# NM1 - ___50_____

# GENERAL CORRESPONDENCE

# YEAR(S):

# Sept. 2011 – July 2011

## Jones, Brad A., EMNRD

**From:** Jones, Brad A., EMNRD
**Sent:** Tuesday, July 24, 2012 6:16 PM
**To:** 'Marcella Marquez'
**Cc:** terry@industrialecosystems.com; VonGonten, Glenn, EMNRD
**Subject:** RE: Permit Application

Marcella,

In OCD's November, 22, 2011 Request for Additional Information (RAI), OCD only expressed one issue regarding the proposed application of "centrate" or centrifuge wastewater to a biopile. It is located on the top page 5 of 34 of the Nov. 2011 RAI in response to information provided on page 6.9 of the permit application, Section 5.4 titled *Centrate Water (Wastewater)*. The issue is the proposed criteria for applying centrate water to a biopile. The first bullet states "through "chloride content sampling" waste does not have a chloride concentration exceeding 500 mg/kg (19.15.36.13.A & 19.15.36.15.A) *where ground water is less than 100' but at least 50' below the lowest elevation at which the operator will "place" oil field waste." The regulatory reference "19.15.36.13.A", addresses the depth to ground water and the types of activities that can be considered for permitted depending on the separation to ground water. The other regulatory reference "19.15.36.15.A" is the oil field waste acceptance criteria for landfarm operations. As stated in the RAI, the regulatory reference and chloride concentration provided in the permit application applies to soils and drill cuttings to be accepted into a landfarm cell. The provision , "19.15.36.15.A", does not mention or recognize that the criteria for the acceptance of soils and drill cuttings applies to "centrate" or centrifuge wastewater that will be applied to biopiles after the oil field waste acceptance criteria has been completed. Please identify the liquid concentrations of the "centrate" or centrifuge wastewater that will be applied to biopiles. If OCD has misunderstood the proposal and the proposal is to test the biopiles after the centrate is applied, then please clarify the testing protocol and clarify what steps will be taken if the results indicate an exceedance. Please keep in mind the waste acceptance sampling requirements of 19.15.36.13.E NMAC and 19.15.36.15.A NMAC are required to be completed prior to placement of such waste into the landfarm cell to construct a biopile. This is supported and clearly stated in last sentence of the third bullet in your email below. The proposal presented to OCD is to apply "centrate" or centrifuge wastewater to a biopile after the waste acceptance sampling has been completed. The chemistry of the biopile is subject to change with the addition of an undefined concentration of "centrate" or centrifuge wastewater.

Brad

***Brad A. Jones***
*Environmental Engineer*
*Environmental Bureau*
*NM Oil Conservation Division*
*1220 S. St. Francis Drive*
*Santa Fe, New Mexico 87505*
*E-mail: brad.a.jones@state.nm.us*
*Office: (505) 476-3487*
*Fax: (505) 476-3462*

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**From:** Marcella Marquez [mailto:marcella@industrialecosystems.com]
**Sent:** Tuesday, July 24, 2012 1:58 PM
**To:** Jones, Brad A., EMNRD
**Cc:** terry@industrialecosystems.com

**Subject:** Permit Application
**Importance:** High

Brad:
This email is being sent to you regarding our request to reuse/recycle "centrate" water by adding it to our biopiles for moisture. To address your concerns noted in your reply letter dated 11/22/11:

- *As per NMAC 19.15.36.15.C.6-The operator shall add moisture, as necessary, to enhance bioremediation and to control blowing dust.* The reuse of our "centrate" water would be used for this purpose while also allowing us to reduce waste;
- *As per NMAC 19.15.36.15.C.8.-Pooling of liquids in the landfarm is prohibited. The operator shall remove freestanding water within 24 hours.* With these constraints, the "centrate" water would be applied to the biopiles to the extent to only add moisture without causing any of the water to run/pool from the biopile.
- *As per NMAC 19.15.36.13E.-The operator shall not place oil field waste containing fee liquids in a landfill or landfarm cell. The operator shall use the paint filter test, as prescribed by the EPA (EPA SE-846, method 9095) to determine conformance of the oil field waste to this criterion.* As demonstrated in our permit application, Section 19.15.36.8.C.6-Management Plan-all soils and drill cuttings will be free of liquid content and pass the paint filter test prior to being placed into a biopile in a landfarm cell;
- *As per NMAC 19.15.36.15.E-Vadose Zone Monitoring-The operator shall monitor the vadose zone beneath the treatment zone in each landfarm cell.* We are required to conduct regular and periodic testing to monitor any mobilization of contaminants from the biopile; *and*
- *As per NMAC 19.*15.36.C.10-The division's environmental bureau may approve other treatment procedures if the operator demonstrates that they provide equivalent protection for fresh water, public health, safety and the environment.

With the methods/practices set forth within our permit application, we have demonstrated that equivalent protection is provided for fresh water, public health, safety and the environment when reusing/recycling our "centrate" water to add moisture to the biopile(s).

