GW - ___032____

INSPECTIONS & DATA

2005 - Present

Chavez, Carl J, EMNRD

From:

Dorsey, Alvin [Alvin.Dorsey@wnr.com]

Sent:

Wednesday, December 29, 2010 3:05 PM

To:

Chavez, Carl J, EMNRD

Cc:

Riege, Ed; Larsen, Thurman; Johnson, Cheryl

Subject:

RE: Process Sewer Test Notification

Mr. Chavez:

Our maintenance department has encountered issues with this years sewer testing. They are planning to have the sewers in the tank farm done by the end of January; Product in the pipe is congealing which is creating difficulties in order to clear the sewer lines. We are hoping to be able to steam the sewer and to vacuum out the product in order to complete the test by the end of next week.

Also, all sewer lines in the alky unit tie in to the ASO pit. Therefore, the alky unit will have to be tested during a complete unit shutdown. Additionally, all of the piping in the alky unit join at the sewer junction boxes. Within the junction box, the piping turns down and is almost at the same level with the debris sludge that is inside the junction box. Under these conditions, it is almost impossible to get a sewer plug in without entering the sewer box. At this point, it becomes a safety issue because our Safety Department requires all personnel to use breathing air.

Finally, several sewer junction boxes within the Isom Unit have not been tested due to the inability to determine their exact location. They either do not exist or may possibly be buried under dirt and rock and will need some excavation in order to be located..

Alvin Dorsey

Environmental Specialist

Western Refining
Gallup Refinery
Rt. 3 Box 7
Gallup, NM 87301
(505) 722-3833 ext. 3211
(505) 722-0268 (fax)

Alvin, Dorsey@wnr.com

www.wnr.com

Western/Giant Refining- Ciniza Refinery

7/6/2007 2:50 p.m.

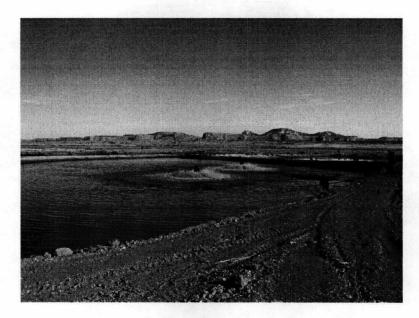
Hope, Carl:

Fuhs Trucking finished the cleanup of the banks of Aeration lagoons 1 and 2 and NE side of Evaporation Pond 1 this week. I have attached some pictures showing the cleaned lagoons and pond. Some also show the aerators working fine. A small shed shown in one picture houses two of our flow meters for the Pilot discharge and the flow from the benzene strippers into AL1. Our waste water generally looks cleaner now that the SWAATS unit is on line. The SWAATS recovers nitrogen and sulfur from waste streams and generates fertilizer as a byproduct that I believe we are currently selling to agricultural entities such as NAPI.

Regards,

Jim Lieb Environmental Engineer Giant Industries, Inc. Ciniza Refinery I-40, Exit 39 Jamestown, NM 87347 (505) 722-0227 fax (505) 722-0210 jlieb@giant.com

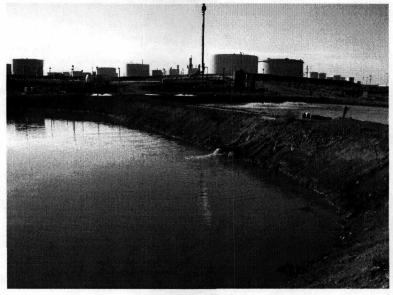


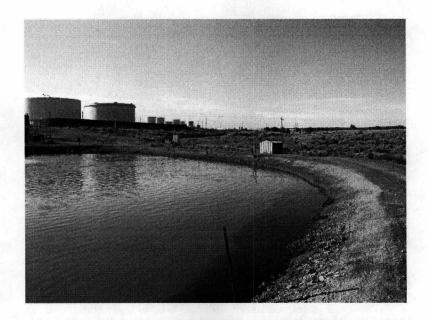


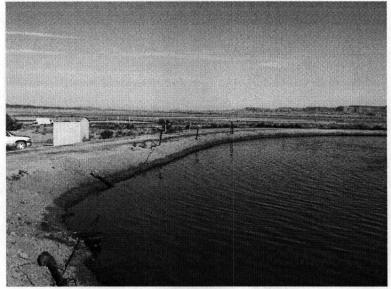












Giant Ciniza Refinery Evaporation Pond & Aeration Lagoon Follow-up Inspection January 4, 2007

OCD Inspector (Mr. Carl Chavez)



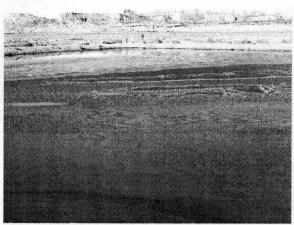
Evaporation Pond No. 2 Bank



Evaporation Pond No. 2 Bank



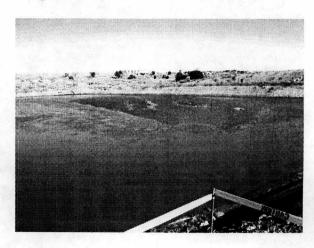
Evaporation Pond No. 2 Bank



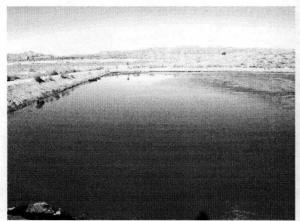
Evaporation Pond No. 1 Bank



Evaporation Pond No. 1Bank



Evaporation Pond No. 2 Bank



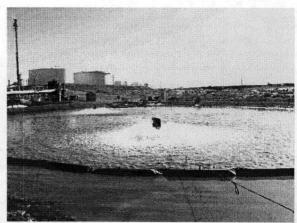
Evaporation Pond No. 1 Bank



Aeration Lagoon No. 2



Evaporation Pond No. 1 Bank



Aeration Lagoon No. 2



Aeration Lagoon No. 2



Aeration Lagoon No. 1

OCD observations:

Giant has worked to clean-up the oil from the evaporation ponds and aeration lagoons are looking better.

