth shall be measured at each well annually.
5 Frequency of sampling shall be per RCRA post closure schedule.
6 Sample is taken at the inlet to Pond 1 from Aeration Lagoon 2.
7 Sample is taken at the inlet to Pond 2 from Pond 1.
8 See "Refinery Landfarm(s)" sampling requirements in Item 21 below.
9. If fluid is present, record static water level and sample well, maintain record, and report to OCD and NMED within 24 hours of detection. If water is present, a sample shall be collected and analyzed for BTEX, MTBE, GRO and DRO extended, and General Chemistry.
10. Sample using the State of New Mexico approved analytical methods as required by 20.6.4.14 NMAC, as amended through February 16, 2006 (use Methods: 9221-E and 9221-F, until EPA approves 40 CFR 136 methods (Colilert, Colilert-18, m-ColiBlue24, membrane filter method)). Parameters are subject to change.
11. Sampling to be conducted in coordination with "Pond 1 Inlet" and "pond 2 Inlet" within the table above.

20. Inspection and Reporting:

Perimeter inspections of the refinery property shall be conducted on bimonthly basis and as needed. The inspections shall focus on hydrocarbon staining or any release that could result in contamination leaving the property boundary. Owner/operator shall maintain an inspection checklist and record that shall be completed and signed by the environmental employee conducting the inspection. Completed inspection sheets shall be maintained on site and made available at the request of an OCD Representative.

A. Annual Groundwater Report: An annual report will be submitted to the OCD and NMED by September 01 of each year. The annual reports shall contain:

1. A description of the monitoring and remediation activities, which occurred during the year including conclusions and recommendations.

2. Summary tables listing laboratory analytic results of all water quality sampling for each monitoring point and plots of concentration vs. time for contaminants of concern from each monitoring point. Any WQCC constituent found to exceed the groundwater standard shall be highlighted and noted in the annual report. Copies of the most recent year's laboratory analytical data sheets shall also be submitted.

3. An annual water table (piezometric) or potentiometric elevation map using the water table elevation of the ground water in all refinery monitor wells. A corrected water table elevation shall be determined for all wells containing phase-separated hydrocarbons. This map shall show well locations, pertinent site features, and the direction and magnitude of the hydraulic gradient.

4. Plots of water table elevation vs. time for each ground water monitoring point.

5. An annual product thickness map based on the thickness of free phase product on ground water in all refinery recovery wells. This map shall include isopleths or iso-concentration lines for products and contaminants of concern.

6. The volume of product recovered in the recovery wells during each quarter and the total recovered to date.

7. Electronic filing: Owner/operator may file this report in an acceptable electronic format; however, in addition, a hard copy must be submitted to the OCD and NMED.

B. Additional Requirements:

1. Owner/operator shall notify the OCD Santa Fe and the local district offices at least 2 weeks in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples. For large facilities, *i.e.,* refineries, an annual notification will suffice.

2. Owner/operator shall notify the OCD within 15 days of the discovery of separated-phase hydrocarbons or the exceedance of WQCC Standards in any down gradient monitor well where separate-phase hydrocarbons were not present or where contaminant concentrations did not exceed WQCC standards during the preceding monitoring event.

21. Refinery Landfarm(s):

A. Land Treatment: The owner/operator shall replace the former discharge plan Item 17: "Refinery Land Farms" provision with this Item "Refinery Landfarms" of this discharge plan permit. The owner/operator shall submit a closure plan within 3 months of the new permit for landfarming, if it wishes not to landfarm. If the owner/operator wishes to continue landfarming, it shall implement or comply with the following permit conditions applicable to landfarming soils contaminated with predominantly petroleum hydrocarbons generated on-site.

B. Waste Acceptance:

(1) Only refinery RCRA non-hazardous waste or exempt soils predominantly contaminated by petroleum hydrocarbons that are capable of being remediated shall be placed in the landfarm.

(2) All waste placed in the landfarm(s) shall be sufficiently free of liquid content to pass the paint filter test and shall not have a chloride concentration exceeding 500 mg/kg.

(3) Records shall be maintained and made available for inspection. OCD form C-138 or equivalent form approved by the division shall be used to verify waste generated and acceptance.

C. Operation and Waste Treatment.

(1) The operator shall berm each cell to prevent run-on and run-off of rainwater.