We would appreciate a quick response to this email so that we may move forward with the permit application process.

***Thanks,***
***Marcella Marquez, HSE Administrator***
***Industrial Ecosystems, Inc.***
***Phone: (505) 632-1782***
***Fax: (505) 632-1876 or (505) 334-1003***

New Mexico Energy, Minerals and Natural Resources Department

**Susana Martinez**
**Governor**

**John H. Bemis**
Cabinet Secretary-Designate

**Brett F. Woods, Ph.D.**
Deputy Cabinet Secretary

**Jami Bailey**
Division Director
**Oil Conservation Division**

November 22, 2011

John J. Kiely
Crowe Blanco Properties, LLC
401 S. LaSalle, Suite 606
Chicago, Illinois 60605

**RE: Request for Additional Information – Permit Application Review for a Proposed Commercial Surface Waste Management Facility**
**Crowe Blanco Properties, LLC – Blanco Landfarm**
**Facility Location: W/2 and SW/4 SE/4 of Section 16, Township 29 North, Range 9 West NMPM**
**San Juan County, New Mexico**

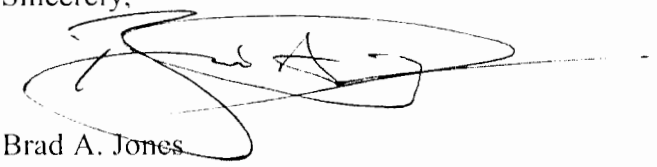
Dear Mr. Kiely:

The Oil Conservation Division (OCD) has reviewed Crowe Blanco Properties, LLC's (Crowe Blanco) response and revision, dated September 19, 2011, of application for a commercial surface waste facility permit for the Blanco Landfarm located in the W/2 and SW/4 SE/4 of Section 16, Township 29 North, Range 9 West NMPM, San Juan County, New Mexico. The review of the submittal is to determine if any additional information or modifications may be required before considering deeming the permit application complete. The application has been determined to be incomplete. Therefore, the OCD requests additional information.

Enclosed is a list of items that must be addressed prior to completing the review. Once this information is submitted, the OCD will determine if additional information is required. The OCD suggests that meetings be conducted with the OCD on a periodic basis to discuss the request for additional information. The OCD recommends that all corrections, additions, and modifications to the application be reviewed and cross-referenced before they are submitted, in order to verify that all responses correlate and coincide with each other throughout the application.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,



Brad A. Jones
Environmental Engineer

BAJ/baj

Attachments: Request for Additional Information

Cc: OCD District III Office, Aztec w/ attach
Marcella Marquez, Industrial Ecosystems, Inc., 49 CR 3150, Aztec, NM 87410 w/ attach

**Request for Additional Information**
**Crowe Blanco Properties, LLC – Blanco Landfarm**
**Commercial Surface Waste Management Facility**
**November 22, 2011**

**Page 4.1**

Pursuant to Paragraph (1) of 19.15.36.13.B NMAC, "No surface waste management facility shall be located within 200 feet of a watercourse, lakebed, sinkhole or playa lake." The first sentence states that "the facility consists of 291 +- acres." The 291 +- acre assessment includes the 3 watercourses and their associated setbacks, as illustrated on page 4.3, and an area in the upper northeast corner which is identified in the cover letter as "it will not be used as part of the SWMF..." Please properly identify the area in which Crowe Blanco, LLC is seeking to permit as a surface waste management facility pursuant to the requirements of 19.15.36 NMAC.

The third sentence states "a perimeter berm will serve as the outer boundary of the cells developed within the facility." The siting criteria identified in 19.15.36.13.B NMAC determines the surface waste management facility boundary. The placement of the contaminated soils is addressed in Paragraph (2) of 19.15.36.15.C NMAC which states the "operator shall not place contaminated soils received after the effective date of 19.15.36 NMAC within 100 feet of the surface waste management facility's boundary." The facility boundary and the outer boundary of the landfarm cells (placement of contaminated soils) are not the same. Please clarify the statement.

**Page 4.1**

Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas*." OCD was unable to locate the engineering designs of underlined items above in Section 19.15.36.8.5 of the permit application, as referenced on page 4.1 as the source of this information. The design drawings provided in Section 19.15.36.8.5 of the permit application seem to only focus on the design of the processing area and not the design features associated with the rest of the proposed surface waste management facility. Please provide all of the required information.

**Page 4.4,** *Sheet 6 of 17*

The illustration identifies another area that may or may not be part of the proposed facility. Please clarify if the area in brown will be part of the proposed area to be permitted. Also, please identify what the dashed line represents on the drawing.

**Page 5.0**, 19.15.36.8.C.5, *Engineering Designs & Technical Data:*

Pursuant to Paragraph (5) of 19.15.36.8.C NMAC, the application shall include "engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments." The use of manure throughout the permit application is recognized as part of the bioremediation process. Please provide the details regarding the storage of the manure.