 $\widehat{\mathcal{H}}_{\mathbf{q}}^{(i)}(x,y) = \widehat{\mathcal{H}}_{\mathbf{q}}^{(i)}(x,y)$

OCD recommendations:

None at this time.

Giant- Ciniza Alkylation Unit Fire 10/05/2006 Water Release Chloride Soil Sampling 11/07/2006











COVER LETTER

Tuesday, November 21, 2006

Steve Morris Giant Refining Co Rt. 3 Box 7 Gallup, NM 87301

TEL: (505) 722-3833 FAX (505) 722-0210

RE: Post Alky Fire Soil Samples Phase 2. 11-7-2

Dear Steve Morris:

Order No.: 0611098

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 11/8/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001



Date: 21-Nov-06

CLIENT:

Giant Refining Co

Client Sample ID: PAF-1A

Lab Order:

0611098

Collection Date: 11/7/2006 10:30:00 AM

Project:

Post Alky Fire Soil Samples Phase 2. 11-7-2006

Date Received: 11/8/2006

Lab ID: 0611098-01

Matrix: SOIL

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Chloride	42	1.5	mg/Kg	5	Analyst: TES 11/14/2006 9:41:40 AM
EPA METHOD 6010B: SOIL METALS Sodium	300	25	mg/Kg	1	Analyst: NM 0 11/17/2006 12:21:24 PM

Qualifiers:

RL Reporting Limit

Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

Date: 21-Nov-06

CLIENT:

Giant Refining Co

Client Sample ID: PAF-1B

Lab Order:

0611098

Collection Date: 11/7/2006 10:35:00 AM

Project:

Post Alky Fire Soil Samples Phase 2. 11-7-2006

Date Received: 11/8/2006

Lab ID: 0611098-02

Matrix: SOIL

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Chloride	31	1.5	mg/Kg	5	Analyst: TES 11/14/2006 9:59:05 AM
EPA METHOD 6010B: SOIL METALS Sodium	210	50	mg/Kg	2	Analyst: NM O 11/17/2006 12:55:00 PM

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

2/10

Page 2 of 8

Post Alky Fire Soil Samples Phase 2. 11-7-2006

Date: 21-Nov-06

CLIENT:

Project:

Giant Refining Co

Lab Order:

0611098

Client Sample ID: PAF-2A

Collection Date: 11/7/2006 10:45:00 AM

Date Received: 11/8/2006

Matrix: SOIL

Lab ID:	0611098-03					
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHO Chloride	D 9056A: ANIONS	75	1.5	mg/Kg	5	Analyst: TES 11/14/2006 10:16:29 AM
EPA METHO	D 6010B: SOIL METALS	420	25	mg/Kg	1	Analyst: NM0 11/17/2006 12;28:10 PM

Qualifiers:

Value exceeds Maximum Contaminant Level

Ε Value above quantitation range

Analyte detected below quantitation limits

Not Detected at the Reporting Limit

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 21-Nov-06

CLIENT:

Giant Refining Co

Lab Order: Project:

Lab ID:

0611098

Post Alky Fire Soil Samples Phase 2. 11-7-2006

0611098-04

Client Sample ID: PAF-2B

Collection Date: 11/7/2006 10:50:00 AM

Date Received: 11/8/2006

Matrix: SOIL

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Chloride	40	1.5	mg/Kg	5	Analyst: TES 11/14/2006 10:33:54 AM
EPA METHOD 6010B: SOIL METALS Sodium	380	25	mg/Kg	1	Analyst: NM 0 11/17/2006 12:30:25 PM

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits 4 / 10

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 4 of 8

Date: 21-Nov-06

CLIENT: Lab Order: Giant Refining Co

0611098

Collection Date: 11/7/2006 11:00:00 AM

Client Sample ID: PAF-3A

Project:

Post Alky Fire Soil Samples Phase 2. 11-7-2006

Date Received: 11/8/2006

Lab ID: 0611098-05 Matrix: SOIL

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Chloride	35	1.5	mg/Kg	5	Analyst: TES 11/14/2006 10:51:19 AM
EPA METHOD 6010B: SOIL METALS Sodium	3 10	25	mg/Kg	1	Analysi: NMO 11/17/2006 12:32:39 PM

Value above quantitation range

Analyte detected below quantitation limits 1

Not Detected at the Reporting Limit ND

Spike recovery outside accepted recovery limits 5 / 10

Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Date: 21-Nov-06

CLIENT:

Giant Refining Co

Lab Order:

0611098

0611098-06

Client Sample ID: PAF-3B

Collection Date: 11/7/2006 11:05:00 AM

Project: Lab ID: Post Alky Fire Soil Samples Phase 2. 11-7-2006

Date Received: 11/8/2006

Matrix: SOIL

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS					Analyst: TES
Chloride	43	1.5	mg/Kg	5	11/14/2006 11:08:44 AM
EPA METHOD 6010B: SOIL METALS					Analyst: NM0
Sodium	420	2 5	mg/Kg	1	11/17/2006 12:34:07 PM

Qualifiers:

Value exceeds Maximum Contaminant Level

Ε Value above quantitation range

Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits $6 \ / \ 10$

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 6 of 8

Date: 21-Nov-06

CLIENT:

Giant Refining Co

0611098

0611098-07

Client Sample ID: PAF-4A

Lab Order:

Collection Date: 11/7/2006 11:15:00 AM

Project: Lab ID: Post Alky Fire Soil Samples Phase 2. 11-7-2006

Date Received: 11/8/2006

Matrix: SOIL

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Chloride	260	1.5	mg/Kg	5	Analyst: TES 11/17/2006 9:41:59 PM
EPA METHOD 6010B: SOIL METALS Sodium	450	25	mg/Kg	1	Analyst: NMO 11/17/2006 12:41:41 PM

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value above quantitation range

Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits 7/10

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Н

MCL Maximum Contaminant Level

Reporting Limit

Page 7 of 8

Date: 21-Nov-06

CLIENT:

Giant Refining Co

Client Sample ID: PAF-4B

Lab Order: Project:

Lab ID:

0611098

Collection Date: 11/7/2006 11:20:00 AM

Post Alky Fire Soil Samples Phase 2, 11-7-2006

0611098-08

Date Received: 11/8/2006

Matrix: SOIL

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Chloride	240	1.5	mg/Kg	5	Analyst: TES 11/17/2006 9:59:23 PM
EPA METHOD 6010B: SOIL METALS Sodium	450	25	mg/Kg	1	Analyst: NM 0 11/17/2006 12:43:55 PM

Qualifiers:

Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits 8 / 10

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 8 of 8

Date: 21-Nov-06

QA/QC SUMMARY REPORT

Client:

Giant Refining Co

Project:

Post Alky Fire Soil Samples Phase 2. 11-7-2006

Work Order: 0611098

Analyte	Result	Units	PQL	%Rec	LowLimit High	Limit	%RPD RF	DLimit Qual
Method: SW9056A			,					
Sample ID: MB-11734		MBLK			Batch ID:	11734	Analysis Date:	11/14/20064:10:55 AM
Chloride	ND	mg/Kg	0.30					
Sample ID: MB-11756		MBLK			Batch ID:	11756	Analysis Date:	11/15/2006 11:30:14 PM
Chloride	ND	mg/Kg	0.30					
Sample ID: LCS-11734		LCS			Batch ID:	11734	Analysis Date:	11/14/2006 4:28:20 AM
Chloride	15.05	mg/Kg	0.30	100	90 11	o		
Sample ID: LCS-11756		LCS			Batch ID:	11756	Analysis Date:	11/15/2006 11:47:39 PM
Chloride	14.85	mg/Kg	0.30	99.0	90 11	0		
Method: SW6010A								
Sample ID: 0611098-08B MSD	1	MSD	•		Batch ID:	11749	Analysis Date:	11/17/2006 12:48:33 PM
Sodium	2796	mg/Kg	25	94.1	75 12	5	6.95	30
Sample ID: MB-11749		MBLK			Batch ID:	11749	Analysis Date:	11/17/2006 12:12:53 PM
Sodium	ND	mg/Kg	25					
Sample ID: LCS-11749		LCS			Batch ID:	11749	Analysis Date:	11/17/2006 12:15:33 PM
Sodium	2838	mg/Kg	25	114	80 12	<u>:</u> 0		
Sample ID: 0611098-08B MS		MS			Batch ID:	11749	Analysis Date:	11/17/2006 12:46:08 PM
Sodium	2608	mg/Kg	25	87.1	75 12	! 5		

Ε Value above quantitation range

j Analyte detected below quantitation limits

RPD outside accepted recovery limits

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Spite recovery outside accepted recovery limits 9 / 10

Sample Receipt Checklist

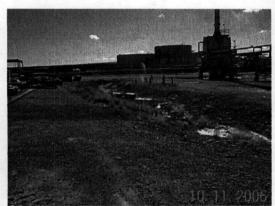
Client Name GIANTREFIN				Date and Time	Received:		11/8/2006
Work Order Number 0611098				Received by	AT		
Checklist completed by Signature	ppe		- K	-06			
Matrix	Carrier name	Clier	nt drop-off				
Shipping container/cooler in good condition?		Yes	V	No 🗆	Not Present		
Custody seals intact on shipping container/cooler?		Yes		No 🗀	Not Present	☐ Not Shipped	ı 🗹
Custody seals intact on sample bottles?		Yes		No 🗆	N/A	\checkmark	
Chain of custody present?		Yes	V	No 🗆			
Chain of custody signed when relinquished and recei	ved?	Yes	V	No 🗆			
Chain of custody agrees with sample labels?		Yes	V	No 🗆			
Samples in proper container/bottle?		Yes	\checkmark	No 🗆			
Sample containers intact?		Yes	$ \mathbf{\nabla}$	No 🗆			
Sufficient sample volume for indicated test?		Yes	\checkmark	No 🗆			
All samples received within holding time?		Yes	\checkmark	No 🗆			
Water - VOA vials have zero headspace?	o VOA vials subn	nitted	\checkmark	Yes 🗌	No 🗆		•
Water - pH acceptable upon receipt?		Yes		No 🗌	N/A 🗹		
Container/Temp Blank temperature?				" C ± 2 Accepta given sufficient			
COMMENTS:							
Client contacted Date	e contacted:			Pers	on contacted	, y , y , photo is assumed to a balance on , a made	
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HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D Albuquerque, New Mexico 87109 Tel. 505.345,3975 Fax 505.345.4107 www.hallenvironmental.com]	RE + 38TM BE NOB bord: F. ROB bord: F. ROB bord: CLSOB bord: CHAG TO AW CHAG	### ##################################	×	*	*	*	* *	*	*	*		Bemarks:
CHAIN-OF-CUSTODY RECORD Client: Std Clevel 4 Chipet: Std Charles Froject Name: For all first Address: Description of the formal for any first Address: Description of the formal	-2/lug NM 97301	Fax #: 505 722 3933 Sample: Many Mania	Date Time Matrix Sample I.D. No. Number/Volume HgCl ₂ HNO ₃ DC I.I O 9 K	11-7-06 1030 Said PAF-1A 2	" 1035 " PAF-1B 2	2	2B 2	11 PAF-3A	3) 1105 y PAK-3B 2 6	T 1115 " PAF-4A 2 111 "	1120 11 PAF- 4B 2		Date: Time: Relinquished By: (Signature) Repéved By: (Signature) Received By: (Signature) Received By: (Signature)

Giant Ciniza Refinery Fire Inspection Follow-up of 10/05/06 Alkylation Unit Fire October 11, 2006

OCD Inspectors (Mr. Leonard Lowe, Mr. Ed Hansen & Mr. Carl Chavez) arrived at the refinery at 1:00 p.m. on Wednesday, October 11, 2006 to investigate the reported Alkyl Unit fire from October 5, 2006. In addition, a site inspection of the refinery was conducted with follow-up discussion of on-going refinery issues from past inspections, and to familiarize new OCD inspectors (Mr. Hansen and Mr. Lowe) with the refinery inspection process. Photos with observations of the investigation are provided below.

1) Giant handed out a signed version of their C-141 release form that indicated on 10/05/06 at 1850 hours that a isobutene gas and hydrofluoric acid (HF) release occurred as a result of failure of a depropanizer charge pump seal in the Alkylation unit (AU), which uses HF as a catalyst. The AU essentially collects light gases and reformulates it into high octane gasoline range material.



