ENTERED

GIANT
REFINING COMPANY

Hope Monzeglio
New Mexico Environmental Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East
Bldg 1
Santa Fe, NM 87505

Certified Mail: 7004 2510 0005 1641 4705

December 28, 2005

Re: **Giant Refining Company, Bloomfield Refinery**
River Terrace Voluntary Corrective Measures – Revised Monitoring Plan
EPA # NMD089416416 HWB – GRCB – 05 - 002

Dear Ms. Monzeglio,

Giant Refining Company Bloomfield (GRBC) received the November 23, 2005 letter from New Mexico Environmental Department (NMED) stating NMED's conditional approval of the October 28, *Bioventing Monitoring Plan (Revised)* submitted by GRBC. The purpose of this letter is to respond to the conditions stated in NMED's letter.

Response to NMED Conditions of Approval

The following responses correspond to the conditions of the October 28, 2005 revised monitoring plan, as stated in NMED's approval letter dated November 23, 2005.

1. Table 1A and Table 1B have been modified to incorporate NMED's request to collect baseline groundwater samples from all temporary wells (TP), monitoring wells (MW), and dewatering wells (DW) for laboratory analysis prior to the start of the dewatering system. The samples will be submitted to the laboratory for RCRA eight metals analysis. The revised version of Table 1A and Table 1B are attached.
2. Table 1A has been revised to incorporate NMED's request to collect soil gas samples from all temporary wells (TP), monitoring wells (MW), and dewatering wells (DW) prior to the start of the dewatering system. The

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samples will be submitted to the laboratory for BTEX and GRO analysis by EPA Method 8021B and Method 8015B, respectively. The soil gas sampling modifications have been incorporated into the attached revised version of Table 1A.

3. Table 1C has been modified to reflect the sample frequency at "GAC 1 Eff" as stated in Section 3.1.5, paragraph 3 of the revised monitoring plan. The revised version of Table 1C and corresponding footnote is attached.
4. GRCB will submit a Six-Month System Start-up Report and an Annual System Monitoring Report as requested by NMED. The Six-Month Report will be submitted to NMED 220 days after system start-up. The Annual Report will be submitted 13 months after system start-up. The format of the reports will follow the Periodic Monitoring Report guidelines as provided by NMED in the November 23, 2005 letter.
5. In the event the bioventing system experiences problems or must be shut down, GRCB will notify NMED within 24 hours upon identification of abnormal system operations.

Please feel free to call me at 505-632-4161, or Randy Schmaltz at 505-632-4171, if you have any questions.

Sincerely,

Cindy Hurtado

Cindy Hurtado
Environmental Coordinator – Giant- Bloomfield

Cc: Wayne Price - OCD
Ed Riege – Giant Refining Co., Gallup
Randy Schmaltz – Giant Refining Co., Bloomfield

Table 1A: Baseline Monitoring Activities Prior to the Dewatering and Air Injection System Start-Up

