



BILL RICHARDSON  
Governor

DIANE DENISH  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Hazardous Waste Bureau*

2905 Rodeo Park Drive East, Building 1  
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**ENTERED**



RON CURRY  
Secretary

JON GOLDSTEIN  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 27, 2009

Mr. Ed Riege  
Environmental Superintendent  
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

**SUBJECT: SEPTEMBER 5, 2009 API SEPARATOR OVERFLOW REPORT  
WESTERN REFINING, SOUTHWEST INC., GALLUP REFINERY  
EPA ID NO. NMD000333211  
HWB-GRCC-MISC**

Dear Messrs Riege and Larsen:

The New Mexico Environment Department (NMED) received the Western Refining Southwest Inc., Gallup Refinery (the Permittee) Report summarizing the overflow and interim measures remedial actions at the API separator on September 5, 2009. The Permittee collected ten soil samples and presented the analytical results in a table titled "Hall Environmental Laboratory Data Summary." The analytical results identified diesel range organics (DRO) extended (which include motor oil range organics (MRO)) ranging from 229 mg/kg to 11,000 mg/kg, all exceeding the NMED's Total Petroleum Screening (TPH) Guidelines of 200 mg/kg for "unknown oil." NMED compared the cumulative values of the DRO and MRO detections when comparing the values to the NMED TPH standard for unknown oil of 200 mg/kg (e.g., sample BKT-E-7 had a DRO detection of 150 mg/kg and a MRO detection of 79 mg/kg with a cumulative value of 229 mg/kg). Because the release came from the API separator, the exact source(s) of the hydrocarbons are unknown.

Mr. Ed Riege  
Gallup Refinery  
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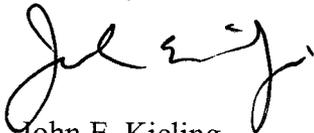
The Permittee must complete additional cleanup activities as follows:

- a. The Permittee must remove additional contaminated soils in the vicinity of the API Separator and the Baker Tank within the hatched area identified in the "Sampling Plan" figure (attached).
- b. The Permittee must collect confirmation samples from the approximate locations of all of the former sampling locations with the exception the roll-off box location. The Permittee must also collect samples from the additional sample locations identified in the attached figure. All samples must be collected from the limits of the excavation not to exceed six inches in depth.
- c. All confirmation samples must be analyzed for DRO extended. In addition, samples collected from locations API-E-2 and BKT-E-7, BKT-S-8, and BKT-W-9 must also be analyzed for gasoline range organics.
- d. The confirmation samples must not exceed organics concentrations of 200 mg/kg, if such concentrations exceed 200 mg/kg then additional soil removal will be required until detected concentrations are less than 200 mg/kg.
- e. The Permittee must submit a report (letter format is acceptable) that describes the additional soil clean up activities, explains how additional contaminated soil was removed, describes how confirmation samples are collected and documents the disposal of the contaminated soils. The Permittee must also include all analytical data in table format, copies of the final laboratory reports, and include a figure that identifies the locations of all confirmation samples.

Mr. Ed Riege  
Gallup Refinery  
October 27, 2009  
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The Permittee must submit the report to NMED on or before February 1, 2010. If you have questions please contact Hope Monzeglio of my staff at 505-476-6045.

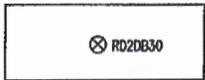
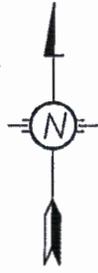
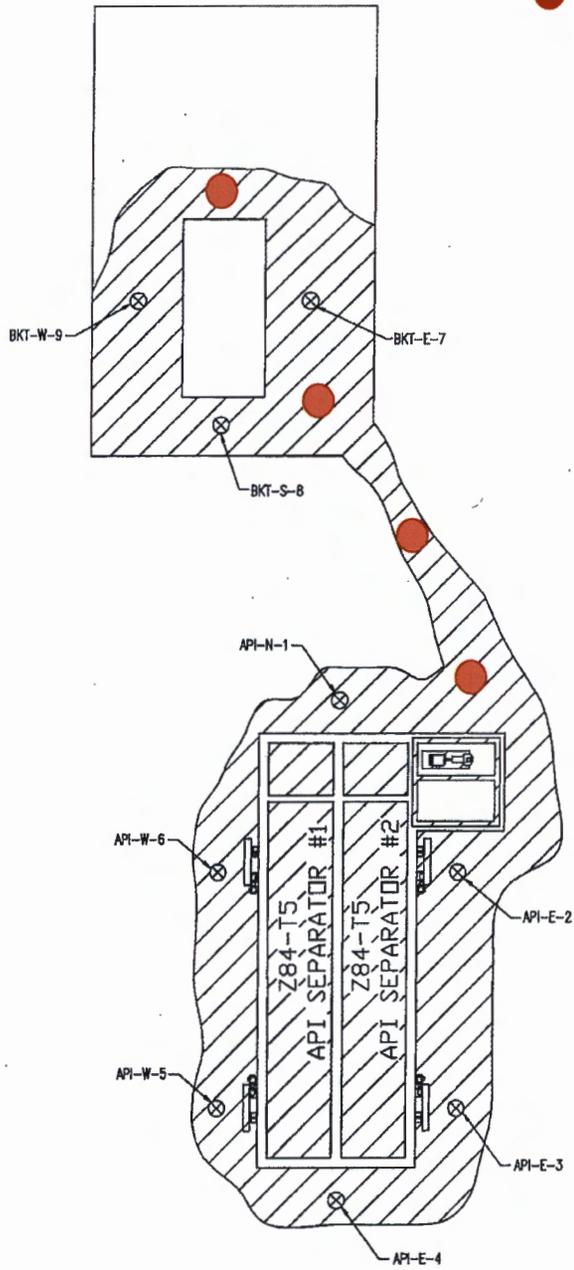
Sincerely,



