

April 16, 2010

New Mexico Environmental Department (NMED)
Hazardous Waste Bureau (HWB)
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505
✓ Attention: James P. Bearzi

New Mexico Energy Minerals and Natural Resources Department
New Mexico Oil Conservation Division (NMOCD)
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Attn: Mr. Carl J. Chavez

**Reference: RESPONSE LETTER- "NOTICE OF DISAPPROVAL",
"CLEANUP STATUS FOR API SEPARATOR OVERFLOWS"
(SEPTEMBER 5, 2009 and DECEMBER 8, 2009)
WESTERN REFINING SOUTHWEST INC, GALLUP REFINERY
EPA ID NO. NMD000333211
HWB-GRCC-MISC**



Dear Mr. Bearzi and Mr. Chavez;

Please accept the following letter in response to a letter from Mr. James Bearzi of the New Mexico Environmental Department (NMED) (Hazardous Waste Bureau (HWB) (March 4, 2010) that references API overflows that occurred on September 5, 2009 and December 8, 2009.

The following shall address the comments as identified by the New Mexico Environmental Department (NMED)/Hazardous Waste Bureau. Enclosed is the Interim Measures Work Plan for the control and prevention of overflows from the API that is due on April 19, 2010 as required according to the letter of March 4, 2010.

I. COMMENT 1-"Permittee must describe in detail the sampling collection methods and procedures that were used to collect the confirmation samples (eg., how were the samples collected, were they discrete or composite samples, how were any composite samples collected, what equipment was used (shovel, encore sampler) to collect the samples). The Permittee must also describe the decontamination process of the sampling equipment (eg., equipment was cleaned in a non-phosphate solution followed by a rinse using de-ionized water."

RESPONSE:

- a. Sample Collection- Six inches of soil was removed at each of the fourteen (14) sample locations using a stainless steel (6") garden spade. Fourteen (14) discrete samples were

- collected in individual 8 oz glass jars at the indicated sample collection point locations as indicated on the initial Sampling Plan. (Figure 1)
- b. Sampling Equipment-A clean stainless steel (6 inch) garden spade was used to collect each sample. The sampler used clean latex gloves in order to minimize any cross contamination that may occur during the sampling event. After collecting an individual sample and before collecting the next sample, the latex gloves were replaced with a new pair of latex gloves.
 - c. Decontamination Process or Procedures- The spade was decontaminated before and after each sample collection using an Alconox solution or Simple Green cleaner followed by a de-ionized water rinse.

II. COMMENT 2-“Permittee states “Gallup is proceeding to excavate contaminated soil based on the analysis received from Hall Environmental Laboratories.” The Permittee must provide a schedule for when the additional sampling and clean up activities will be conducted and be completed.

RESPONSE: This project will be separated into two phases in order to assure the agency that an overflow condition will not occur.

Phase 1 is the installation of four (4) additional Baker Tanks as described in the Interim Measures Work Plan. The importance of this as the first step is to be able to handle any API overflows in order to assure that this will not occur. Tank installation has to be the first step because any API overflow will cause additional contamination in this same area that we are trying to remediate. Dirt Work has to be done to insure a solid foundation for the baker tanks. The dirt work and frac tank installation will be on a non-contaminated area north of the existing baker tank. Next, piping has to be fabricated. The four (4) frac tanks have to be delivered and placed at this location. Piping will then have to be connected to each frac tank. This phase should take up to two and one-half weeks to complete. (Refer to Attachment)

Phase 2 is the clean up activities around the API and other contaminated areas. All contaminated material including around the API is to be remediated. This soil will be put in roll-off boxes to be shipped off-site as Hazardous Waste. The clean up activities will take about two to two and one-half weeks to complete. Next, sampling will be conducted for the same sample locations as described in a previous location plot of December 8 Sampling Plan. It will take up to four weeks to receive analysis from Hall Environmental Laboratory with a normal turn-around. (Figure 1)

III. COMMENT 3-The Permittee must address the following regarding the “Confirmation Samples” figure that identifies the areas requiring additional excavation and confirmation sampling.

- a. **The figure shows two hatched areas: the blue hatch identifies the “Area of Possible Contamination” and the red hatch identifies that the “Area is Contaminated.” The report indicates that the red hatch area is where additional excavation and confirmation sampling will occur. The Permittee must explain the difference between the red and blue hatch areas, and specifically why the “Area of Possible Contamination” does not require additional sampling.”**

RESPONSE: The “Red” hatch (Area is Contaminated) and the BLUE hatch (area of Possible Contamination) was based on the Total Petroleum Hydrocarbon (TPH) values greater than 200 mg/kg as determined from 2006 (2009) Soil Screening Levels (SSL). Areas that were greater than 200 mg/kg were considered to be a “HOT ZONE”, i.e., shaded in “RED” hatch or “Area is Contaminated”. Areas that were less than 200 mg/kg was considered to be “BLUE” hatch or “Area of Possible Contamination” Clean up efforts will be made for both “RED” and “BLUE” hatch areas. These areas do not determine if excavation is required, only which areas are more contaminated than others.

- b. The area west of the Baker Tank is hatched, red indicating that additional excavation and confirmation sampling will occur; however, there are two small areas within the red hatch that are blue (west edge of the excavation and the southwest corner edge of the excavation), an area which indicates no further sampling will be conducted. It is not clear how the Permittee determined that these “blue” areas do not need additional excavation and sampling. Additionally, it is unclear how the Permittee determined the areas north and south of the sample location API-W-6 do not need additional excavation. The Permittee must explain how the borders between the “Area of Possible Contamination” and the “Area is Contaminated” were determined.**

RESPONSE: The two small areas of concern are due to a drawing error. These two areas are all considered as contaminated, should have been identified as a red hatch area, and will also be excavated. Excavation and sampling of the areas north and south of the sample location API-W-6 will also be performed. A detailed description of the red and blue hatch areas was previously identified under comment (3 a) above.

