

Via Certified Mail
No. 7004 1350 0003 7984 1246

March 15, 2010



James Bearzi, Bureau Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM 87505

Re: Response to Notice of Disapproval dated February 4, 2010
Financial Assurance
Gallup Refinery EPA ID #NMD000333211
Bloomfield Refinery EPA ID #NMD 089416416
Western Refining Southwest, Inc.
HWB-GRCC-MISC and HWB-GRCB-MISC

Dear Mr. Bearzi:

Western Refining Southwest, Inc. ("Western") appreciates the time extension granted on February 24, 2010 to respond to the February 4, 2010 Notice of Disapproval by March 15, 2010. This response is in two parts: a financial assurance path forward and a discussion of the additional \$1,100,000 to the total cost estimate for closure and post-closure activities. If it would be helpful, Western is prepared to meet with you and your staff at your convenience to discuss these matters further.

Financial Assurance

We must respectfully disagree with the assertions in your February 4, 2010 letter that Western did not meet the financial test for its 2009 RCRA financial assurance submission and will not be able to utilize the financial test for its 2010 RCRA financial assurance submission. At this time, however, Western is focusing its efforts on prospective compliance for 2010 financial assurance and will forgo any further discussions of 2009 financial assurance unless necessary.

Upon review of our 2009 financial information, we believe that Western Refining Southwest, Inc. may be able to submit a financial test and corporate guarantee for 2010. In order to complete the analysis of all the available options, Western requests additional time to determine the form that financial assurance will take for 2010. This might be accomplished by a change in "guarantor" to Western Refining Company, L.P. (a firm whose parent corporation is also the

parent corporation of Western Refining Southwest, Inc.) in accordance with 40 CFR §264.143(f)(10), §264.145(f)(11), §265.143(e)(10) and §265.145(e)(11). As set forth in these sections:

The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator.

Western is still reviewing this option, and is determining what additional financial analysis, such as an independent audit, may be required to use this mechanism, and the time required to complete such analysis.

In addition to the financial test and corporate guarantee, Western is also actively exploring the other financial assurance mechanisms available under the applicable regulations, in the event the financial test and corporate guarantee are not available. In the meantime, Western is proceeding with its closure and post-closure obligations for the above-referenced facilities, so any additional time necessary to evaluate financial assurance options will not have any detrimental effect on Western's cleanup activities.

Cost Estimate

Western does not believe that the additional \$1,100,000 to the total cost estimate for closure and post-closure activities at Bloomfield, set out in your February 4, 2010 letter is required. As discussed in your February 26, 2010 letter, Western understands that this increase is based on the cost required to remove the soils beneath the aeration lagoons. Western has reviewed all available information related to at the Bloomfield Refinery aeration lagoons, including the operational history, approved Closure Plans and recently completed closure activities. Based on this information, the aeration lagoons have been closed in accordance with the "clean closure" requirements of 40 CFR §265.228(1). This analysis is set out in more detail in Appendix A to this letter.

As noted in your letter of February 24, 2010, investigation and remediation of any impacted media beneath the impoundment liners will be conducted in conjunction with corrective action conducted under the July 27, 2007 Order No. HWB 07-34 (CO). This activity will address any historical (pre-RCRA) impacts to subsoils and ground water, as necessary. Pursuant to Section III.P.1. of the Order, the estimated cost of work shall include the costs of the remedy for a solid waste management unit or area of concern if the Department has selected a remedy for that unit or area. At this time, a remedy has not been selected for any potentially impacted soils or ground water beneath the impoundments and thus the Financial Assurance cost estimate is not required to address the soils and ground water underlying the impoundments. In order to submit the 2010 Financial Assurance, this matter concerning the cost estimate should be resolved first.

If you have questions or would like to discuss this information further, then please contact me at (915) 534-1480.