Looking S. from NE corner of process area where firewater and diluted HF acid flowed northward to pond in berm area at NE region of process area.



Looking northward from SE corner of process area in direction where firewater and diluted HF acid flowed north toward culvert and eventually to pond in berm area at NE region of process area.



Looking northward at storm water ditch area where firewater and diluted HF acid flowed to berm area at NE region of process area.



Looking south back toward SE corner of process unit where overflow drained through storm water culvert to pond in berm area at NE region of process area.



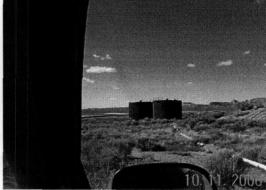
Looking northward at NE corner of process area south of tank battery where fire water and diluted HF acid eventually ponded within berm.



Looking northward toward NE region of process area where ponding from overflow of fire water and diluted HF acid flowed to NE corner of process area to pond within berm



Metal debris, i.e., piping, temporarily stored for recycling E of process area



Two 5000 bbl. tanks W of API treatment area located down near ponds that are planned to be used to store water for eventual treatment and in lieu of a previous fire water pond proposal



Outfall area #1 at west side of refinery.

Note, outfall area #2 has been closed with a new storm water diversion setup closer to the plant. SWPPP recently completed for EPA depicts new storm water drainage diagram. Giant has not been contacted by EPA based on the submittal.

OCD observations:

1) Giant has effectively altered and/or blocked the natural storm water run on and run-off drainage area east and northeast of its refinery process area. During our investigation, Giant informed the OCD that may be associated with Giant's new Stormwater Pollution Prevention Plan (SWPPP). However, you may recall from our most recent stormwater inspection with Mr. Richard Powell of the NMED that he was concerned about keeping the process area drainage separate from the runon-runoff drainage

Will normal rainfall events cause overflow conditions within the process area?

OCD recommendations:

1) Two soil samples near the refinery process area are required: one at the SE (at the corner or elbow of the stormwater drainage area) and another at the NE (ponding/pooling within confines of berm) proximity from the process area where overland flow of fire water in contact with hydrofluoric acid catalyst from Alkyl Unit flowed. The soil sample shall be analyzed for fluoride, chloride and pH.

Giant Ciniza Refinery Fire Inspection Follow-up of 10/05/06 Alkyl Unit Fire October 10, 2006



Truck load-out spill area just S of SE corner of process area scheduled to be cleaned next week



Looking northward at storm water ditch area where firewater and diluted HF acid flowed to berm area at NE region of process area.



Looking S. from NE corner of process area where firewater and diluted HF acid flowed northward to pond in berm area at NE region of process area.



Looking south back toward SE corner of process unit where overflow drained through storm water culvert to pond in berm area at NE region of process area.



Looking northward from SE corner of process area in direction where firewater and diluted HF acid flowed north toward culvert and eventually to pond in berm area at NE region of process area.



Looking northward at NE corner of process area south of tank battery where fire water and diluted HF acid eventually ponded within berm.

Giant Ciniza Refinery Fire Inspection Follow-up of 10/05/06 Alkyl Unit Fire October 10, 2006



Looking northward toward NE region of process area where ponding from overflow of fire water and diluted HF acid flowed to NE corner of process area to pond within berm



Metal debris, i.e., piping, temporarily stored for recycling E of process area



Two 5000 bbl. tanks W of API treatment area located down near ponds that are planned to be used to store water for

eventual treatment and in lieu of a previous fire water pond proposal



Outfall area #1 at west side of refinery.

Note, outfall area #2 has been closed with a new storm water diversion setup closer to the plant. SWPPP recently completed for EPA depicts new storm water drainage diagram. Giant has not been contacted by EPA based on the submittal.

OCD Ciniza Refinery Evaporation Pond 2 Corrective Action Inspection May 10, 2006

Inspector: Mr. Carl Chavez

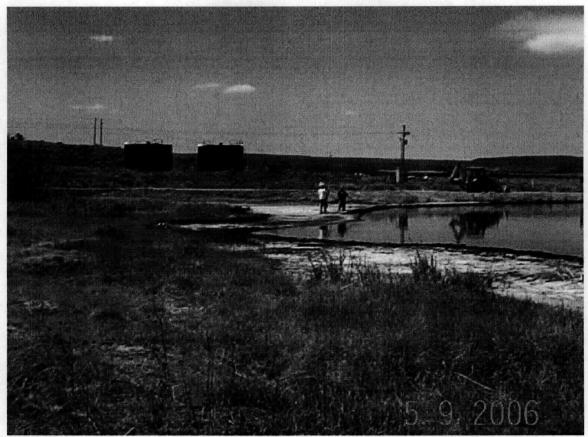
Photos:



Discharge of EP1 effluent into EP2



Looking southward from NE side of EP2 along eastern shoreline. Eastern shoreline is estimated to be about 300 ft. long.



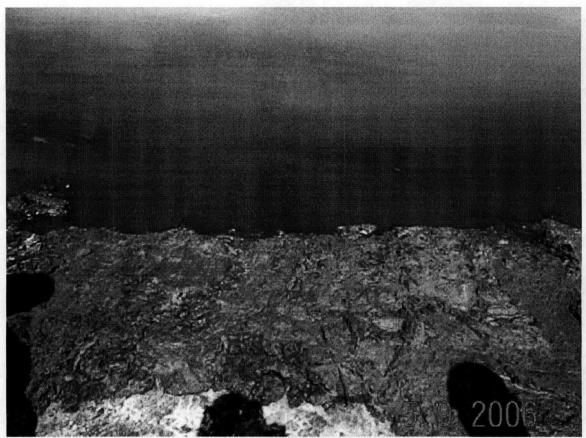
Looking southward from mid-point along east side of EP 2 shoreline at scraped waste along shoreline and workers preparing for a lunch break.