- c. Additional sampling is necessary to define the horizontal and vertical extent of contamination in areas where contaminants are still present. The Permittee must revise the Confirmation Sampling figure to address items a and b and propose additional sampling. The Permittee must be able to demonstrate that clean up of contamination surrounding the API separator and Baker Tank has been completed.**

RESPONSE: The facility is in process of addressing the API overflow issue which is the cause of the contamination. An “Interim Measures Work Plan” is being submitted along with this report. This plan addresses the API overflow issues in more detail. Additional excavation and sampling will be conducted around the API and Baker Tanks both under the “BLUE” and “RED” hatch areas. (Figure 2)

IV. COMMENT 4- In NMED’s September 15, 2009 letter regarding the Formal Report submittal to the September 5, 2009 API Separator Overflow, NMED directed the Permittee to provide steps that would be implemented to ensure overflow to the API separator do not continue to occur. On page 5 of the Report, the Permittee states “both of the API overflows were the direct result of inclement weather conditions that were beyond the control of the refinery. Gallup is in the design phase of a new “Stormwater Diversion Project” in order to eliminate overflows from the new API due to unexpected or inundated

stormwater discharges. This project will be composed of two (2) Stormwater diversion Tanks (T-27 and T-28) and additional diversionary tank. The new system will connect directly into the current stormwater system. A new twenty-four inch (24" pipe will connect the old system to the Stormwater Diversion Tanks (T-27 and T-28). The stormwater will be pumped from the diversion tanks (T-27 and T-28) to the new API."

The overflows were a direct result of the weather, which cannot be controlled by the Permittee; however, the Permittee can control how the overflows are handled so that the wastewater will not flow to the ground surface. The Stormwater diversion Project is not yet installed. Until it is, the API separator must prevent releases from the API separator to the ground surface. The Permittee must propose an interim measures in accordance with Section IV.B.6 (Interim Measure (IM)) of the Post-Closure Care Permit that will control and prevent all overflow from the API separator to the ground surface until the Stormwater diversion Project is installed and operational. The Interim Measures Work Plan is due to NMED on or before April 19, 2010.

RESPONSE: An "Interim Measures Work Plan for control and prevention of Overflow from the API Separator" has been prepared. The plan discusses the amendments to the API area through the use of four (4) additional frac tanks in conjunction with an existing frac tank. The Interim Measures Work Plan is being submitted in conjunction with this report. (Attachment)

V. COMMENT 5- The following comments address the "Hall Environmental Laboratory Data Summary" Table.

- a. **NMED updated their Soil Screening Levels (NMED SSLs), (December 2009). The updated NMED SSLs must be applied to all future comparisons. The change in the December 2009 version of the NMED SSLs do not affect the information provided in this table with the exception of xylenes, for which the reported detection is below the NM SSL industrial value of 3,610 mg/kg. No revision to the Table is necessary.**

RESPONSE: Changes have been adopted to use the December 2009 NMED Soil Screening Levels (SSL) for future comparisons. The 2006 SSL for Xylene was 82 mg/kg. The December 2009 SSL of 3610 mg/kg has been adopted. The table has been modified to reflect these changes. (Figure 3)

- b. **In the Table, the Permittee presents the chromium III value of 100,000 mg/kg. In the future, the Permittee must apply the chromium VI values unless chromium has been speciated or the Permittee can otherwise demonstrate the chromium present in the sample is chromium III. No revision is necessary as the chromium detections are below the industrial chromium VI value.**

RESPONSE: According to the table, the 2006 SSL value for Cr(+3) is 100,000 mg/kg. This is the Soil Screening Level (SSL) not the Cr(+3) value. This value has been changed in accordance with the December 2009 SSL value of 1,570,000 mg/kg. The

maximum Cr(+3) value of 73 mg/kg is below either SSL versions (2006 or 2009). (Figure 3)

The 2006 SSL value for Cr(+6) is 3400 mg/kg. The 2009 SSL value for Cr(+6) is 2900 mg/kg. This value will be used in future comparisons. A maximum Cr(+3) value is well below either 2006 or the 2009 SSL values. (Figure 3)

- c. **The benzene standard in the table states “258 mg/kg”. The standard in the NMED SSLs June 2006 is 25.8 mg/kg. No revisions to the Table us necessary since the benzene detection are below the NMED SSLs December 2009 industrial standard of 85.4 mg/kg.**

RESPONSE: A decimal error was made in the original submittal reporting a SSL (2006 version) of 258 mg/kg for Benzene. This value should have been designated as 25.8 mg/kg as a SSL. This value has been changed to reflect a new SSL of 85.4 mg/kg. The new 2009 SSL will be applied in future comparisons. No revision to table is required. (Figure 3)

- d. **The “DRO” row under the brown shaded column titled “Cleanup Status” states “ok”, indicating no additional cleanup is necessary. However, listed detection exceed the cleanup standard and additional cleanup activities are required. No revision is necessary as the locations that have detections above the cleanup standard are designated as requiring additional cleanup in the Report. The Permittee must ensure the text, tables, and figures are consistent with one another. No revisions are necessary.**

RESPONSE: The SSL detection for TPH for both 2006 and 2009 is 200 mg/kg. According to the NMED tables, there are no SSL values for DRO, MRO, and GRO. However, the comparison will reflect a DRO, MRO, and GRO change based on the TPH values in the future. (Figure 3)

- e. **According to the laboratory reports, gasoline range organics (GRO) were not detected at the following sample locations: API-N-1, API-E-2, API-S-4, API-W-5, API-W-6, CHN-C-10, CHN-C-11, NBT-W-12, and NBT-E-14; however, the Table includes detections for these locations. The detections provided in the Table are the PQL values found in the laboratory reports. Since there were no detections, no revision is necessary. In the future, the Permittee must ensure the tables are consistent with the laboratory reports.**

RESPONSE: The comparison chart submitted was based on an actual value to reflect any “Clean Up Status” as indicated in “Brown”. Therefore, the lowest value that could be put in the table was a PQL. For future comparisons, if the value is a “non-detect, ND”, the letters of “ND” will be put in table.

VI. SUMMARY- The comments as identified by the New Mexico Environmental Department (NMED)/Hazardous Waste Bureau were addressed in detail as indicated above. Enclosed is the Interim Measures Work Plan for the control and prevention of overflows from the API that is due on April 19, 2010 as required according to the letter of March 4, 2010.

VI. DOCUMENT ENCLOSURES/ATTACHMENTS:

The following enclosures or attachments have been included in order to provide the Agency with a visual reference in order to aid in a better understanding of the event surrounding the API overflows that include sampling. These enclosures include the following:

NMED correspondence letter of March, 2010 "Notice of Disapproval, Clean up Status for API Separator Overflows",

Figure 1- Sampling / Clean Up Plan

Figure 2- Drawing of the API area indicating the extent of overflow contamination,

Figure 3- Hall Environmental Laboratory Data Summary Spreadsheet (Corrected),

Attachment- Interim Measures Work Plan for Control and Prevention of Overflows from the API Separator- Installation of four (4) additional frac tanks, letter from NMED "Notice of Disapproval Cleanup Status for API Separator Overflows"

If you require additional information concerning this matter, please contact me at (505) 722-0258.

