OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

December 30, 1999

CERTIFIED MAIL RETURN RECEIPT NO. Z 274 520 735

Mr. John Stokes Vice President Giant Refining Co. P.O. Box 159 Bloomfield, NM 87413



RE: Discharge Plan Renewal

Bloomfield Refinery Class I (Non-Hazardous) Disposal Well (GW-130)

San Juan County, New Mexico

Dear Mr. Stokes:

The groundwater discharge plan renewal application for the Bloomfield Refinery Class I (Non-Hazardous) Disposal Well GW-130 operated by Giant Refining Co. located in the NE/4, SE/4 of Section 27, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico is hereby approved under the conditions contained in the enclosed attachment. 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 ten working days of receipt of this letter.

The original discharge plan application was submitted on September 16, 1992 and approved on November 05, 1993. The discharge plan renewal application, dated September 16, 1999 submitted pursuant to Sections 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals. The discharge plan is renewed pursuant to Section 5101.A. and 3109.C. Please note Section 3109.G., which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Giant Refining Company of liability should operations result in pollution of surface or ground waters, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

Please note that Section 3104. of the regulations requires that "when a plan has been approved,

discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C., Giant Refining Company is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. This approval will expire November 04, 2003 and an application for renewal should be submitted in ample time before that date. Pursuant to Section 5101.F. of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved. It should be noted that all discharge plan facilities will be required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan renewal.

The discharge plan application for the Giant Refining Company Bloomfield Refinery Class I (Non-Hazardous) Disposal Well is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of \$50 plus a renewal fee of \$690.00 for class I wells. The OCD has not received the \$690.00 flat fee. The flat fee of \$690.00 may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

If you have any questions, please contact Wayne Price of my staff at (505-827-7155). On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger Anderson

Environmental Bureau Chief

RCA/lwp

Attachment-1

xc: OCD Aztec Office

ATTACHMENT TO THE DISCHARGE PLAN GW-130 APPROVAL Giant Refining Company Bloomfield Refinery Class I (Non-Hazardous) Disposal Well DISCHARGE PLAN APPROVAL CONDITIONS December 30, 1999

- 1. Payment of Discharge Plan Fees: The \$50.00 filing fee has been received by OCD. The \$690.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
- 2. <u>Giant Refining Company Commitments:</u> Giant Refining Company will abide by all commitments submitted in the discharge plan renewal application dated September 16, 1999 and these conditions for approval.
- 3. Authorization to Inject and Maximum Injection Pressure: Giant Refining Company is authorized to inject subject to the discharge plan commitments and conditions contained within. The maximum operating injection pressure at the wellhead will be 1150 psi as allowed in the amended Administrative Order SWD-528. The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 1150 psi. The pressure limiting device shall monthly be demonstrated to operate to the satisfaction of the OCD.
 - Giant Refining Company shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the ground surface.
- 4. Mechanical Integrity Testing: In accordance with OCD testing procedures, a mechanical integrity test will be conducted on the well annually in the month of July, and any time the tubing is pulled or the packer is reseated. A pressure recorder will be used and copies of the chart submitted to the OCD Santa Fe Office and the OCD Aztec District Office within 30 days following the test date. The OCD will be notified prior to the test so that they may witness the test. Mechanical integrity testing charts will be maintained at Giant Refining Company for the life of the well

- 5. <u>Annulus:</u> The casing-tubing annulus will be filled with an inert fluid and a minimum pressure of 100 psi maintained. Fluid levels shall be checked and reported at the time of performing the mechanical integrity test.
- 6. <u>Continuous Monitoring and Recording:</u> Continuous monitoring and recording devices will be installed and mechanical charts made of injection pressure, flow rate, flow volume, annular pressure and nitrogen usage. Mechanical charts are to be maintained at Giant Refining Company for the life of the well.
- 7. <u>Maintenance Records:</u> All routine maintenance work on the well will be recorded and maintained at Giant Refining Company for the life of the well.
- 8. <u>Wastes Permitted for Injection:</u> Injection will be limited to exempt and non-hazardous oil field wastes generated exclusively by Giant Refining Company Refining Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9.
- 9. <u>Chemical Analysis of Injection Fluids:</u> The following analyses of injection fluids will be conducted on a quarterly basis:
 - a. Aromatic and halogenated volatile hydrocarbon scan by EPA method 8260C GC/MS including MTBE. Semi-Volatile Organics GC/MS EPA method 8270B including 1 and 2-methylnaphthalene.
 - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.
 - c. Total heavy metals using the ICAP scan (EPA method 6010/ICPMS) and Mercury using Cold Vapor (EPA method 7470).
 - d. EPA RCRA Characteristics for Ignitability, Corrosivity and Reactivity.