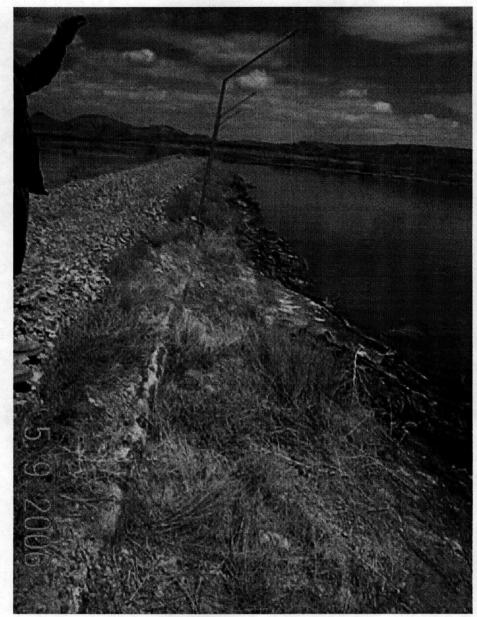
Looking westward from east side middle section of EP2. Scraped waste on shoreline in foreground. Notice clean shoreline conditions on west side of pond.



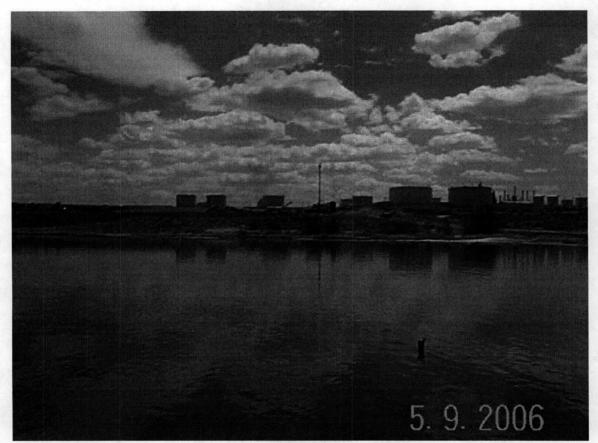
Looking northward from SE side of pond along east side of EP 2 shoreline. Eastern shoreline is estimated to be about 300 ft. long.



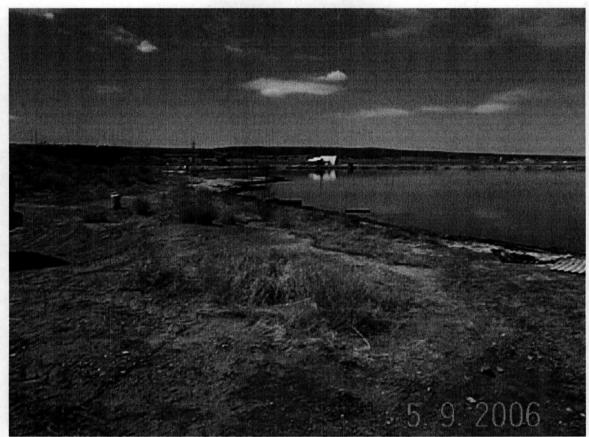
Contractors are digging with long scrapers by hand at least 4 inches deep from at least 2 feet inside of pond scraping waste outward over shoreline. Anticipated volume of waste expected from soil cleanup is expected to be greater than 200 ft³ or 7.4 yd³ as the shoreline will end up being scraped during the waste removal process.



Looking northward from SW of EP2 along shoreline.



Looking eastward from center west shoreline of EP2 back toward refinery.



Looking southward from NE point along EP2 shoreline. Eastern shoreline is estimated to be about 300 ft. long.

OCD Observations:

Oil in Evaporation Ponds 1 & 2 that needs to be cleaned up.

OCD Recommendations:

Corrective action required to clean up oil from evaporation ponds. Giant has vacuum trucks working to remove oil from treatment system.



BILL RICHARDSON GOVERNOR

State of New Mexico ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau
Harold Runnels Building Room N2050
1190 St. Francis Drive - Zip 87505
P.O. Box 26110 - Zip 87502-6110
Santa Fe, New Mexico
Telephone (505) 827-0187
Fax (505) 827-0160



RON CURRY SECRETARY

DERRITH WATCHMAN MOORE DEPUTY SECRETARY

Certified Mail - Return Receipt Requested

www.nmenv.state.nm.us

December 19, 2005

Mr. Ed Rios, General Manager Giant Refining Company Route 3, Box 7 Gallup, New Mexico 87301

RE: NPDES Storm Water Compliance Evaluation Inspection, Ciniza Refinery, NPDES

#NMR05B157, November 10, 2005

Dear Mr. Rios:

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas, for their review. These inspections are used by EPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report, and are required per Part 4.10 of the multi-sector general storm water permit, to amend your Storm Water Pollution Prevention Plan as appropriate based on the findings of this report to incorporate additional structural and non-structural controls as needed to eliminate or significantly minimize pollutants in storm water discharges. Further, you are encouraged to notify in writing, both USEPA and NMED regarding modifications and compliance schedules.

My thanks for the help and cooperation of Messrs. Ed Riege and Steve Morris of your staff during this inspection. If you have any questions, please feel free to contact me at the above address or by telephone at (505) 827-2798.

Sincerely,

Richard E. Powell Surface Water Quality Bureau

cc: Marcia Gail Bohling, USEPA (6EN-AS)

USEPA, NPDES Permits Branch (6WQ-P) NMED, District V, Grants

Carl Chavez, EM&NRD, OCD, 1220 S. St. Francis, Santa Fe, New Mexico 87505

NPDES Compliance Inspection Giant Refining Company/Ciniza Refinery NPDES Permit #NMR05B157, November 10, 2005

Further Explanations

Introduction

On November 10, 2005, a Compliance Evaluation Inspection was conducted at the Giant Refining Company/Ciniza Refinery (petroleum refining - Standard Industrial Classification 2911) located near Gallup, New Mexico by Richard E. Powell of the State of New Mexico Environment Department (NMED). Carl Chavez and Wayne Price of the NM Energy, Minerals and Natural Resources Department, Oil Conservation Division (OCD) accompanied the inspector. The primary purpose of this inspection was to document the permittee's status regarding the NPDES multi-sector general storm water permit (MSGP) for industrial activities (this facility has industrial activities being conducted on-site that meet the descriptions of industrial activities in section I) and storm water regulations at 40 Code of Federal Regulations (CFR) Part 122.26. In addition, this inspection included an assessment of the potential co-mingling of "contaminated runoff" as defined under 40 CFR Part 419.11 that is subject to nationally established effluent guidelines found at 40 CFR Part 419 and ineligible for coverage under the MSGP, with storm water discharges that are eligible.