Sincerely,



Beck Larsen-CHMM, REM

Environmental Engineer

Western Refining (Southwest) (Gallup Refinery)

Enc: NMED correspondence letter of March 4, 2010

Figure 1- Sampling / Clean Up Plan

Figure 2- Drawing of the API area indicating extent of contamination

Figure 3- Hall Environmental Laboratory Data Summary Spreadsheet (Corrected)

Attachment- Interim Measures Work Plan for Control and Prevention of Overflows from the API Separator- Installation of four (4) Additional Frac Tanks

Cc: Mr. Mark Turri, Gallup (Southwest), Refinery Manager

Mr. Ed Riege, Gallup (Southwest), Environmental Manager)

File

NMED (HWB)- Ms Hope Monzeglio

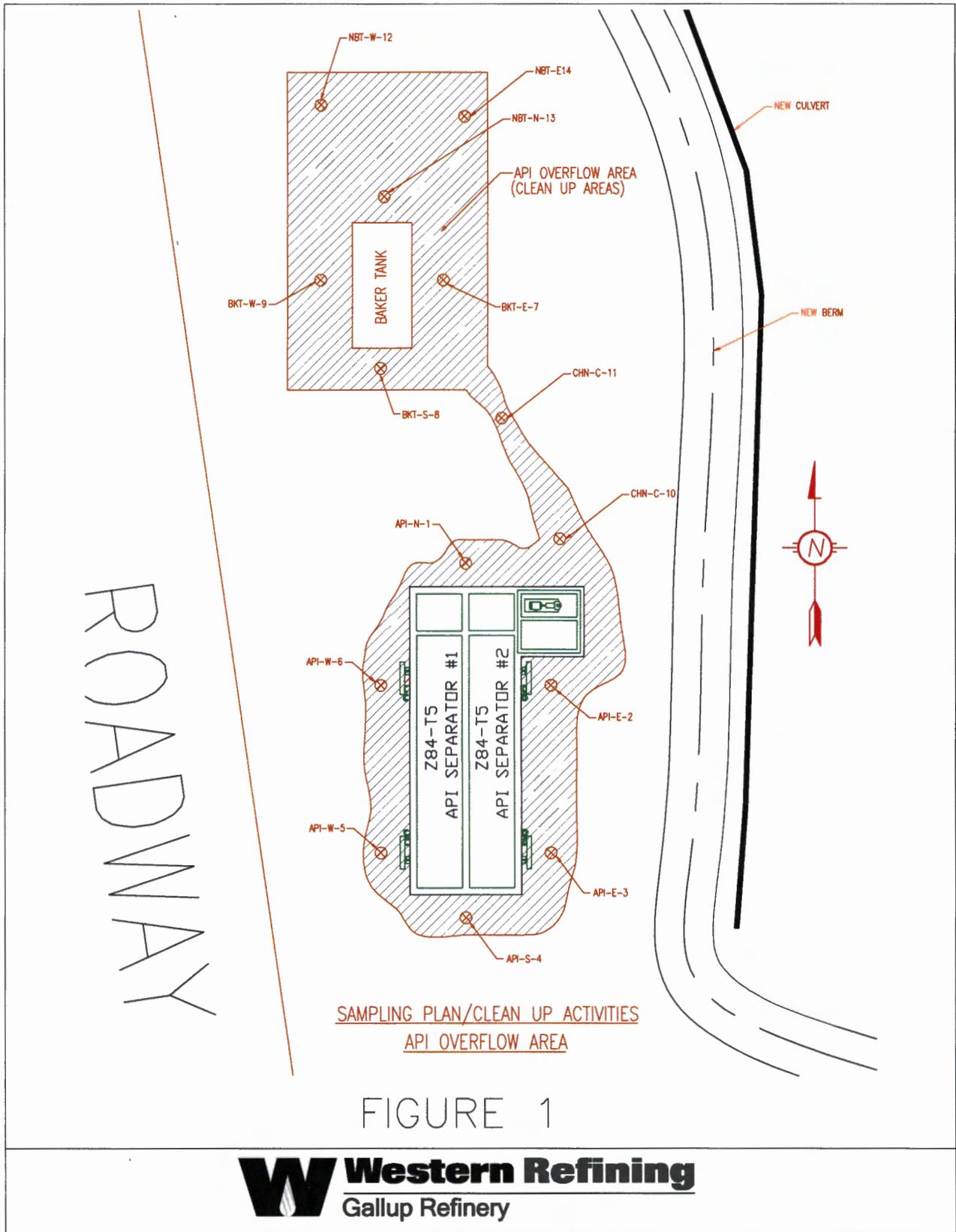
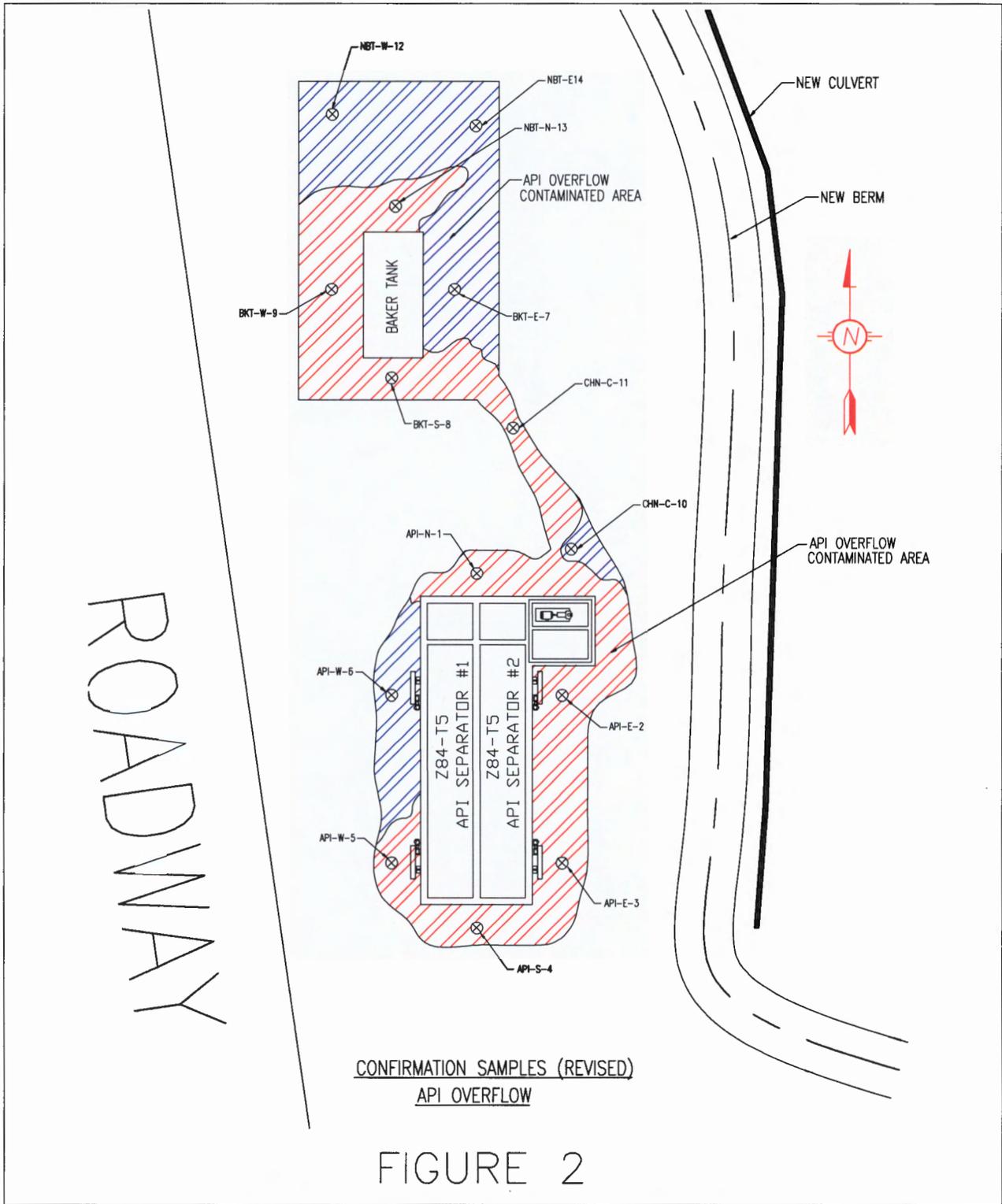