Sincerely,



Leslie Ann Allen
Senior Vice President
Health, Safety, Environmental and Regulatory Affairs

Enclosures

cc: Hope Monzeglio – NMED HWB
Carl Chavez - NMOCD
Dave Cobrain – NMED HWB
John Kieling – NMED HWB
J. Dougherty – EPA Region 6 **Via Certified Mail No. 7004 1350 0003 7984 1253**
D. Edelstein – EPA Region 6 **Via Certified Mail No. 7004 1350 0003 7984 1260**
Allen Hains – Western Refining El Paso

Appendix A

Western has reviewed all available information related to the Bloomfield Refinery aeration lagoons, including the operational history, approved Closure Plans and recently completed closure activities. Based on this information, the aeration lagoons have been closed in accordance with the “clean closure” requirements of 40 CFR §265.228(1).

Section 265.228 requires the owner or operator at closure to:

- (1) remove or decontaminate all waste residues, contaminated containment systems components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate (i.e., “clean closure”); or
- (2) close the impoundment and provide post-closure care for a landfill (i.e., “landfill closure”).

The recent closure activities at the aeration lagoons, which were completed in accordance with the NMED approved Closure Plan and documented in the Closure Certification Report (September 2009), included the removal of waste residues and decontamination of containment system components, structures, and equipment contaminated with waste or leachate, which resulted in “clean closure” of the units.

The only remaining issue appears to be the potentially contaminated “subsoils” below the liner system. The concern is the nature of any historical impacts and if these potential impacts are the result of a RCRA regulated activity. Based on a review of the operational history of the surface impoundments prior to installation of the liner system, all free liquids and sludge materials were removed from the impoundments in 1982. In addition, contaminated soils were removed from beneath the impoundments, leaving at most, minimally impacted soils. The soils removed from beneath the impoundments were kept on-site and subsequently “delisted” by the Environmental Protection Agency (EPA) on September 3, 1996. The 1982 closure activities were conducted prior to the TCLP and Primary Sludge Listings. In its evaluation, EPA determined that the waste (i.e., contaminated soils removed from beneath the impoundment) did not meet any of the criteria under which the waste was listed as a hazardous waste (i.e., K051-API Separator Sludge). In addition, the EPA determined that factors (including additional constituents) other than those for which the waste was listed did not warrant retaining the waste as a hazardous waste. While this delisting only pertained to the soils that were removed and stock-piled on-site, it must be noted that in the Delisting Petition evaluation, EPA reviewed analyses of soil samples collected from beneath the impoundments after the 1982 closure activities. The following statements were made by EPA in their letter of December 29, 1992:

“The other information provided in the submittal was soils sampling data from the two oily water ponds and landfill which held the petitioned waste previously. The soil samples were collected as part of earlier closure activities. We agree that data from analyses performed on these samples indicate no significant concentration of the limited number of constituents which were analyzed. Therefore, these data suggest that the petitioned waste did not leach any significant concentrations of these constituents into subsurface soils or the ground water.”

This information indicates that at the time of initial closure activities in 1982, there was no indication of significant impacts to the soils beneath the impoundments.

The second concern deals with the question of whether any hazardous constituents were present in soils beneath the impoundments. In the April 15, 1991 Delisting Petition, it is clearly demonstrated that the impoundments had not received hazardous waste (K051-API Separator Sludge). Based on the EPA Final Exclusion published in the Federal Register on September 3, 1996, it appears that EPA's original position that the materials were a listed waste was based on the argument that the impoundments were "used to contain water outflow from an API separator (EPA Hazardous Waste No. K051)." However, outflows from API Separators do not generally result in the generation of K051 hazardous wastes in downstream units (see discussion below). There was no contention by EPA or the State that API Separator sludge had been placed in the surface impoundments. In addition, Bloomfield Refining Company clearly noted in its Delisting Petition that API Separator sludge was not present in the impoundments and that solids removed from the API Separator were separately disposed at an off-site permitted hazardous waste facility.