(2) The operator shall disk all contaminated soils in eight inch or less lifts or approximately 1000 cubic yards per acre per eight-inch lift within 72 hours of receipt.

(3) The operator shall ensure that soils are disked biweekly.

(4) The operator may add fresh water, as necessary, to enhance bioremediation and to control blowing dust.

(5) The application of microbes for the purposes of enhancing bioremediation requires prior division approval.

(6) Pooling of liquids in the landfarm is prohibited. Freestanding water shall be removed within 24 hours.

(7) The operator shall maintain records of the facility's treatment activities in a form readily accessible for division inspection.

(8) Prior to adding an additional lift the treatment zone standards as shown in 21.D below shall be met and documented.

(9) The maximum thickness of treated soils in a landfarm cell shall not exceed two feet or approximately 3000 cubic yards per acre. When that thickness is reached, the operator shall not place additional waste in the landfarm cell.

D. Treatment zone monitoring. The operator shall conduct treatment zone monitoring to ensure that prior to adding an additional lift the TPH concentration of each lift, as determined by EPA SW-846 method 8015M or EPA method 418.1 or other EPA method approved by the division, does not exceed 2500 mg/kg and that the chloride concentration, as determined by EPA method 300.1, does not exceed 500 mg/kg. The operator shall collect and

analyze at least one composite soil sample, consisting of four discrete samples, from the treatment zone at least semi-annually using the methods specified for TPH and Chlorides shown above.

E. Vadose zone monitoring.

(a) Sampling. The operator shall monitor the vadose zone beneath the treatment zone in each landfarm cell. The operator shall take the vadose zone samples from soils between three and four feet below the cell's original ground surface.

(b) Semi-annual monitoring program. The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone at least semi-annually using the methods specified above for TPH, BTEX and chlorides and shall compare each result to the higher of the practical quantitation limit (PQL) or the background soil concentrations to determine whether a release has occurred.

(c) Five year monitoring program. The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified in Item F below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred.

(d) Record keeping. The operator shall maintain a copy of the monitoring reports in a form readily accessible for division inspection.

(e) Release response. If vadose zone sampling results show that the concentrations of TPH, BTEX or chlorides exceed the higher of the PQL or the background soil concentrations, then the operator shall notify the division's environmental bureau of the exceedance, and shall immediately collect and analyze a minimum of four randomly selected, independent samples for TPH, BTEX, chlorides and the constituents listed in Item F5 below i.e. Subsections A and B of 20.6.2.3103 NMAC. The operator shall submit the results of the re-sampling event and a response action plan for the division's approval within 45 days of the initial notification. The response action plan shall address changes in the landfarm's operation to prevent further contamination and, if necessary, a plan for remediating existing contamination, or removal of contamination.

F. Closure Performance Standards. After the operator has filled a landfarm cell to the maximum thickness of two feet or approximately 3000 cubic yards per acre, the operator shall continue treatment until the contaminated soil has been remediated to the higher of the background concentrations or the following closure performance standards. The operator shall demonstrate compliance with the closure performance standards by collecting and analyzing a minimum of one composite soil sample, consisting of four discrete samples.

(1) Benzene, as determined by EPA SW-846 Method 8021B or 8260B, shall not exceed 0.2 mg/kg.

(2) Total BTEX, as determined by EPA SW-846 Method 8021B or 8260B, shall not exceed 50 mg/kg.

(3) The gasoline range organics (GRO) and diesel range organics (DRO) combined fraction, as determined by EPA SW-846 Method 8015M, shall not exceed 500 mg/kg. The total extractable petroleum hydrocarbon (TPH) fractions, as determined by EPA Method 418.1 or other EPA method approved by the division, shall not exceed 2,500 mg/kg.

(4) Chlorides, as determined by EPA method 300.1, shall not exceed 500 mg/kg.

(5) The concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by EPA SW-846 methods 6010B or 6020 or other methods approved by the division. If the concentration of those constituents exceed the PQL or background concentration, the operator may either perform a site specific risk assessment using EPA approved methods and propose closure performance standards based upon individual site conditions that protect fresh water, public health, safety and the environment, which shall be subject to division approval or remove the soils to an approved OCD facility.