FIGURE 1



HALL ENVIRONMENTAL LABORATORY DATA SUMMARY (CORRECTED)

(API Spill on 12/08/09)

		Sample ID: 1001093 (SOIL CONFIRMATION SAMPLING EVENT)																						
ANALYTES	Units	API-N-1	API-E-2	API-E-3	API-S-4	API-W-5	API-W-6	BKT-E-7	BKT-S-8	BKT-W-9	CHN-C-10	CHN-C-11	NBT-W-12	NBT-N-13	NBT-E-14	MAXIMUM CONTAMINATION FOUND	NMED SOIL (2006) SCREENING LEVELS (mg/Kg)	NMED SOIL (2009) SCREENING LEVELS (mg/Kg)	CLEANUP STATUS					
		TPH	mg/Kg	777	870	1620	8700	210	14	31	1490	2916	180	220	110	720	0	8700	200	200	Contaminated			
DRO	mg/Kg	710	870	1500	8700	210	14	31	1100	560	88	120	32	390	ND	8700	N/A	N/A	Contaminated					
MRO	mg/Kg	87	ND	56	72	100	78	120	ND	120	N/A	N/A	Contaminated											
GRO	mg/Kg	ND	ND	120	ND	ND	ND	ND	390	2300	ND	ND	ND	210	ND	2300	N/A	N/A	Contaminated					
Ignibility	deg F	NO RCI ANALYTICAL TEST PERFORMED														0	N/A	N/A	O.K.I					
Corrosivity	s.u.															0	N/A	N/A	O.K.I					
Reactivity (CN)	mg/Kg															0	N/A	N/A	O.K.I					
Reactivity (S)	mg/Kg															0	N/A	N/A	O.K.I					
METALS																								
As	mg/Kg															0	17.7	17.7	O.K.I					
Ba	mg/Kg	420	500	380	480	130	450	500	360	640	350	380	350	350	310	640	100000	224000	O.K.I					
Cd	mg/Kg															0	564	1120	O.K.I					
Cr (+3)	mg/Kg	6.6	4.0	73	5.2	1.7	3.4	8.7	7.6	9.0	9.1	11	9.1	7.3	5.0	73	100000	1570000	O.K.I					
Cr (+6)	mg/Kg															3400	2920	2920	O.K.I					
Pb	mg/Kg	1.9	1.3	3.5	4.0	3.3	1.3	5.6	5.8	6.8	7.2	5.8	7.7	6.5	6.2	7.7	800	800	O.K.I					
Hg	mg/Kg	0.048															0.11	100000	49.9	O.K.I				
Se	mg/Kg															0	568 (5680)	5680	O.K.I					
Ag	mg/Kg															0	568 (5680)	5680	O.K.I					
VOLATILES																								
Benzene	mg/Kg															6.9	258 (25.8)	85.4	O.K.I					
Toluene	mg/Kg															14	252	57900	O.K.I					
Ethylbenzene	mg/Kg															28	128	385	O.K.I					
1,2,4-Trimethylbenzene	mg/Kg	0.88	0.081	1.1	11	0.09															53	269	N/A	O.K.I
1,3,5-Trimethylbenzene	mg/Kg	0.36															20	69.2	N/A	O.K.I				
Naphthilene	mg/Kg	0.32	0.22	0.74	1.1	0.16															13	300	252	O.K.I
1-Methylnaphthalene	mg/Kg	1.0	1.4	2.0	17	0.35															17	N/A	N/A	O.K.I
2-Methylnaphthalene	mg/Kg	1.6	1.6	2.3	35	0.34															35	N/A	N/A	O.K.I
Isopropylbenzene (cumene)	mg/Kg															5.4	N/A	14900	O.K.I					
4-Isopropyltoluene	mg/Kg	0.64															0.88	N/A	N/A	O.K.I				
n-butylbenzene	mg/Kg	0.22															6.2	62.1	N/A	O.K.I				
n-propylbenzene	mg/Kg															10	62.1	N/A	O.K.I					
sec-butylbenzene	mg/Kg	0.055	nd	0.11	0.56															2.6	60.6	N/A	O.K.I	
Xylene, Total	mg/Kg															180	82	3610	O.K.I					
SEMIVOLATILES																								
Fluorene	mg/Kg															1.9	26500	24400	O.K.I					
Phenanthrene	mg/Kg	0.47	1.1															9.2	20500	20500	O.K.I			
Phenol	mg/Kg															0.36	N/A	205000	O.K.I					
Pyrene	mg/Kg															1.1	30900	18300	O.K.I					
2-Methylnaphthalene	mg/Kg	0.5	1.6	2.1	29															29	N/A	N/A	O.K.I	
Naphthilene	mg/Kg															59	300	252	O.K.I					