EPA has discussed the applicability of the "mixture rule" to petroleum refinery wastewater streams and the potential for a listed waste to accumulate in units downstream of an API Separator in various policy memorandums. Two memorandums that are directly applicable to the operation of the API Separator and the downstream impoundments have been enclosed. In the July 1991 Memo, EPA states, "*It is Agency policy that no mixing occurs in a wastewater treatment unit that manages a non-hazardous [nonlisted] liquid waste even if that liquid generates a hazardous sludge that settles to the bottom of the unit, unless that sludge is in some way dredged up and physically mixed with the liquid.*" In the enclosed December 1984 memo, EPA states, "*It is imperative that your staff understand the proper framework for the application of the mixture rule. To maintain that a pond is regulated because an API Separator is an inherently inefficient unit and allows sludge to be carried through to a pond, is inaccurate. Likewise, downstream oxidation ponds are not regulated simply because they sometimes receive flow that has bypassed the API Separator. In both cases, the listed API Separator Sludge has not yet been generated. Rather, API Separator Sludge is generated when it is deposited in the bottom of an API Separator. The mixture rule is relevant only in those cases where previously deposited sludge is scoured, resuspended, and then carried out of the unit with the wastewater.*"

In the December 1984 memo, EPA provides some factors to be considered when determining the potential for separator sludge scouring. Based on a review of these factors and documentation of the historical operations of the separator as provided in the April 15, 1991 Delisting Petition, there is no reason to believe that sludge was being scoured from the API Separator and transported into the surface impoundments.

After the impoundments were cleaned out in 1982, the impoundments were lined with a 33% bentonite composite liner, overlain by a French drain system and a 100-mil HDPE liner. The impoundments were then placed back into service and continued in non-hazardous operation as aeration lagoons until the early 1990s. With the addition of D018 (benzene) as a regulated waste stream as part of the TCLP regulatory change, the impoundments were once again cleaned out and a double HDPE liner and a leak detection system added over the previously existing

liners/collection systems in accordance with minimum technology requirements (MTRs) of 40 CFR §265.221(h). The impoundments were then placed back into operation as interim status hazardous waste management units.

During the recent closure activities at the impoundments, an inspection of the lower RCRA liner did not identify any penetrations or other indications of leaks from the uppermost leak detection system. Based on a full review of all available information, there is no evidence to suggest that hazardous constituents have leaked from the impoundments and impacted the underlying soils while the impoundments operated as interim status units.

FaxBack # 11626

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JULY 5, 1991

MEMORANDUM

SUBJECT: Applicability of the "Mixture" Rule To Petroleum Refinery Wastewater Systems

FROM: Sylvia K. Lowrance
Office of Solid Waste

TO: Director, Waste Management Division

Regions I - X

Last fall, EPA added two wastes, F037 and F038, generated in the treatment of petroleum refinery wastewaters to the list of hazardous wastes under 40 C.F.R. 261.31 (55 Fed. Reg. 46354, November 2, 1990). Since then, we have received requests for clarification concerning the application of the "mixture rule" to these listings. This memorandum is intended to provide guidance on this question.

In a December meeting with the American Petroleum Institute (API) and my staff, API discussed what it viewed as a potential conflict between the language of the listing that limits the listed wastes to those generated upstream of aggressive biological treatment units and the preamble discussion of the interaction between the "mixture rule" and the listing. API explained its fear that introduction of a particle of the sludge to non-hazardous wastewater would taint the wastewater and thus convert any downstream units into hazardous waste treatment facilities.

The discussion of the mixture rule in the preamble to the final regulation does not reflect any change in the Agency's position about how the mixture rule works and the circumstances in which a non-hazardous wastewater, i.e., non-listed wastewater, that generates a listed waste would become hazardous.

In response to an expression of concern about this matter in comments filed on the rule, EPA (Response to Comments Background Document) indicated as follows:

With respect to the commenter's concern that all downstream units would be regulated as hazardous as a consequence of application of the mixture rule, the Agency feels that the following points should be made. Generation of a waste does not occur until deposition. It is

Agency policy that no mixing occurs in a wastewater treatment unit that manages a non-hazardous [nonlisted] liquid waste even if that liquid generates a hazardous sludge that settles to the bottom of the unit, unless that sludge is in some way dredged up and physically mixed with the liquid. If the Agency did not interpret the mixture rule in this manner, there would be no point in carefully limiting listings to include sludges but exclude wastewaters. The position of the Agency in expanding the listing was to ensure the regulation of similarly composed sludges, regardless of where they are generated.