Records of all analyses will be maintained at Giant Refining Company for the life of the well.

- 10. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.G. and submitted quarterly to both the OCD Santa Fe and Aztec Offices:
 - a. Results of the chemical analysis of the injection fluids (number 9).

- b. Monthly average, maximum and minimum values for injection pressures; flow rate and flow volume; and, annular pressure.
- c. Monthly volumes of injected fluids.
- 11. <u>Drum Storage:</u> All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.
- 12. <u>Process Areas:</u> All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
- 13. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.
- 14. <u>Above Ground Saddle Tanks:</u> Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
- 15. <u>Labeling:</u> All tanks, drums and containers should be clearly labeled to identify their contents and other emergency notification information.
- Below Grade Tanks/Sumps: Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must be tested to demonstrate their mechanical integrity no later than February 28, 2000 and every year from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD 30 days after test has been conducted.

- 17. <u>Underground Process/Wastewater Lines:</u> All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity no later than February 28, 2000 and every 5 years, from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD 30 days after test has been conducted.
- 18. Well Workover Operations: OCD approval will be obtained from the Director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Aztec District Office.
- 19. <u>Housekeeping:</u> All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.
- 20. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.
 - Giant Refining Company shall immediately notify the Supervisor of the Aztec District Office and the Environmental Bureau of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.
- 21. <u>Transfer of Discharge Plan:</u> The OCD will be notified prior to any transfer of ownership, control, or possession of the well and associated facilities. A written commitment to comply with the terms and conditions of the previously approved discharge plan and a bond must be submitted by the purchaser and approved by the OCD prior to transfer.
- 22. <u>Closure:</u> The OCD will be notified when operations of the well are discontinued for a period in excess of six months. Prior to closure of the well and associated facilities a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

- 23. Plugging Bond and /or Letter of Credit: Giant Refining Company shall have in effect a Division approved plugging bond and/or letter of credit for the estimated amount required to plug the well according to the proposed closure plan and adjusted for inflation. The required plugging bond and/or letter of credit shall be adjusted at the time of discharge plan renewal. Please submit the new estimate by February 28, 2000.
- 24. <u>Training:</u> All personnel associated with operations at the Giant Refining Company Class I disposal well will have appropriate training in accepting, processing, and disposing of Class I non-exempt non-hazardous oil field waste to insure proper disposal. All training documentation shall be maintained at Giant Refining Company for the life of the well.
- 25. OCD Inspections: Additional requirements may be placed on the well and associated facilities based upon results from OCD inspections.
- 27. <u>Certification:</u> Giant Refining Company by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Giant Refining Company further acknowledges that these conditions and requirements of this permit modification may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Conditions accepted by:	Giant Refining Company	
	Company Representative- print name	_
	Company Representative- Sign	Date
	Title	

OCD ENVIRONMENTAL BUREAU

SITE INSPECTION SHEET

DATE: 12/15/99 Time: // AM
Type of Facility: Refinery Gas Plant Compressor St. Brine St. OilField Service Co. Surface Waste Mgt. Facility E&P Site Crude Oil Pump Station Other A CLASS I INSECTION WELL
Discharge Plan: No DYes of DP# G-W-130
FACILITY NAME: GIAUT BLOOM SIELD CLASS I DIS PASAL ZIELL PHYSICAL LOCATION: Legal: QRT NE QRT SE Sec 27 TS 27 PR 11 W County SAN JOAN PM
OWNER/OPERATOR (NAME) GIAN & RESIVING CO. Contact Person: DAVE PAULICH Tele:# 505-722-3833 MAILING ADDRESS: P.O. Box 159 BLOOM SIELD State PM ZIP 87413 Owner/Operator Rep's: 5 A B
OCD INSPECTORS: D PRICE, C PERRIN, D FOUST PREA-HRAB D. CORR
1. <u>Drum Storage</u> : All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.
2. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design. OK

3. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.