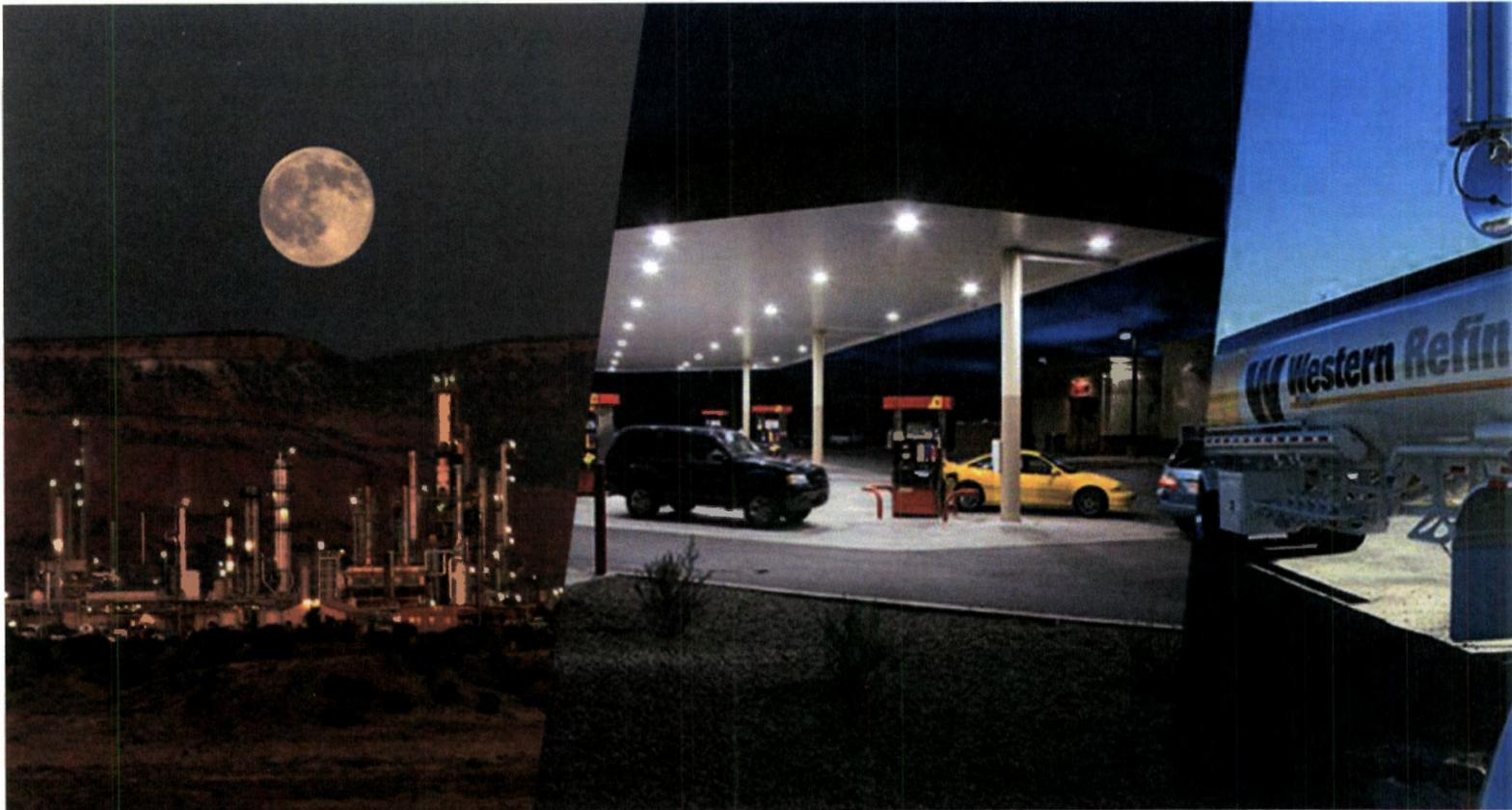
NOTE: **BLANKS** indicate a Non-detect (ND).
 Light Blue color area highlights (DRO* REQUIRED); IF DRO> 200 ppm, 8270 method was to be run. However, Method 8270 (Semi-volatiles was run on ALL sample points)
 Yellow color area highlights the maximum contaminant for a particular sample ID above
 Green highlights the NMED Soil Screen Levels (mg/Kg) for Industrial Facilities for a particular contaminant
 Brown (CLEANUP STATUS) indicates that cleanup was sufficient or insufficient based on NMED Soil Screening Levels for Industrial Facilities.

NOTE: SCREENING GUIDELINES BASED ON AUGUST 2009 NMED TABLE

FIG 3

Interim Measures Work Plan for Control and Prevent of Overflows from the API Separator- Installation of Four (4) Additional Frac Tanks

**Western Refining
Gallup, New Mexico**



April 2010

Attachment

Interim Measures Work Plan
WESTERN REFINING SOUTHWEST, INC., GALLUP REFINERY
EPA ID #NMD000333211
April 2010

Executive Summary

This report describes Western Refining's Interim Measures Work Plan to comply with Section IV.B.6 (Post-closure Care Permit) that will control and prevent all future overflows from the API separator to the ground surface until the Stormwater Diversion Project is installed and operational. Western Refining (Gallup Refinery) is in the design phase of a new Stormwater Diversion Project in order to eliminate these overflows from the new API due to unexpected or inundated stormwater discharges. The original Stormwater Diversion project is comprised of two (2) Stormwater Diversion Tanks (T-27 and T-28) having a capacity of 5000 barrels each. These tanks are to be utilized as additional storage capacity for potentially contaminated stormwater from the process unit areas.

There is one (1) frac tank (500 bbl capacity) in use that receives overflow from the API separator during excessive flow events. During normal situation, it has sufficient volume to prevent the API separator from overflowing on to the ground. In order to address excessive stormwater events, four (4) additional frac tanks with a capacity of 500 bbls each are being installed. This increase will allow for a total influx capacity of 2500 bbls of additional stormwater and process water to the API during heavy storm events.

The 2009 API overflows are primarily as a result of weather related issues. These overflows occurred on September 5 and December 8, 2009. These overflows occurred due to inundation of stormwater to the API unit causing the API to overflow from the top. This work plan will address this issue and corrections made to the API system in order to prevent this occurrence in the future.

TABLE OF CONTENTS

Executive Summary	ii
1.0 Introduction and Background	1
2.0 Current Conditions.....	1-2
3.0 Physical Changes	2
4.0 Schedule.....	2
5.0 Summary	2
Appendix A: NMED’s March 4, 2010 letter Requesting Interim Measures Work Plan.	3-6
Appendix B: API Area Layout with Newly Installed Baker Frac Tanks	7-8
Appendix B-1 API & Lagoon Area with Frac Tank Layout	9

1.0 Introduction and Background

Western Refining-(Southwest)-(Gallup Refinery) has had a couple of API overflows during 2009 as a result of weather related issues. The API overflows occurred on September 5 and December 8, 2009. These overflows occurred due to inundation of stormwater to the API unit causing the API to overflow from the top. This work plan will address this issue and corrections made to the API system in order to prevent this occurrence in the future.