Closure Constituents			
(i)	Arsenic (As)	**(xix)**	1,1,2-trichloroethylene (TCE)
(ii)	Barium (Ba)	**(xx)**	methylene chloride
(iii)	Cadmium (Cd)	**(xxi)**	chloroform
(iv)	Chromium (Cr)	**(xxii)**	1,1-dichloroethane
(v)	Cyanide (CN)	**(xxiii)**	ethylene dibromide (EDB)
(vi)	Fluoride (F)	**(xxiv)**	1,1,1-trichloroethane
(vii)	Lead (Pb)	**(xxv)**	1,1,2-trichloroethane
(viii)	Total Mercury (Hg)	**(xxvi)**	1,1,2,2-tetrachloroethane
(ix)	Nitrate (NO3 as N)	**(xxvii)**	vinyl chloride
(x)	Selenium (Se)	**(xxviii)**	PAHs: total naphthalene plus monomethylnaphthalenes
(xi)	Silver (Ag)	**(xxix)**	benzo-a-pyrene
(xii)	Uranium (U)	**(xxx)**	Copper (Cu)
(xiii)	Radioactivity: Combined Radium-226 and Radium-228	**(xxxi)**	Iron (Fe)
(xiv)	Polychlorinated biphenyls (PCBs)	**(xxxii)**	Manganese (Mn)
(xv)	Carbon Tetrachloride	**(xxxiii)**	Phenols
(xvi)	1,2-dichloroethane (EDC)	**(xxxiv)**	Sulfate (SO4)
(xvii)	1,1-dichloroethylene (1,1-DCE)	**(xxxv)**	Zinc (Zn)
(xviii)	1,1,2,2-tetrachloroethylene (PCE)		

(6) Disposition of treated soils.

(a) If the operator achieves the closure performance standards specified above, then the operator may either leave the treated soils in place or, with prior division approval, dispose or reuse of the treated soils in an alternative manner.

(b) If the operator cannot achieve the closure performance standards specified in above within five years or as extended by the division, then the operator shall remove contaminated soils from the landfarm cell and properly dispose of it at a division-permitted landfill or reuse or recycle it in a manner approved by the division.

22. Aeration Lagoons: Aeration Lagoons 1 and 2 shall comply with Item 16D (Additional Site Specific Conditions) requirements above.

23. Evaporation Ponds: Evaporation Ponds 1 and 2 shall comply with Item 16E (Additional Site Specific Conditions) requirements above. The owner/operator shall demonstrate that all wastewater or process water discharged to the evaporation ponds meets the definition of EPA RCRA Non-hazardous. A minimum freeboard of three feet shall be maintained in the ponds so that no overtopping of wastewater occurs. The owner/operator shall receive prior OCD approval for any major repairs or modifications to the ponds or leak detection systems, except under emergency conditions. Any exceedance of the freeboard or any leaks or releases shall be reported pursuant to Item 15 (Spill Reporting) above of these conditions.

A. Evaporation Pond Inspections: Evaporation Ponds shall be inspected a minimum of three times per week and after any major storm event or malfunction of the treatment system. Weekly records shall be maintained for all flow rates from all flow meters, fluid levels, freeboard, seepage, flow channels, pipes, valves, and dike integrity.

B. Evaporation Spray System(s):

1. Individual sprinklers (atomizers) in the spray system will be oriented to direct the fluid spray so that no direct spray or windblown draft will leave the confines of the pond.

2. The spray system will not be operated when wind conditions will allow spray or salt precipitates to drift outside the confines of the pond.

C. Evaporation Pond(s) Water Quality and Quantity Monitoring: Surface water shall be observed, sampled and analyzed in accordance with Item 19 (Surface Water/ Ground Water/ Vadose Zone Monitoring/ Remediation/ Abatement) above. In addition, all wastewater from the refinery or other sources entering the ponds shall be metered and records maintained and reported in an annual report to be submitted on the 1st day of September 1 of each year.

D. Temporary storage ponds: Any ponds that were previously approved shall be identified and Owner/operator shall submit a closure plan for OCD approval by September 01, 2008.

24. Wastewater from Pilot Travel Center and Truck Stop Facility: In order for OCD to allow wastewater from the Pilot Travel Center and Truck Stop Facility to continue to be disposed of at the Giant Ciniza Refinery, Owner/operator shall incorporate the following conditions and controls into the discharge plan permit:

A. The by-pass line, or any other by-pass means, whether by pipe, surface/sub-surface flow shall be disconnected, plugged and/or prevented from flowing directly into any evaporation pond before treatment by December 31, 2007. A new duel primary separation device with secondary containment and leak detection shall be installed to catch solid debris and provide oil water separation. The OCD will consider the construction of an above ground treatment system that will address this issue by the above date.