This is consistent with EPA's previous discussions of the applicability of the mixture rule with respect to petroleum refinery wastewater separation sludges. (See attached December 7, 1984 Office of Solid Waste and Emergency Response Memorandum, Subject: Region VIII Policy for the Permitting of Refinery Oily Wastewater Treatment Ponds). Further, the Agency's position is fully explored in the extended discussion of the rule in the final rule concerning the delay of closure for hazardous waste management facilities. See 54 Fed. Reg. 33376, 33387 (August 14, 1989). There, the Agency rejected the position that when non-hazardous waste and a listed hazardous waste are co-mingled and co-managed in the same unit under any circumstances, the entire mixture is considered a listed waste.

The Agency has consistently interpreted the mixture rule not to apply where a non-listed waste is discharged to a unit (i.e., surface impoundment) even if that liquid generates a hazardous sludge, unless the sludge is in some way "mixed" with the liquid (e.g., scoured as a result of operations in the unit). If the Agency did not interpret the mixture rule in this manner, there would be no point in carefully limiting listings to include sludges but exclude wastewater.

The discussion goes on to recognize that there is a continuum between sludge, the sludge/liquid and the liquid. Within the sludge/liquid interface there may be some mixing but not "mixing" so as to convert the liquid from non-hazardous waste to hazardous. Only in the event of scouring or other physical mixing would the mixture rule come into play.

Were any mixing to occur, it would be confined to the liquid/sludge interface. Levels of hazardous constituents escaping from the hazardous sludge to the non-hazardous liquid are not likely to pose an appreciable risk to human health and the environment. Should the impoundment be dredged so that scouring or other physical mixing occurs, the mixture rule would come into effect. 54 Fed. Reg. 33388.

Under the policy explained above, for example, it is unlikely that any increased turbidity associated with the introduction of water from storm events would create the necessary scouring or physical mixing described above so as to convert non-hazardous wastewater to hazardous. Similarly, for example, the small amount of resuspension of primary sludge

associated with the normal operation of a properly designed wastewater treatment system would not render the wastewater hazardous.

cc: RA's Region I-X
Richard Witt (LE-132S)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
DECEMBER 7, 1984

MEMORANDUM

SUBJECT: Region VIII Policy for the Permitting of Refinery Oily Wastewater Treatment Ponds

FROM: John He Skinner, Director

Office of Solid Waste (WH-562)

TO: Robert L. Duprey, Director

Region 8
Air and Waste Management Division (8AW-WM)

We have reviewed the proposed Region VIII position discussed in your memos dated May 1 and October 12, 1984 that define permitting coverage of refinery wastewater treatment ponds. As your staff may have informed you, there have been several meetings between my staff and yours to discuss this problem. We have also met with Chevron, Phillips, Tosco and API and, separately, with Region IX to discuss the issue. We share your concern about the threat posed to ground and surface waters by some of the unlined wastewater ponds that treat or store oily wastewaters. However, we believe that the similarity of downstream unit sludges (in terms of lead and chromium levels) to those found in the API Separator are not a sufficient basis for defining the material in the downstream units as API Separator Sludge. In fact, the similarity of these sludges was a significant factor in our decision to move forward on an expanded listing to regulate these pond sludges.

Specifically, we are planning in a forthcoming listing to regulate oil/water/solids separation sludges generated in the wastewater treatment system prior to biological treatment. This listing was originally proposed in November of 1980. We expect to issue a notice identifying all of the available data in support of the listing and to provide some clarifications in response to previous comments. Current plans are to promulgate that listing by late summer.

While the listing revision should cover most sludges generated in these ponds, we realize

that does not address your short term problem. We do have some suggestions in this regard. Section 206 of the Hazardous and Solid Waste Amendments of 1984 provides that persons obtaining RCRA permits must undertake corrective action for all releases of hazardous constituents from any solid waste management unit as a condition of obtaining the RCRA permit. Thus, if a refinery pond is releasing hazardous constituents and the refinery seeks a RCRA permit for any unit at that facility, the refinery would have to undertake corrective action for the releases from the pond. (This could be done either through the permit, or pursuant to an interim status compliance order.) This principle applies even if the pond is not considered to hold a hazardous waste, since Section 206 applies to releases of hazardous constituents from solid waste management units.