Permit Status: Overall rating of "Unsatisfactory"

"Contaminated runoff" is defined as "runoff which comes into contact with any raw material, intermediate product, finished product, by-product or waste product located on petroleum refinery property." Most areas at refineries are not eligible for coverage under the MSGP including: raw material, intermediate product, by-product, final product, waste material, chemical, and material storage areas; loading and unloading areas; transmission pipelines; and, processing areas. Runoff that may be eligible for coverage, provided discharges are not co-mingled with "contaminated runoff," include: vehicle and equipment storage, maintenance and refueling areas.

A number of areas from which "contaminated runoff" or co-mingled "contaminated runoff" and storm water runoff appears to discharge were identified during this inspection. These include: a fairly large area in the northeast part of the facility where some (most is contained) of the railcar loading/unloading facility and an LPG tank farm appear to drain either directly offsite or are co-mingled with storm water runoff directed to storm water outfall No. 2; the area along the south side of the main process area (north of the office complex) appears to co-mingle with storm water runoff directed to storm water outfall No. 1; and the area along the north side of the facility where some of the drainage from a scrap yard (from which discharges are likely eligible) appears to co-mingle with drainage from an adjacent (to the east) tank farm and then directed to storm water outfall No. 2. There may be other areas where "contaminated runoff" or co-mingled "contaminated runoff" and storm water runoff discharge from this facility but the difficulty of identifying these areas is exacerbated by the facility operator's failure to identify and provide adequate drainage area mapping. The site maps included in the SWPPP show only general drainage patterns and outfalls, but lack of detailed drainage area mapping creates a situation where even the facility operators may be unaware of exactly what areas drain to "contaminated runoff" containment systems, and what

areas drain offsite or are directed to the storm water outfalls. Figure No. 1 in the SWPPP does delineate eight drainage sectors, which are described in the attached "Storm Water Assessment" narrative, but these appear to be inaccurate per the above discussion. It appears that these eight sectors were determined by merely drawing a large box around a general area rather than making an accurate determination of specific drainage areas.

Section 301 (a) of the Federal Water Pollution Control Act states that "Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful." Since this facility does not have (and has apparently never had) NPDES permit coverage for discharges of process wastewater or contaminated runoff, all past, and continuing, discharges have been (are) in apparent violation of Section 301 of the Clean Water Act, 33 U.S.C. § 1311.

Storm water runoff from this facility discharges to unclassified tributaries to the North Fork of the Rio Puerco (west) in the Little Colorado River minor Basin, Lower Colorado River major Basin. This report is based on a review of files maintained by the permittee and NMED, on-site observation by NMED personnel, and verbal information provided by the permittee's representatives.

An entrance interview was conducted with Messrs. Ed Riege, Environmental Superintendent and Steve Morris, Environmental Engineer at approximately 1025 hours on November 10, 2005. The inspector made introductions, presented his credentials and discussed the purpose of the inspection.

This facility applied for permit coverage under the NPDES multi-sector general storm water permit (MSGP) 2000 and has been assigned reference #NMR05B157 effective April 24, 2002. There was an SWPPP last revised on April 12, 2005, available for review at the site on the date of this inspection. There is no documentation included in the SWPPP, which supports the permittee's determination of permit eligibility with regard to Part 1.2.3.6 (Endangered Species) and Part 1.2.3.7 (Historic Places). There is a signed/certified statement (by Ed Rios) in the "NPDES Certifications" section of the plan regarding eligibility "... due to previous authorization under the Endangered Species Act." However, although the facility may have followed proper procedures (see MSGP Addendum A) to establish MSGP permit eligibility regarding endangered species, no documentation, other than the above statement, regarding this determination was included in the SWPPP. Information to support the permittee's determination of permit eligibility must be included in the SWPPP.

Since most of the time available to conduct this inspection was spent doing the above documented "contaminated runoff" assessment, only a cursory, and after the fact review of the SWPPP, was completed. Some of the major findings of this brief review are as follows:

Storm Water Pollution Prevention Plan (SWPPP)

Pollution Prevention Team: Overall rating of "Marginal"

Part 4.2.1 of the permit states, in part, "You must identify the staff individual(s) (by name or title) that comprise the facility's storm water Pollution Prevention Team ... Responsibilities of each staff individual on the team must be listed."

Although, Mr. Riege appears to have rather significant responsibilities regarding storm water pollution prevention and implementation of the SWPPP, the permittee's SWPPP does not identify this individual or his responsibilities.

Description of Potential Pollutant Sources: Overall rating of "Marginal"

Part 4.1.1 of the permit requires that permittees "Identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from your facility."

The permit requires that this description include such things as a site map, an identification of the types of pollutants that are likely to be present in storm water discharges, an inventory of the types of materials handled at the site that potentially may be exposed to precipitation, a list of significant spills and leaks of toxic or hazardous pollutants, sampling data, a narrative description of the potential pollutant sources from specific activities at the facility, and identification of specific potential pollutants.

As noted above, the permittee has prepared an SWPPP for this facility. As above, the site map does not include an accurate depiction of drainage areas, all structural controls (berms, including berms associated with the truck parking and staging area; straw bale dikes; secondary containment; etc.) or receiving waters. The SWPPP must include a general location map and a site map identifying such things as: drainage areas, drainage patterns and outfalls, all structural BMPs, surface watercourses, all potential pollutant sources, locations of major spills or leaks, locations of all industrial activities exposed to precipitation, etc. The plan does a very thorough job of pollutant and pollutant source identification.