B. A new emergency holding system with secondary containment and leak detection shall be installed to contain a minimum of 48 hours of wastewater generated from the Travel Center for emergency upsets. The OCD will consider the construction of an above ground treatment system that will address this issue by December 31, 2007.

C. All wastewater received from the Pilot Travel Center and Truck Stop shall be EPA RCRA Non-Hazardous as defined in 40 CFR part 261 and shall not contain phase separated hydrocarbons or solids.

D. Owner/operator shall design, implement and maintain a sampling and metering station on the incoming line. At a minimum, weekly flow rates from flow meters shall be recorded to assist with the treatability study and future evaluations of the treatment system. Grab samples shall be collected quarterly and analyzed for Hazardous Characteristics (TCLP) by EPA Method 1311, COD by EPA Method 410.1 and BOD by Method 405.1. All emergency up-sets or an exceedance of RCRA Standards shall be reported to OCD within 24 hours and immediate corrective actions taken.

E. A biohazard or bio-safety "expert" consultant shall be retained to develop a Biohazard operation and maintenance plan for the waste treatment facility and evaporation ponds. The plan shall describe methods and procedures to identify all possible bio-hazards, treatment, proper handling and disposal, protection for workers, visitors, public and wildlife. The comprehensive plan shall be submitted to the OCD and the New Mexico Health Department by June 30, 2008.

25. Annual Report: On an annual basis due September 01, Giant shall submit a formal report to the OCD similar to the Resource Conservation and Recovery Act (RCRA) New Mexico Environment Department- Hazardous Waste Bureau requirement(s) on the past year's activities. The report will include the following at a minimum:

- **A.** A summary of all major refinery activities or events.
- **B.** Results of all sampling and monitoring events.
- **C.** Summary of all waste and wastewater disposed of, sold, or treated on-site, including a refinery wastewater balance sheet including a mass balance of the evaporation pond rates.
- **D.** Summary of the sump and underground wastewater lines tested.
- **E.** Summary of all leaks, spills and releases and corrective actions taken.
- **F.** Summary of discovery of new groundwater contamination. This should include recommendations for investigation and remediation.
- **G.** Summary and Copies of all EPA/NMED RCRA activity.

26. Transfer of Discharge Permit (WQCC 20.6.2.3111 NMAC): Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transferor shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to the department a copy of such

written notification, together with a certification or other proof that such notification has in fact been received by the transferee. Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in the department's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

27. Closure Plan and Financial Assurance: Pursuant to 20.6.2.3107 NMAC an owner/operator shall notify the OCD when any operations of the facility are to be discontinued for a period in excess of six months. Prior to closure, or as a condition of this permit, or request from the OCD, the operator will submit an approved closure plan, or modify an existing plan, and/or provide adequate financial assurance.

Please submit a closure plan and financial assurance cost estimate for the unlined wastewater and/or evaporation/temporary ponds by December 31, 2007. The plan shall address how any remaining water contaminants will be monitored and abated to ensure the protection of public health and safety, fresh water, and the environment in the foreseeable future.

28. Certification: Giant Refining Company, by the officer, whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained herein. **Giant Refining Company** further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

_____
Company Name-print name above

_____
Company Representative- print name

_____
Company Representative- signature

Title_____

Date:_____

OCD Discharge Permit (GW-032)
Minor Permit Modification
September 21, 2007
Schedule
Giant Refining - Gallup Refinery