John E. Kieling  
Program Manager  
Permits Management Program  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
H. Monzeglio, NMED HWB  
C. Chavez, NMEMNRD OCD  
File: Reading GRCC 2009  
GRCC-MISC

● Approximate additional confirmation sample locations



ROLL-OFF BOX

SAMPLING PLAN  
(API OVERFLOW) ON 09/05/09



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RON CURRY  
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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 22, 2009

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

**RE: NOTICE OF DISAPPROVAL  
INTERIM MEASURES WORK PLAN TO COMPLY WITH RCRA STANDARDS  
FOR DISCHARGE OF WASTEWATER TO SURFACE IMPOUNDMENTS  
WESTERN REFINING COMPANY, SOUTHWEST, INC., GALLUP REFINERY  
EPA ID # NMD000333211  
HWB-GRCC-09-005**

Dear Mr. Riege:

The New Mexico Environment Department (NMED) has received Western Refining Southwest Inc., Gallup Refinery (the Permittee) *Interim Measures Work Plan to Comply with RCRA Standards for Discharge of Wastewater to Surface Impoundments* (Work Plan), dated September 2009. NMED has identified deficiencies with the Work Plan, and hereby issues this Notice of Disapproval (NOD).

**Comment 1**

In the Executive Summary, page iii, bullet 1, the Permittee states "Western will install a fourth benzene stripper as an interim measure. However, Western Refining proposes that it retain the discretion not to implement measures that would, therefore, be unnecessary to achieve compliance. For example, if improved performance of our existing two strippers meets compliance, the fourth rental stripper may be discontinued" [this was also stated in the last paragraph of Section 3.1 on page 4]. In Section 3.1 (Physical/Design Changes), pages 3 and 4, the Permittee states "[o]nce the new rental stripper system is installed we will have an enhanced stripper system made up of three strippers – a single stripper in series with two others in parallel. Flow from the API separator will first flow to one of two filter pots followed by the rental

Ed Riege  
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stripper. Flow will then be split between the two existing strippers, treated further, and then discharged to AL-1. If Gallup can achieve continuous compliance using the rental stripper, then Western Refining proposes that it retains the discretion not to run one or both of the existing strippers.”

**NMED Response**

Due to the Permittee’s inability to consistently achieve compliance with the discharge limit of 0.5 mg/L for benzene in the past, the Permittee may not eliminate the use of any of the benzene strippers, and so must operate all three benzene strippers in series. Strippers one, two, or four may be removed from service only for maintenance purposes. If the Permittee wishes to remove any benzene strippers from service for any other reason, it must seek prior approval from NMED in writing, and including justification for the removal. The Permittee must revise the Work Plan to address these changes.

**Comment 2**

In Section 3.1 (Physical/Design Changes), pages 3 and 4, the Permittee states “[o]nce the new rental stripper system is installed we will have an enhanced stripper system made up of three strippers – a single stripper in series with two others in parallel. Flow from the API separator will first flow to one of two filter pots followed by the rental stripper.”

**NMED Response**

It is unclear what the “filter pots” are and what their purpose is. The Permittee must revise the Work Plan to provide a detailed description of the “filter pots” and their intended purpose.

**Comment 3**

In Section 3.2 (Monitoring and Reporting), page 4, the Permittee states “[w]e believe compliance is best demonstrated by calculating a rolling annual average of weekly grab samples which is the standard applied to other refineries (see Appendix A for a detailed discussion).”