On September 5, 2009 another heavy rain and thunderstorm passed over the facility. Once again the API began overflowing from the top as a result of this event. The estimated quantity of oily water from this event was determined to be 230 bbls and 6 ½ bbls of oil.

On December 8, 2009 another heavy rain and thunderstorm passed over the facility. In addition to excessive stormwater, the facility experienced a plant wide reduction in power that corresponded to a 15 to 20 percent power reduction. This power reduction translated to a total power failure to all units. This power failure caused the API began overflowing from the top as a result of this event. The estimated quantity of oily water from this event was determined to be 739 bbls and 7 ½ bbls of oil.

A working group including engineers, operators, management staff, including the refinery and maintenance managers was created to solve wastewater issues. This group meets on a bi-weekly basis in order to discuss API issues including overflows at the API. Action items are developed, evaluated, and implemented.

2.0 Current Conditions

This Interim Measures Work Plan is to comply with requirements of Section IV.B.6 (Post-closure Care Permit) in order to control and prevent all future overflows from the API separator to the ground surface until the Stormwater Diversion Project is installed and operational. Western Refining (Gallup Refinery) is in the design phase of a new Stormwater Diversion Project in order to eliminate these overflows from the new API due to unexpected or inundated stormwater discharges. The Stormwater Diversion project includes two (2) Stormwater Diversion Tanks (T-27 and T-28) having a capacity of 5000 barrels each. These tanks are to be utilized as additional storage capacity for potentially contaminated stormwater from the process unit areas.

The facility has one (1) frac tank with a capacity of 500 bbls located at the new API separator area that is used during excessive flow events from the process units. Under normal conditions, this frac tank is sufficient in volume in order to contain overflows from the API separator due to minor storm surges as a result of inclement weather. In order to address excessive storm events, Western Refining is in the process of installing four (4) additional frac tanks with a capacity of 500 bbls each providing a total of 2000 bbls additional capacity. The total frac tank storage allowable for overflow conditions will be 2500 bbls. This quantity exceeds the maximum capacity of any of the overflow volumes encountered during 2009. Completion of the Stormwater Diversion project will

allow for an additional influx capacity of 10000 barrels of potentially contaminated and contaminated stormwater to be diverted from the API separator.

3.0 Physical Changes

The existing frac tank (500 bbls) is connected to the new API separator. This tank collects overflow liquids from the API due to excess flow from the process units. The only design change to this set up is to add four (4) additional frac tanks (500 bbls each) to the existing system. The importance of this as the first step is to be able to handle any API overflows in order to assure that this will not occur. Tank installation has to be the first step because any API overflow will cause additional contamination in this same area that we are trying to remediate. Dirt Work has to be done to insure a solid foundation for the baker tanks. The dirt work and frac tank installation will be on a non-contaminated area north of the existing baker tank. Next, Piping has to be fabricated. Baker Tanks Co has to deliver four (4) frac tanks to this location. Piping will then have to be connected to each frac tank.

3.0 Schedule

Western Refining has prepared and is in the process of implementation of the Interim Measures Plan as directed by NMED/HWB in the previous correspondence of March 4, 2010. This frac tank installation should take up to three weeks to complete.

4.0 Summary

- The important element of the Interim Measures Work Plan is to install and pipe four (4) additional frac tanks (500 bbl each) in conjunction to the existing frac tank (500 bbl) to the new API separator system in order to provide additional storage capacity during excess storm or API overflow event. The additional storage capacity will insure that the new API will not overflow to the ground in the future.

Appendix A: NMED's March 4, 2010 letter (Interim Measures Work Plan Requirements, Comment 4)



2011 RICHARDSON
Governor

DEAN BUNISH
Lieutenant Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Radon Park Drive East, Building 1
Santa Fe, New Mexico 87505-6903

Phone (505) 476-6000 Fax (505) 476-6030

www.nmed.nm.gov



RON CURRY
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 4, 2010

Mr. Ed Riigo
Environmental Manager
Western Refining, Southwest Inc.,
Gallup Refinery
Route 3 Box 7
Gallup, New Mexico 87301

Mr. Beck Larsen
Environmental Engineer
Western Refining, Southwest Inc.,
Gallup Refinery
Route 3 Box 7
Gallup, New Mexico 87301

RE: NOTICE OF DISAPPROVAL
CLEANUP STATUS FOR API SEPARATOR OVERFLOWS
(SEPTEMBER 5, 2009 & DECEMBER 8, 2009) 2-109
WESTERN REFINING SOUTHWEST INC., GALLUP REFINERY
EPA ID NO. NM0000333211
BWB-GRCC-MJSC

Dear Messrs. Riigo and Larsen:

The New Mexico Environment Department (NMED) has reviewed Western Refining Southwest Inc., Gallup Refinery's (the Permittee) Cleanup Status for Western Refining (Gallup Refinery) for API Overflow on September 5, 2009 and API Overflow on December 8, 2009 (Report) dated January 25, 2010, and NMED hereby issues this Notice of Disapproval (NOD).

Comment 1

On page 4, item d, the Permittee states "the sampler excavated potentially contaminated soil at the locations as designated on the sampling plan to a maximum depth of 6 inches. The sampler followed proper decontamination procedures between all fourteen sample points in order to minimize any cross contamination. The samples were collected in an 8 oz jar for shipment to Hall Environmental Laboratory."

Mr. Ed Riege
Gallup Refinery
March 4, 2010
Page 2 of 4

The Permittee must describe in detail the sampling collection methods and procedures that were used to collect the confirmation samples (e.g., how were the samples collected, were they discrete or composite samples, how were any composite samples collected, what equipment was used (shovel, core sampler) to collect the samples). The Permittee must also describe the decontamination process of the sampling equipment (e.g., equipment was cleaned in a non-phosphate solution followed by a rinse using deionized water).

Comment 2

On page 5, the Permittee states "Gallup is proceeding to excavate contaminated soil based on the analysis received from Hall Environmental Laboratories." The Permittee must provide a schedule for when the additional sampling and clean up activities will be conducted and be completed.

Comment 3

The Permittee must address the following regarding the "Confirmation Samples" figure that identifies the areas requiring additional excavation and confirmation sampling.