Although not specifically required (conducting analytical monitoring may be dictated for appropriate site assessment procedures, as well as documentation of SWPPP effectiveness) at these types of facilities by the MSGP 2000, benchmark analytical monitoring was required and conducted under the baseline general storm water permit as well as more limited monitoring since. Results of the September 1991, May 1997, August 2000, and August 2003 analytical monitoring indicate that the MSGP cut-off concentrations for total suspended solids (TSS) was greatly exceeded (range from 42 - 48,000 mg/L) most of the time, and results for COD (range 64 - 428 mg/L) was exceeded some of the time. These elevated analytical results (as well as the results of the quarterly visual examinations) must be taken into consideration during the facility's "Comprehensive Site Compliance Evaluation." These results must be used, in part, to determine required amendments to the SWPPP to incorporate additional structural and non-structural controls as appropriate to eliminate or significantly minimize pollutants in storm water discharges so that these pollutant levels are reduced to below cut-off concentrations. The operator has apparently taken no action to amend the SWPPP as required. However, the permittee has sampled outfalls that are located in "waters of the U.S." Because of this, these results may not be representative of actual discharges from the industrial activities at this facility. Sampling must be conducted in a location that is after the last treatment unit and prior to entry into a "water of the U.S." Also, the permittee has apparently not conducted required Quarterly Visual Monitoring (see 5.1.1 of the MSGP 2000) at this facility.

Description of Appropriate Measures and Controls: Overall rating of "Unsatisfactory"

Part 4.2.7 of the permit requires that the permittee, "Describe the type and location of existing non-structural and structural best management practices (BMPs) selected for each of the areas where industrial materials or activities are exposed to storm water," and describe appropriate proposed BMPs for areas not yet affected, and implement such controls.

Non-structural and structural BMPs to be described and implemented by the permittee include such things as good housekeeping, preventive maintenance, spill prevention and response procedures, periodic inspections, employee training, record keeping, non-storm water evaluations and certifications, sediment and erosion control, as well as implementation/maintenance of traditional storm water management practices, where appropriate.

Some of the BMPs are overly generic (e.g., "maintain in a clean and orderly work environment"). In addition, although the facility apparently does occasionally clean and repair storm water conveyances and replace straw bales dikes, the SWPPP does not include a record of regular inspections and preventive maintenance of these storm water management controls. Part 6.I.4.3.1 of the MSGP 2000 requires facility inspections at a minimum of 6-month intervals and at least quarterly inspections of equipment and vehicles that store, mix or transport chemicals/hazardous materials. It appears that these inspections are not conducted or are, at least, not recorded.

Routine facility storm water inspections must be recorded, including their scheduled frequency, personnel conducting the inspection, dates of the inspection, results of the inspection, actions taken to correct problems encountered during the inspection, etc., in the SWPPP. These inspections must include observations of all areas of the facility where industrial materials or activities are exposed to storm water, and include an evaluation of all BMPs, including sediment and erosion control measures such as silt fences, check dams, etc. These inspections must be conducted by "qualified" personnel and include a reasonable set of tracking or follow-up procedures to be used to ensure that appropriate actions are taken (deficiencies must be corrected no later than 14 days after the inspection) in response to problems documented during the inspections. As above, there are apparent problems at this facility with "contaminated runoff" control practices that the permittee has not addressed. This is the sort of problem that should be documented during the permittee's periodic inspections, and appropriate and timely corrective actions taken and documented.

Although the SWPPP includes a "Non-Storm Water Discharge Assessment Certification" that lists cooling tower mist as a source of non-storm water discharge, there is no description of results of tests/evaluations, evaluation criteria or testing methods used, dates of any testing and/or evaluation, or any other information upon which the certification decision could be based.

Annual Site Compliance Evaluation Reports: Overall rating of "Unsatisfactory"

Part 4.9 of the permit states, in part, "You must conduct facility inspections at least once a year. The inspections must be done by qualified personnel provided by you."

According to the plan, the last annual site compliance evaluation was conducted in December 2004. Ed Riege and Darren Joe, neither of whom are on the Pollution Prevention Team, conducted this evaluation. Other than the apparent failure to incorporate changes dictated by the above-mentioned

analytical sampling data, the areas evaluated, the recording of findings, follow-up, and post evaluation activities for these annual evaluations appear very thorough. However, the staff conducting the evaluations apparently failed to observe, document, and properly address the areas that appear to produce discharges of "contaminated runoff" from this facility. In addition, reports of these evaluations have not been signed and certified by a cognizant official or authorized representative per requirements in Parts 4.9.4 and 9.7.1 of the MSGP.

Per Part 4.9 of the permit, the required annual site compliance evaluation must be done by "qualified personnel that are knowledgeable and possess the skills to assess conditions at your facility that could impact storm water quality and assess the effectiveness of the BMPs ..." This inspection must include a comprehensive evaluation of the SWPPP and the entire facility, including effectiveness of current measures and controls, and identification of current and anticipated potential pollutant sources. The evaluation should include a review of the SWPPP to ascertain that all required inspections, maintenance, and good housekeeping activities are conducted and recorded, and that these activities are effective in controlling pollutant loads in storm water runoff. It should also include a review of visual and analytical monitoring results, and result in appropriate revisions to the SWPPP that describe, and provide for, implementation of any required changes/additions in a timely manner.

Based on this inspection, the operator(s) must prepare, and include with the SWPPP, a properly signed report (and reports documenting any follow-up actions taken) signed by a cognizant official or an authorized representative (see Part 9.7 of the permit) which summarizes the scope of the inspection, includes the name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and any incidents of non-compliance (or a certification that the facility is in compliance with the SWPPP and the permit).

An exit interview to discuss the preliminary findings of this inspection was conducted from approximately 1515-1550 hours on November 10, 2005 with Mr. Ed Rios, General Manager, Mr. Stan Fisher, Operations Manager, and Messrs. Riege and Morris all of Ciniza Refinery, as well as Messrs. Chavez and Price of OCD, at the site.

\$EPA

EPA Form 3560-3 (Rev. 9-94) Previous editions are obsolete.