Bioventing Monitoring Plan
Giant Refinery - Bloomfield, New Mexico

Location	Matrix	DTW / DTP	Temp	pH	Cond	DO	ORP	% CO2	% O2	Organic Vapors (PID)	Pressure	Baseline Samples
MW-48	GW	B	B	B	B	B	B					T
MW-49	GW	B	B	B	B	B	B					T
DW-1	GW	B	B	B	B	B	B					T
DW-2	GW	B	B	B	B	B	B					T
TP-1	GW	B	B	B	B	B	B					T
TP-2	GW	B	B	B	B	B	B					T
TP-3	GW	B	B	B	B	B	B					T
TP-4	GW	B	B	B	B	B	B					T
TP-5	GW	B	B	B	B	B	B					T
TP-6	GW	B	B	B	B	B	B					T
TP-8	GW	B	B	B	B	B	B					T
TP-9	GW	B	B	B	B	B	B					T
TP-10	GW	B	B	B	B	B	B					T
TP-11	GW	B	B	B	B	B	B					T
TP-12	GW	B	B	B	B	B	B					T
TP-13	GW	B	B	B	B	B	B					T
GAC Inf	EW											
GAC 1 Eff	EW											
GAC 2 Eff	EW											
MW-48	A							B	B	B	B	BTEX, GRO
MW-49	A							B	B	B	B	BTEX, GRO
DW-1	A							B	B	B	B	BTEX, GRO
DW-2	A							B	B	B	B	BTEX, GRO
TP-1	A							B	B	B	B	BTEX, GRO
TP-2	A							B	B	B	B	BTEX, GRO
TP-3	A							B	B	B	B	BTEX, GRO
TP-4	A							B	B	B	B	BTEX, GRO
TP-5	A							B	B	B	B	BTEX, GRO
TP-6	A							B	B	B	B	BTEX, GRO
TP-8	A							B	B	B	B	BTEX, GRO
TP-9	A							B	B	B	B	BTEX, GRO
TP-10	A							B	B	B	B	BTEX, GRO
TP-11	A							B	B	B	B	BTEX, GRO
TP-12	A							B	B	B	B	BTEX, GRO
TP-13	A							B	B	B	B	BTEX, GRO

Notes:

B - Baseline monitoring activities prior to the start of the dewatering pumps and venting blower.

Matrix
GW - groundwater
EW - extracted groundwater
A - soil gas

Field Parameters
DTW - Depth to water measurement
DTP - Depth to product measurement
Temp - temperature
Cond - conductivity
DO - dissolved oxygen
ORP - oxidation-reduction potential
% CO2 - percent carbon dioxide
% O2 - percent oxygen
PID - photoionization detector

Analytical Analysis
T - Total RCRA 8 Metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag) by EPA Method 6010 / 7470
BTEX - BTEX only by EPA Method 8021B
GRO - GRO by EPA Method 8015B

Table 1B: Baseline Monitoring Activities Prior to Air Injection System Start-Up

Bioventing Monitoring Plan
Giant Refinery - Bloomfield, New Mexico

Location	Matrix	DTW / DTP	Temp	pH	Cond	DO	ORP	% CO2	% O2	Organic Vapors (PID)	Pressure	Baseline Samples
MW-48	GW	D	D	D	D	D	D					
MW-49	GW	D	D	D	D	D	D					
DW-1	GW	D	D	D	D	D	D					
DW-2	GW	D	D	D	D	D	D					
TP-1	GW	D	D	D	D	D	D					
TP-2	GW	D	D	D	D	D	D					
TP-3	GW	D	D	D	D	D	D					
TP-4	GW	D	D	D	D	D	D					
TP-5	GW	D	D	D	D	D	D					
TP-6	GW	D	D	D	D	D	D					
TP-8	GW	D	D	D	D	D	D					
TP-9	GW	D	D	D	D	D	D					
TP-10	GW	D	D	D	D	D	D					
TP-11	GW	D	D	D	D	D	D					
TP-12	GW	D	D	D	D	D	D					
TP-13	GW	D	D	D	D	D	D					
GAC Inf *	EW											B, GRO, DRO, T
GAC 1 Eff *	EW											B, GRO, DRO
GAC 2 Eff *	EW											B, GRO, DRO
MW-48	A							D	D	D	D	
MW-49	A							D	D	D	D	
DW-1	A							D	D	D	D	
DW-2	A							D	D	D	D	
TP-1	A							D	D	D	D	
TP-2	A							D	D	D	D	
TP-3	A							D	D	D	D	
TP-4	A							D	D	D	D	
TP-5	A							D	D	D	D	
TP-6	A							D	D	D	D	
TP-8	A							D	D	D	D	
TP-9	A							D	D	D	D	
TP-10	A							D	D	D	D	
TP-11	A							D	D	D	D	
TP-12	A							D	D	D	D	
TP-13	A							D	D	D	D	
BV-1	A							D	D	D	D	
BV-2	A							D	D	D	D	
BV-3	A							D	D	D	D	
BV-4	A							D	D	D	D	
BV-5	A							D	D	D	D	
BV-6	A							D	D	D	D	
BV-7	A							D	D	D	D	
BV-8	A							D	D	D	D	
BV-9	A							D	D	D	D	
BV-10	A							D	D	D	D	
BV-11	A							D	D	D	D	
BV-12	A							D	D	D	D	
BV-13	A							D	D	D	D	