- a. The figure shows two hatched areas: the blue hatch identifies the "Area of Possible Contamination" and the red hatch identifies the "Area is Contaminated." The Report indicates that the red hatched area is where additional excavation and confirmation sampling will occur. The Permittee must explain the difference between the red and blue hatched areas, and specifically why the "Area of Possible Contamination" does not require additional sampling.
- b. The area west of the Baker Tank is hatched red indicating that additional excavation and confirmation sampling will occur; however, there are two small areas within the red hatch that are blue (the west edge of the excavation and the southwest corner edge of the excavation), an area which indicates no further sampling will be conducted. It is not clear how the Permittee determined that these "blue" areas do not need additional excavation and sampling. Additionally, it is unclear how the Permittee determined the areas north and south of sample location API-W-6 do not need additional excavation. The Permittee must explain how the borders between the "Area of Possible Contamination" and the "Area is Contaminated" were determined.
- c. Additional sampling is necessary to define the horizontal and the vertical extent of contamination in areas where contaminants are still present. The Permittee must revise the Confirmation Sampling figure to address items a and b and propose additional sampling. The Permittee must be able to demonstrate that cleanup of contamination surrounding the API separator and Baker Tank has been completed.

Mr. Ed Rege
Gallup Refinery
March 4, 2010
Page 3 of 4

Comment 4

In NMED's September 15, 2009 letter regarding the *Formal Report Submitted to the September 5, 2009 API Separator Overflow*, NMED directed the Permittee to provide steps that would be implemented to ensure overflows to the API separator do not continue to occur. On page 5 of the Report, the Permittee states "[b]oth the API overflows were the direct result of inclement weather conditions that were beyond the control of the Refinery. Gallup is in the design phase of a new "Stormwater Diversion Project" in order to eliminate overflows from the new API due to unexpected or inundated stormwater discharges. This project will be composed of two (2) Stormwater Diversion Tanks (T-27 and T-28) and an additional diversionary tank. This new system will connect directly into the current stormwater system. A new twenty-four inch (24") pipe will connect the old system to the Stormwater Diversion Tanks (T-27 and T-28). The stormwater will be pumped from the diversion tanks (T-27 and T-28) to the new API."

The overflows were a direct result of weather, which cannot be controlled by the Permittee; however, the Permittee can control how the overflows are handled so that the wastewater will not flow to the ground surface. The Stormwater Diversion Project is not yet installed. Until it is, the API separator must prevent releases from the API separator to the ground surface. The Permittee must propose an interim measure in accordance with Section IV.B.6 (Interim Measures (IM)) of the Post-Closure Care Plan that will control and prevent all overflows from the API separator to the ground surface until the Stormwater Diversion Project is installed and operational. The Interim Measures Work Plan is due to NMED on or before April 19, 2010.

Comment 5

The following comments address the "Rad" Environmental Laboratory Data Summary" Table (Table):

- a. NMED updated their Soil Screening Levels (NMED SSLs). (December 2009). The updated (NRF) SSLs must be applied to all future comparisons. The changes to the December 2009 version of the NMED SSLs do not affect the information provided in this table with the exception of xylenes, for which the reported detection is below the NM SSL Industrial value of 3,610 mg/kg. No revision to the Table is necessary.
- b. In the Table, the Permittee presents the chromium III value of 100,000 mg/kg. In the future, the Permittee must apply the chromium VI value unless chromium has been quantified or the Permittee can otherwise demonstrate the chromium present in the sample is chromium III. No revision is necessary as the chromium detections are below the industrial chromium VI value.
- c. The benzene standard in the table states "258 mg/kg." The standard in the NMED SST's June 2006 is 28.8 mg/kg. No revision to the Table is necessary since the

Mr. Ed Riege
Cullup Refinery
March 4, 2010
Page 4 of 4

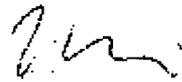
benzene detections are below the NMED SSI's December 2009 industrial standard of 35.4 $\mu\text{g}/\text{m}^3$.

- d. The "DRC" row under the brown shaded column titled "CLEANUP STATUS" states "ok," indicating no additional cleanup is necessary. However, listed detections exceed the cleanup standard and additional cleanup activities are required. No revision is necessary as the locations that have detections above the cleanup standard are designated as requiring additional cleanup in the Report. The Permittee must ensure the text, tables, and figures are consistent with one another. No revisions are necessary.
- e. According to the laboratory reports, gasoline range organics (GRO) were not detected at the following sample locations: API-N-1, API-E-2, API-S-4, API-W-5, API-W-6, CLIN-C-10, CLIN-C-11, NBT-W-12, NBT-S-14; however, the Table includes detections for these locations. The detections provided in the Table are the PQL values found in the laboratory reports. Since there were no detections, no revision is necessary. In the future, the Permittee must ensure the tables are consistent with the laboratory reports.

The Permittee must address all comments requiring a response, and submit a response to NMED on or before April 19, 2010. The Interim Measures Work Plan (Comment 6) is also due April 19, 2010.

If you have questions please contact Kristen Van Horn at 505-476-6245.