	OK							
4. Above Ground S. they contain fresh was 016561 GIANT	addle Tanks: ter or fluids the TANK	Above gat are ga	round saddle uses at atmos Sou th TH IS	e tanks must his pheric temperature EUN PAR	ave imperature and p	meable pad a pressure. P&NA TEM P	NEED OLARY.	e containment unless
Labeling: All tan	ks, drums and nation.		ers will be cle	early labeled to	o identify	their conten	ts and other	emergency
	ks/Sumps: A must incorporate demonstrate mal operating he OCD will be		grade tanks, ndary contain on an annua and/or visua d at least 72	· .	ts must be c-detection rity tests i cleaned (all testing	e approved by into the desinctude pressout tanks and	y the OCD sign. All presure testing to	prior to installation or existing sumps and to 3 pounds per or other OCD
		ter Lines and then such as p	: All underg	ground process s thereafter, o	/wastewa	ter pipelines discharge pl e inch above	must be test an renewal.	ted to demonstrate The permittee may erating pressure or
OK	<u>.</u>		D will be not		2 hours p	rior to all te	sting.	
Onsite/Offsite Was ues the facility have a					es properi	/		osed of correctly?
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9. Class V Wells: Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. All Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be closed unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Closure of Class V wells must be in accordance with a plan approved by the Division's Santa Fe Office. The OCD allows industry to submit closure plans which are protective of human health, the environment and groundwater as defined by the WQCC, and are cost effective. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.
ANY CLASS V WELLS NO BYES I IF YES DESCRIBE BELOW! Undetermined I
10. Housekeeping: All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.
11. Spill Reporting: All spills/releases will be reported pursuant to OCD Rule 116 and WQCC 1203 to the proper OCD District Office.
12. Does the facility have any other potential environmental concerns/issues? JONE OBSERUEA !
13. Does the facility have any other environmental permits - i.e. SPCC, Stormwater Plan, etc.?
14. ANY WATER WELLS ON SITE? NO TYES TIFYES, HOW IS IT BEING USED?
Miscellaneous Comments: CLASS I ZELL ANNULUS PRESSURE MAINTAINED 7/00 psig - OK MONITORING EQUIPMENT WORKING - YES - OKY
Number of Photos taken at this site:

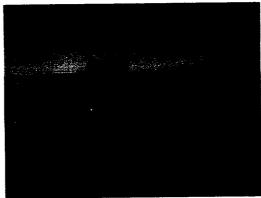
OCD Inspection Sheet Page <u>3</u> of <u>3</u>

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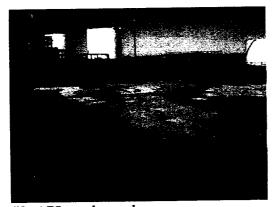
Pictures By: Wayne Price NMOCD Dec 15, 1999- Giant Bloomfield Class I Inj. Well (GW-130) inspection.



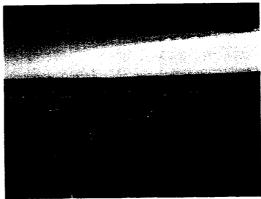
#1 API Separator ponds



#4 Refinery evaporation (south) pond



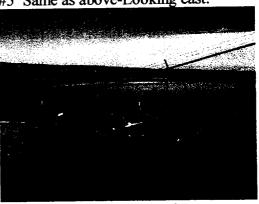
#2 API south pond



#5 Same as above-Looking east.

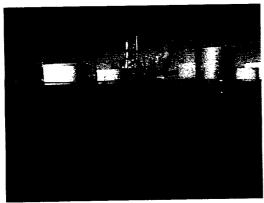


#3 API Separator

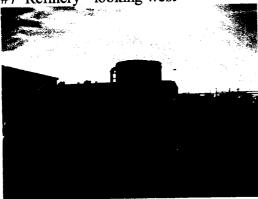


#6 North evaporation pond

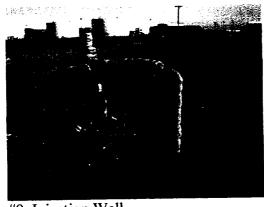
Pictures By: Wayne Price NMOCD Dec 15, 1999- Giant Bloomfield Class I Inj. Well (GW-130) inspection.



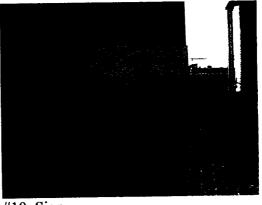
#7 Refinery - looking west



#8 Class I Inj. Well and Tank



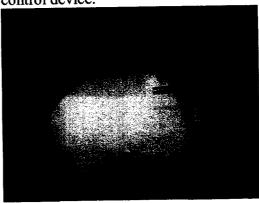
#9 Injection Well



#10 Sign



#11 Annulas Pressure gage & high-limit control device.



#12 Injection pressure chart

Pictures By: Wayne Price NMOCD Dec 15, 1999- Giant Bloomfield Class I Inj. Well (GW-130) inspection.



Giant Refinery- Looking Southwest