A second option for addressing these pond sludges is to regulate the wastes as hazardous based on their exhibiting one or more of the characteristics of hazardous waste (see 40 CFR §261.21 -24). You mentioned this option in your recent letter with respect to EP Toxicity. However, your staff seems to have overlooked corrosivity (high pH has been found in some COD ponds) and reactivity (§261.23(a)(5)). It is likely that some refinery pond sludges will contain excessive levels of reactive sulfides.

The final option that could be used to deal with downstream impoundments and basins is applicability of the mixture rule. It is imperative, however, that your staff understand the proper framework for the application of the mixture rule. To maintain that a pond is regulated because an API Separator is an inherently inefficient unit and allows sludge to be carried through to a pond, is inaccurate. Likewise, downstream oxidation ponds are not regulated simply because they sometimes receive flow that has bypassed the API Separator. In both cases, the listed API Separator Sludge has not yet been generated. Rather, API Separator Sludge is generated when it is deposited in the bottom of an API Separator. The mixture rule is relevant only in those cases where previously deposited sludge is scoured, resuspended, and then carried out of the unit with the wastewater. If the Region can make a case for scouring from a separator, the mixture rule is applicable and the wastewater becomes a hazardous waste until delisted or discharged to a stream subject to regulation under the Clean Water Act.

The burden of proof in the demonstration of scouring is upon the Agency. Such an argument, although technically complex, can be made based on well established hydrodynamic principles. Realizing that there are limited resources and capability for developing such an argument by the Regions, we have (at the request of your staff) taken an active role in the development of guidance for the application of this argument. Attached to this memo is a preliminary list of factors that may be required to establish the occurrence of scouring from a given separator. These points are being provided at this time to facilitate the initiation of information gathering in the more serious cases.

We have also requested that the Office of Waste Programs Enforcement (OWPE) develop more thorough guidance. That effort is being conducted by their contractor (Metcalf & Eddy). We anticipate that your staff will be contacted by them in the near future. The contractor should be able to provide some direct assistance to your staff in some specific cases, thereby serving the dual purpose of training and resolution of specific factors of

concern. Mike Barclay (FTS: 475-8727) of OWPE is the Head-quarters lead on that project and should be contacted for any further information. Ben Smith of my staff (FTS: 475-8551) is our technical expert in this matter and the lead on our study of petroleum refineries and their wastes. Do not hesitate to contact him if additional questions arise pertaining to this or other matters.

cc: RA's Region I-X

Mike Barclay (OWPE)
Steve Silverman (OGC)
Susan Manganello (ORC, Region VIII)

Factors To Be Evaluated In Determining The Potential For Separator Sludge Scouring

Sludge Accumulation Practices - Continuous sludge removal from the separator rules out the occurrence of scouring. At the other end of the spectrum are facilities that allow sludge to accumulate to considerable depth. Accumulation to a depth greater than 50% of the flow depth makes scouring probable. Intermediate ranges of accumulation will probably depend more heavily on other factors.

Flow Variability - Unless overloaded, units with maximum-to-minimum, flow ratios at the separator effluent of less than 2 and inlet flow ratios of less than 4 are probably not experiencing much resuspension of sludge.

Poor Separator Design or Operation - Factors contributing to scour conditions include: excessive, inlet or outlet zone turbulence; nominal horizontal velocities greater than 30 feet per minute; nominal overflow rates (flow/ surface area) greater than 10,000 gallons per day/square foot of basin; basins less than 30 feet in length; operation under pressure (e.g., with a backwater at the inlet of a separator with a frozen surface), settling zone turbulence (sometimes seen as bubbling with solids entrainment).

Separator Effluent Characteristics - Excessive weir loadings (e.g., operation with a suppressed weir, flow depth greater than a foot) facilitate carryover of resuspended particles. Visible, large (diameter greater than 1/4 inch) sludge particles in the separator effluent are strong evidence of scouring associated with microbial degradation of deposited sludge.

Sludge Characteristics - Particle size distribution as measured by wet sieve and hydrometer analyses is necessary information to define scour conditions. The presence of coke fines in the wastewater influent is also important because that size of particle (<.1mm) is non-cohesive and highly susceptible to resuspension.