Notes:

D - Baseline monitoring activities to be completed after the start of the dewatering pumps and before the start of the bioventing blower.

***** - Sampling commences when dewatering begins.

Matrix
GW - groundwater
EW - Extracted groundwater
A - soil gas

Field Parameters
DTW - Depth to water measurement
DTP - Depth to product measurement
Temp - temperature
Cond - conductivity
DO - dissolved oxygen
ORP - oxidation-reduction potential
% CO2 - percent carbon dioxide
% O2 - percent oxygen
PID - photoionization detector

Analytical Analysis
B - BTEX, MTBE by EPA Method 8021B
GRO - GRO by EPA Method 8015B
DRO - DRO by EPA Method 8051B
T - Total RCRA 8 Metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag) by EPA Method 6010 / 7470

Table 1C: Summary of Performance Monitoring Activities

Bioventing Monitoring Plan
Giant Refinery - Bloomfield, New Mexico

Location	Matrix	DTW / DTP	Temp	pH	Cond	DO	ORP	% CO2	% O2	Organic Vapors (PID)	Pressure *	Baseline Samples
MW-48	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO, Pb & Cr
MW-49	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO, Pb & Cr
DW-1	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO, Pb & Cr
DW-2	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO, Pb & Cr
TP-1	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-2	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-3	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-4	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-5	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-6	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-8	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-9	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-10	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-11	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-12	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
TP-13	GW	WMQ	WMQ	WMQ	WMQ	WMQ	WMQ					Q-B, GRO, DRO
GAC Inf	EW											Q-B, GRO, DRO
GAC 1 Eff	EW											W*M - B, GRO, DRO
GAC 2 Eff	EW											Q - B, GRO, DRO
MW-48	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
MW-49	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
DW-1	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
DW-2	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-1	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-2	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-3	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-4	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-5	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-6	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-8	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-9	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-10	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-11	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-12	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO
TP-13	A							WMQ	WMQ	WMQ	WMQ	Q - B(2), GRO

*** Pressure** - Full system and individual well injection pressure will be recorded during each monitoring event.

Matrix
GW - groundwater
EW - Extracted groundwater
A - soil gas

Field Parameters
DTW - Depth to water measurement
DTP - Depth to product measurement
Temp - temperature
Cond - conductivity
DO - dissolved oxygen
ORP - oxidation-reduction potential
% CO2 - percent carbon dioxide
% O2 - percent oxygen
PID - photoionization detector

Analytical Analysis
B - BTEX, MTBE by EPA Method 8021B
B(2) - BTEX only by EPA Method 8021B
GRO - GRO by EPA Method 8015B
DRO - DRO by EPA Method 8051B
Pb & Cr - Total Lead and Chromium using EPA Method 6010

Sample Frequency
WMQ - Weekly x 4 (a sample will be collected once a week for the initial four weeks of operation), monthly for first quarter, then quarterly thereafter.
Q - Quarterly
W*M - Weekly until breakthrough is detected; monthly thereafter.

AT 60 DAYS AND IN AUGUST 2006- PERFORM IN-SITU RESPIRATION TESTING

Shutdown blower and monitor oxygen/carbon dioxide levels in TP-1, 2, 5, 6, 8, 9, and each of the 13 BV wells.

Monitor every 1/2 hour for first 4 hours, then every hour until hour 12. Then monitor every 10 to 12 hours up to 48 to 72 hours.