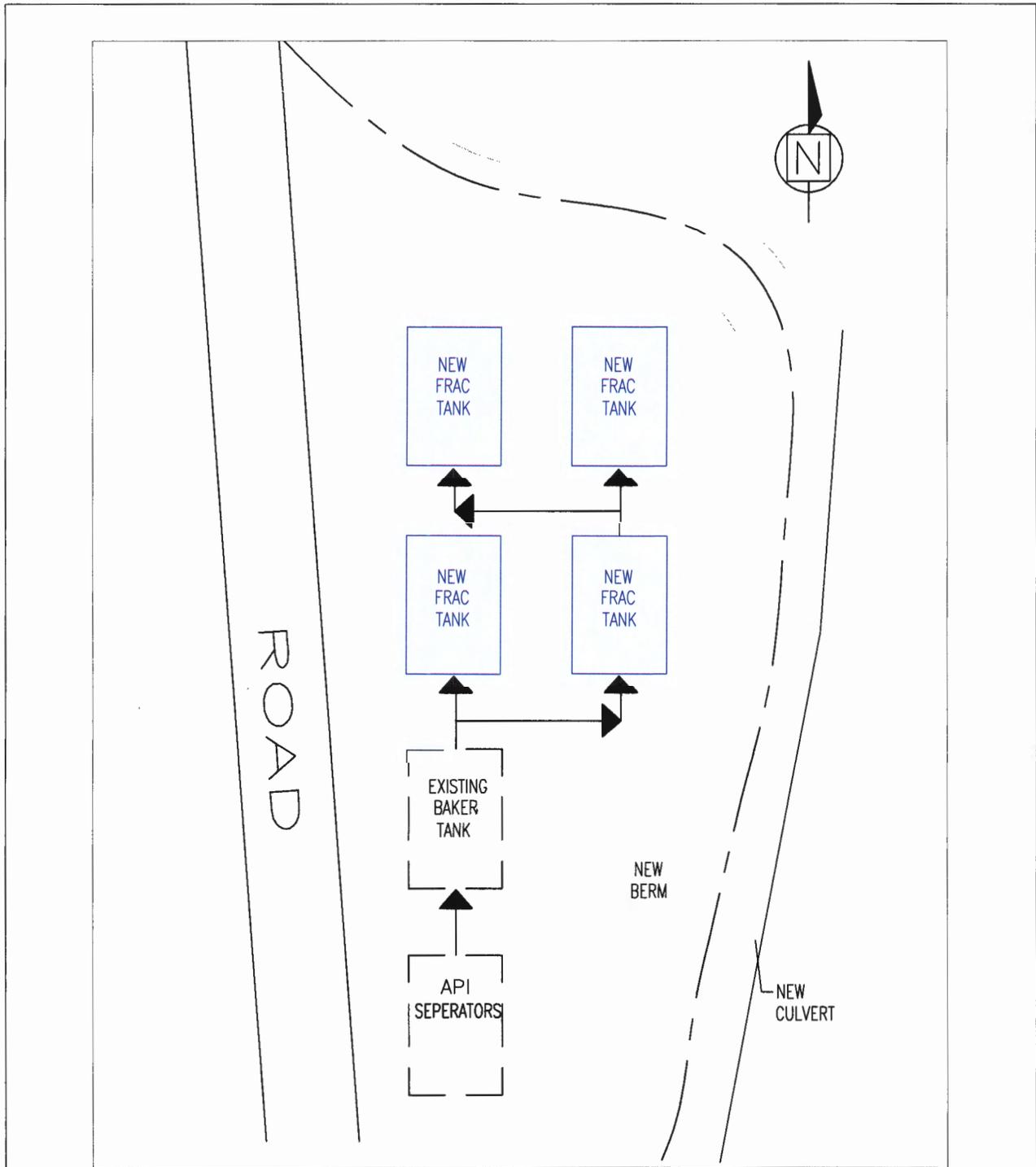
Sincerely,



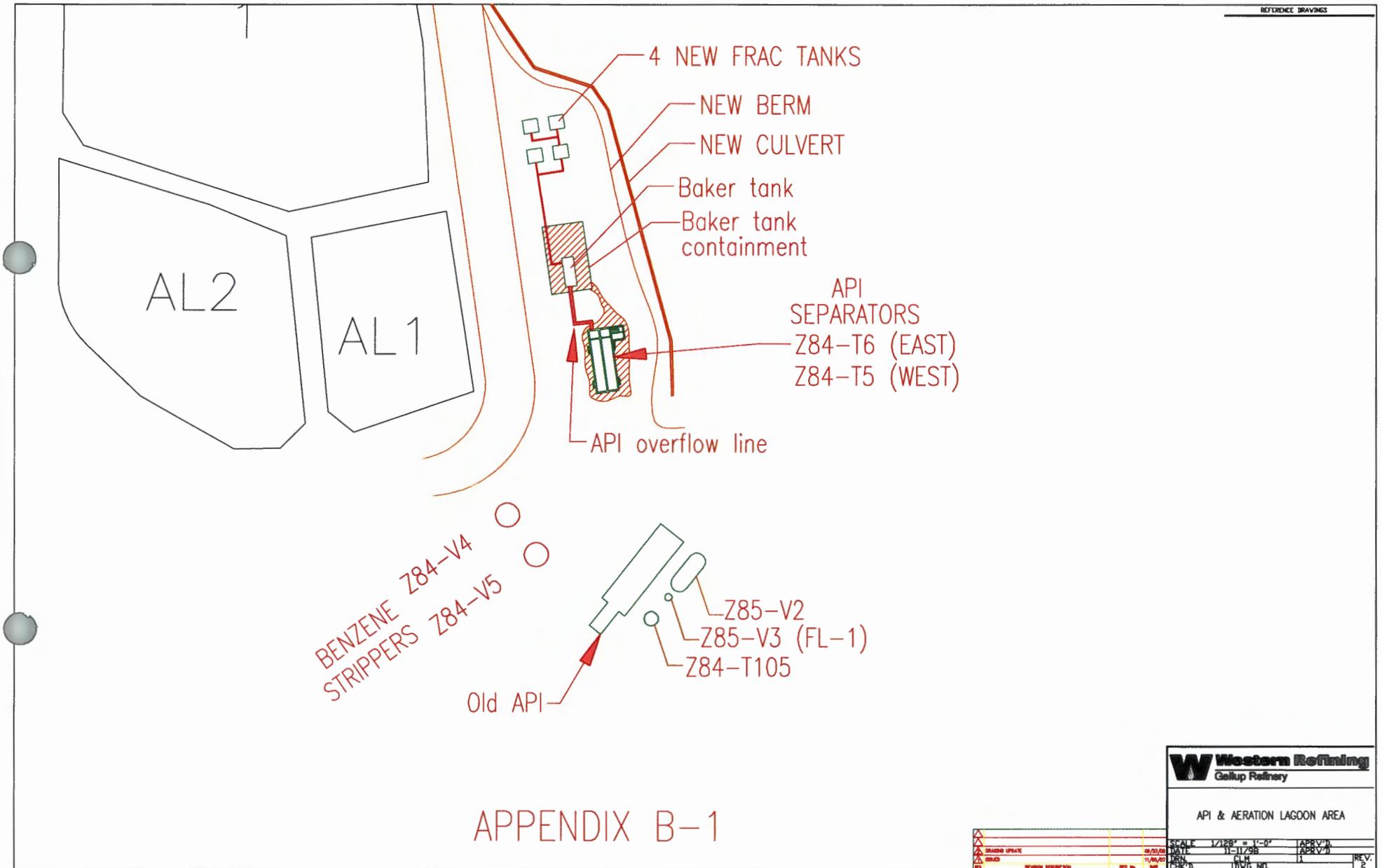
James P. Bearzi
Chief
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB
D. Cobain, NMED HWB
H. Moczygemba, NMED HWB
K. Van Horn, NMED HWB
C. Chavez, NMBVNRD OGD
File: Reading File and WRG 2010

Appendix B: API Area Drawing with Newly Installed Baker Frac Tanks



APPENDIX B



APPENDIX B-1

Western Refining		Gallup Refinery	
API & AERATION LAGOON AREA			
SCALE	1/2" = 1'-0"	APRVD	
DATE	11-11-98	APRVD	
DESIGN	CLB	REV	1
PROJECT	DAWG NO.	REV	2

NO.	REVISION DESCRIPTION	DATE	BY	CHKD.
1	ISSUED FOR PERMITS	09/23/98		
2	REVISED	11/16/98		