Form Approved OMB No. 2040-0003 Approval Expires 7-31-85

	NPDES Compliance Inspection Report																,	
Section A: National Data System Coding																		
Transaction Code												spec. Typ	e I	nspecto	r 20	Fac T	Гуре	
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Section B: Facility Data																		
name GIA	ne and Location of Facility Inspected (For and NPDES permit number) VT REFINING COMPANY/CINIZA RE XIT 39 BEHIND PILOT TRAVEL CEN		Entry Time /Date 1025/11-10-05					Permit Effective Date 10-30-00										
Exit Ti 1550/1													Permit Expiration Date 10-30-05					
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) *ED RIEGE, ENVIRONMENTAL SUPERINTENDENT 505-722-0217 *STEPHEN MORRIS, ENVIRONMENTAL ENGINEER 505-722-3833												Other Facility Data LAT 35 29 10.9						
Name, Address of Responsible Official/Title/Phone and Fax Number *ED RIOS, GENERAL MANAGER, CINIZA REFINERY, ROUTE 3 BOX 7, GALLUP, NM 87301 505-722-0202 Contacted Yes * No											ONG -108 25 36.3							
Section C: Areas Evaluated During Inspection (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)																		
U	Permit	N	Flow Measurement		N	Operations & Maintenance			N	N CSO/SSO								
М	Records/Reports	U	Self-Monitoring Pro	gram	N	Sludge Handling/Disposal					U	Pollution Prevention						
U	Facility Site Review	N	Compliance Schedul	es .	N	Pretreatment					N	Multimedia						
Z	Effluent/Receiving Waters	N	Laboratory		U	Storm Water						N	Other:					
			Section D: Summa	ry of Findings/Cor	nment	s (Att	ach add	itiona	l sheet:	s if nece	ssary)							
 FACILITY HAS COVERAGE UNDER THE MSGP 2000 (UNDER CINIZA REFINERY, JAMESTOWN, NM) AND HAS PREPARED A SWPPP. THIS INSPECTION INCLUDED AN ASSESSMENT OF THE POTENTIAL CO-MINGLING OF "CONTAMINATED RUNOFF" AS DEFINED UNDER 40 CFR PART 419.11 THAT IS SUBJECT TO NATIONALLY ESTABLISHED EFFLUENT GUIDELINES FOUND AT 40 CFR PART 419 AND INELIGIBLE FOR COVERAGE UNDER THE MSGP, WITH STORM WATER DISCHARGES THAT ARE ELIGIBLE. A NUMBER OF AREAS FROM WHICH "CONTAMINATED RUNOFF" OR CO-MINGLED "CONTAMINATED RUNOFF" AND STORM WATER RUNOFF APPEARS TO DISCHARGE WERE IDENTIFIED DURING THIS INSPECTION. "PETROLEUM REFINERY OF MODERATE COMPLEXITY RATING" WITH CATALYTIC CRACKING CAPABILITY, REFORMING, AND TOPPING (BASIC DISTILLATION). SEE REPORT AND FURTHER EXPLANATION. 																		
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RIC	HARD E. POWELL	NMED/SWQB 505-827-2798																
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_	ature of Management QA Reviewer	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-222-9560									Date							

Weather: Sunny ~ 68F



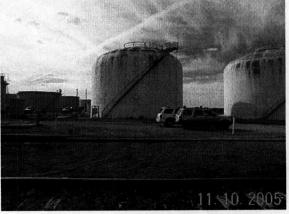
Railroad lagoon rack remediation area-NMED awaiting final remediation report



Railroad lagoon rack spill area close-up post remediation



Looking N at W end of facility people standing upgradient from evaporation pond network left or westward in the photo



Tanks need berming at the NE area of the facility



Railroad running N-S across the eastern boundary of the facility



Close up of tanks without berms on the NE side of the facility looking N-NW

Weather: Sunny ~ 68F



Pipe rack trending N-S on east side of facility



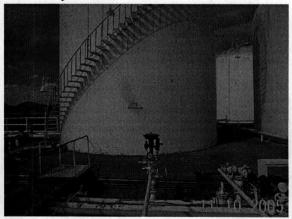
LACT area



Looking S at tank batteries with constructed berms



Close-up of old design tank on ground w/o secondary containment



Where's the berm?



Looking S along pipe-rack on NW area of facility near Railroad Lagoon Rack

Weather: Sunny ~ 68F



Looking W north of at bermless tank at far NE part of facility



No berms to capture spills running off toward the north & need storm water controls



Looking W gas bullet tanks in background, which do not require berms- gas at STP



Looking NW at Storm water drainage SW of facility draining NW toward evaporation pond network



Chopper pump problem at API separator



Chopper pump problem at API separator

Weather: Sunny ~ 68F

Inspectors: Richard Powell- NMED-SWQB, Wayne Price & Carl Chavez-OCD



Oil floating on top of Evaporation Pond 1 violation of permit- removes oil on shoreline sediments and vacuum off oil



Old API separator near flare stack w/ roof needs fluid removal, used in conjunction with recently install New API separator



Old API Separator close-up w/ roof construction to prevent flare stack ignition.

Notes:

- Oil in evaporation pond 1 (EP1) down gradient from the benzene strippers, API separator and aeration lagoons (ALs 1 & 2) is a violation of the OCD discharge permit. Cleanup is needed in EPs 1 & 2.
- 2) EPs shoreline hydrocarbon stained sediment need to be cleaned up.
- 3) The water in the RR Lagoon excavation shall be evacuated within 48 hours
- 4) Old API Separator (OAPIS) needs decommissioning and removal as it is too close to the flare stack (fire hazard) & has been replaced by the new API Separator (NAPIS).
- 5) Evacuate fluids from OAPIS & prevent spill over bay.
- 6) Two soil piles generated from plant wastewater spills in August 2005 will be disposed of as hazardous waste F037.
- 7) The diesel contaminated soils shall be disposed of or properly placed into the OCD landfarm within 10 days. Landfarm, records must be maintained and material must be RCRA Nonhazardous.
- 8) The cooling tower soils and salts shall be disposed of within 30 days
- 9) The storm water Outfalls shall have control devices installed within 30 days
- 10) The stormwater plan shall be updated to show all drainages, intermediate containment devices and control devices.

Weather: Sunny ~ 68F

- 11) The Outfall areas shall have all of the silt build-up removed.
- 12) Giant shall continue the Old API stormwater investigation for oil accumulation. Need environ. testing of stormwater/oil. Full suite.
- 13) Need two additional MW's at evap pond # 1 and ALs 1 & 2.
- 14) Need to Plug Old south water well Tank# 101 oil leaks.