**NMED Response**

Use of a rolling average is not appropriate for demonstrating compliance with the discharge limit below 0.5 mg/L for benzene (discharge limit) for effluent entering Aeration Lagoon 1 (AL-1) as all wastewater entering AL-1 must be below the discharge limit. The Permittee must revise the Work Plan to remove all text referring to a rolling average.

**Comment 4**

NMED does not approve Sections 3.2.3 (Period 3: 120 days from the Effective Date of the Interim Measures Work Plan to start up of new upgraded wastewater treatment system) and 3.2.4

(Contingency Sampling and Reporting) of the Work Plan. The Permittee must revise the Work Plan to reflect the following requirements:

- a. If **any** of the effluent wastewater samples collected from AL-1 during "Period 2" of [implementation of] the Work Plan meet or exceed the discharge limit at or above 0.5 mg/L for benzene, beginning on day 121, the Permittee must implement the sampling requirements established in NMED's August 27, 2009 letter (Interim Measures Work Plan Requirements).
- b. If **all** wastewater effluent samples collected from AL-1 during "Period 2" are below the discharge limit of 0.5 mg/L for benzene, the Permittee must continue to follow the sampling requirements for "Period 2" for an additional 30 days. If benzene concentrations in all effluent samples collected from AL-1 during the additional 30 days are below the discharge limit, then the Permittee must resume sampling effluent entering into AL-1 once a week until notified otherwise by NMED. The effluent samples must be analyzed for benzene, toluene, ethylbenzene, and total xylenes plus MTBE. If at any time benzene concentrations detected in any effluent sample meet or exceeds the discharge limit, the Permittee must implement the sampling requirements established in NMED's August 27, 2009 letter (Interim Measures Work Plan Requirements).
- c. Beginning with Period 2, unless otherwise notified by NMED, all analytical laboratory reports must be submitted to NMED within five business days of sample collection.
- d. The Work Plan must be revised to include a detailed description of how all effluent samples will be collected. The effluent samples must be collected using valid techniques to minimize the loss of the volatile organic compounds (VOCs) within each sample (i.e., the sample location must have a sample port that allows for samples to be collected at a low flow rate to minimize volatilization).

#### **Comment 5**

In Section 3.2.2 (Period 2: 75 days to 120 days from the Effective Date of the Interim Measure Work Plan), the Permittee states "[t]he analytical results for each sample will be submitted to NMED within five (5) business days of receipt of report from the external laboratory during Period 2."

#### **NMED Response**

The laboratory reports for all samples collected during "Period 2" and thereafter must be submitted to NMED within five business days of sample collection. See Comment 4 item c above. The Permittee must revise the Work Plan accordingly.

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**Comment 6**

In Section 5.0, the Permittee summarizes the major requests for approval. Bullet two requests approval to "sample at different frequencies and report on corresponding different schedules during three (3) discrete periods identified in this plan" and bullet three requests approval for compliance to be demonstrated by calculating a rolling average on an annual basis for weekly grab samples of strippers' effluent tested for benzene."

**NMED Response**

The above requests have been addressed in comments 3 and 4.

**Comment 7**

The following are general reminders for the Work Plan and compliance with the CAFO:

- a. Daily wastewater effluent sample is defined as an effluent sample collected from any effluent entering into AL-1 at any time wastewater is discharged to AL-1.
- b. All laboratory reports submitted to NMED must contain copies of the chain of custody forms.
- c. NMED reserves the right to collect effluent samples in accordance with Section I.E.8 of the Post-Closure Care Permit and 20.4.1.900 NMAC (incorporating 40 CFR 270.30(i)).
- d. Beginning on day 121 following NMED's approval; any effluent samples collected from the wastewater entering into AL-1 that contain benzene concentrations that are equal to or exceed the discharge limit of 0.5 mg/L for benzene are subject to the stipulated penalties found in Section V. (Civil Penalty and Terms of Settlement), item B (General Provisions) 110 of the CAFO.

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The Permittee must address all comments contained in this NOD and submit a revised Work Plan to NMED on or before November 30, 2009. The revised Work Plan must be submitted with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. In addition, the Permittee must include an electronic version of the revised Work Plan that include all edits and modifications in redline strikeout format.

If you have questions regarding this letter please contact Hope Monzeglio of my staff at 505-476-6045.

Sincerely,



James P. Bearzi  
Chief

Hazardous Waste Bureau

cc: J. Kieling, NMED HWB  
D. Cobrain NMED HWB  
H. Monzeglio NMED HWB  
D. McElroy, NMED AQB  
C. Chavez, OCD  
A. Allen, Western Refining Southwest, Inc.  
D. Edelstein, EPA Region 6  
J. Dougherty, EPA Region 6  
File: Reading File and GRCC 2009 File  
HWB-GRCC-09-005