Section No.	Requirement	Conditions Deadline	Proposed Deadline	Reason for the Change
Cover Letter	Signed Discharge Permit Approval Conditions GW-032 and $8,400.00 Fee	9/27/2007	Same	
2	OCD Discharge Permit Renewal	4/1/2011	Same	
9	Above Ground Tanks Impermeable Secondary Containment Requirement - Retrofit all tanks by 8/1/11 or propose alternate schedule by 10/17/07.	10/17/2007	2/15/2008	Alternative Plan and Schedule development requires: 1. Data Collection and evaluation, 2. Engineering, and 3. Design.
11. A.	Underground Sumps - Retrofit with secondary containment and leak detection.	8/1/2011	Same	
16.A.	Old API Separator - Storm Water Engineering Plan to decomission and Replace	12/31/2007	Same	Plan should coincide with Section 17.
16.B.	Repair new API Separator	12/31/2007	Same	
16.C.	Activated Sludge Wastewater Treatment Study and Design (including installation of Flow meters and Phenol, BOD, COD into AL1,AL2 & EP1 Analyses)	12/31/2007	6/6/2008	The study is an extensive undertaking requiring: 1. Modification of equipment such as tanks, piping, valves and controls. 2. Data collection and evaluation, and 3. Engineering, and 4. Design. This study should coincide with the Section 16.D schedule
16.C.2.	Grab samples for VOC, BOD, COD, Chlorides, DRO,GRO, MTBE, pH & Phenol. Monitoring monthly at EP1 for 12 months or by 12/31/08	12/31/2008	Same	
16.D.	Aeration Lagoons Replacement Engineering Design/Construction Plan and Schedule	6/6/2008	Same	
16.E.	Evaporation Ponds - Engineering Design/Construction Plan to single-line the evaporation pond EP-1 or alternative plan.	6/6/2008	Same	

OCD Discharge Permit (GW-032)
Minor Permit Modification
September 21, 2007
Schedule
Giant Refining - Gallup Refinery

Section No.	Requirement	Conditions Deadline	Proposed Deadline	Reason for the Change
16.F.	Temporary Landfarms - Closure Plan	12/31/2007	*3/17/2008*	Closure Plan development will require: 1. Development of Sampling Program and Sampling, 2. Analyses and Data Evaluation, and 3. Preparation of Plan.
20. A.	Annual Ground Water Report	Annually due by 9/1	Same	
21. A.	If decide not to landfarm, submit a closure plan within 3 months of permit issuance	NA	NA	
24. A.	Pilot by-pass be disconnected and plugged. Installation of Dual Primary Separation Device with secondary containment and leak detection	12/31/2007	*7/16/2008*	Pilot bypass will be locked closed and would only be opended in event of an emergency until the 48 hours storage can be installed. Installation requires: 1. Data Collection and evaluation, 2. Engineering, and 3. Design, and 4. Delivery and/or Construction/Installation.
24. B.	Emergency tank holding system for Pilot waste water (48 hours accumulation)	12/31/2007	*7/16/2008*	
24. D.	Maintain a sampling and metering station on incoming Pilot waste water line	Permit Issuance Date	Same	
24. E.	Biohazard O&M Plan for WW treatment facility	6/30/2008	Same	
27	Closure Plan and Financial Assurance cost estimate for unlined waste water and/or evaporation ponds	12/31/2007	Same	

Monzeglio, Hope, NMENV

From: Chavez, Carl J, EMNRD

Sent: Friday, September 21, 2007 3:45 PM

To: Jim Lieb

Cc: Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Cobrain, Dave, NMENV; Ed Rios; Ed Riege; Ann Allen; Allen Hains

Subject: RE: Minor Permit Modification Request - Giant Refining Permit (Gw-032)

Mr. Lieb:

The Oil Conservation Division (OCD) has reviewed your permit modification request under the recently issued WQCC discharge plan. The OCD has determined that your request is a "Minor Modification" and is hereby approved by the OCD. There is no fee and the minor modification will be attached onto the existing permit.

Please contact me if you have questions. Thank you.

Disclaimer: Please be advised that this e-mail does not relieve Western Refining (Giant Refining Company) Ciniza Refinery of responsibility should its operations pose a threat to ground water, surface water, human health or the environment. In addition, Giant is not relieved of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Jim Lieb [mailto:jlieb@giant.com]
Sent: Friday, September 21, 2007 12:57 PM
To: Chavez, Carl J, EMNRD
Cc: Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Cobrain, Dave, NMENV; Ed Rios; Ed Riege; Ann Allen; Allen Hains
Subject: Minor Permit Modification Request - Giant Refining Permit (Gw-032)

Carl:
As we discussed this morning, Giant would like to request a minor permit modification for Permit GW-032 regarding some deadlines in the permit as issued. I have attached a table containing the deadlines that we discussed and agreed upon as being mutually acceptable to both OCD and Giant.

Please issue the minor permit modification at your earliest convenience. Would it be possible to issue by September 27th?

If you have any questions, please contact me at (505) 722-0227.

Very Sincerely,

Jim Lieb

Environmental Engineer
Giant Industries, Inc.
Ciniza Refinery
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Jamestown, NM 87347
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