**Page 5.1**

Sheet C105 was not provided in the section of the permit application. Please provide a copy of Sheet C105 which illustrates the detailed construction/installation diagrams for the processing area such as the containment area design, the containment area berm design, interior tank battery berm design, the interior road and driveway design, and the chain link gate and foundation design. Also, please provide detailed construction/installation diagrams for the following: facility boundary fencing and gating, facility boundary berms, landfarm cell berms, vehicle/equipment wash-down area, manure storage area, and concrete impoundments discussed in the permit application.

**Page 5.5,** *Sheet C107:*

The cross-section drawings, Section A-A and Section B-B, illustrate that piping to and from the above grade tanks are to be installed 3-4 feet below the surface elevation of the tanks within the containment area. The cross-section drawing Section C-C on Sheet C105 illustrates that only 12 inches of clean sand will be installed on top of the 60-mil HDPE liner. Please clarify or explain how the piping will be installed without compromising the liner.

**Page 6.4**, Section 4.1, *Flowchart for Waste Acceptance/Disposal:*

The purple section of the flow chart, which addresses the handling of drill cuttings, does not address compliance with the waste acceptance protocol of Subsection A of 19.15.36.15 NMAC. As proposed on the chart, the solids generated in the separation process of the drill cuttings are not subjected to the paint filter test prior to being placed into the biopile. Please modify the flow chart to reflect the landfarm waste acceptance requirements of Part 36.

**Page 6.5**, Section 4.2, *Migratory Bird Protection:*

Pursuant to Subsection I of 19.15.36.13 NMAC, "To protect migratory birds, tanks exceeding eight feet in diameter, and exposed pits and ponds shall be screened, netted or covered. Upon the operator's written application, the division may grant an exception to screening, netting or covering upon the operator's showing that an alternative method will protect migratory birds or that the surface waste management facility is not hazardous to migratory birds..." Sheet C108, provided on page 5.6 of the permit application, identifies the dimensions of the equipment within the processing area. The shaker tank dimensions are 45 feet (length) x 8.5 feet (width) x 10 feet (height). The slurry tank dimensions are 45 feet (length) x 8.5 feet (width) x 10 feet (height). The centrifuge will have a diameter of 14 feet and a length of 48 feet. The storage (not fresh water) tanks will have a diameter of 12 feet and a height of 20 feet. The centrate tanks will have a diameter of 20 feet and a height of 16 feet. Please identify which tanks are open top. Also, please demonstrate compliance to the migratory bird provision for any open top tanks that exceed the 8 foot diameter surface area (or 50.24 square feet).

**Page 6.8**, *Tank Bottoms:*

The instructions provided in Step 1 regarding tank bottoms is "offloaded into the above grade tank(s)." Please clarify how the tank bottoms are "offloaded into the above grade tank(s)." Are the above grade tank open top? If so, please assess and demonstrate compliance to the migratory bird protection requirements of Subsection I of 19.15.36.13 NMAC.

**Page 6.9**, Section 5.4, *Centrate Water (Wastewater):*

Please identify the source of the centrate water or describe how the centrate water will be generated. The information provided in the first sentence regarding the use of the centrifuge and

the "end waste product being centrate water" is not identified as part of the "*Flowchart for Waste Acceptance/Disposal*" provided in Section 4.1 or page 6.4 of the application. The centrifuge is only identified to be used for solidification. Please modify the "*Flowchart for Waste Acceptance/Disposal*" provided in Section 4.1 or page 6.4 of the application if such operations are appropriate. Please see additional comments for this section.

The third paragraph proposes to reuse the centrate water (wastewater) as dust control on the roadways within the facility and to add moisture to the biopiles if certain concentrations are not exceeded. The first issue is the proposal to reuse the centrate water (wastewater) as dust control on the roadways within the facility. Such a proposal requires a discharge permit pursuant to 20.6.2 NMAC. The second issue is the concentrations proposed for the reuse of the centrate water (wastewater). The regulatory references provided in the first bullet do not apply to liquids. Paragraph (3) of 19.15.36.13.A NMAC states "No landfarm that accepts soil or drill cuttings with a chloride concentration that is 500 mg/kg or less shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste." Subsection A of 19.15.36.15 NMAC states "Soils and drill cuttings placed in a landfarm shall be sufficiently free of liquid content to pass the paint filter test, and shall not have a chloride concentration exceeding 500 mg/kg if the landfarm is located where ground water is less than 100 feet but at least 50 feet below the lowest elevation at which the operator will place oil field waste..." As underlined above, the 500 mg/kg concentration specifically applies to soil and drilling cuttings; not liquids as proposed. A separate permit issued under the Water Quality Control Commission Regulations 20.6.2 NMAC is required, if Crowe Blanco wishes to discharge wastewater to the surface, such as for dust control. Also, the OSHA PEL for hydrogen sulfide is 10 ppm (TWA), not greater or "in excess of 10 ppm" as proposed. Please make the appropriate modifications and changes.

**Page 6.11**, *Five Year Monitoring:*

Regarding the proposed five year vadose zone monitoring protocol, the current language states "the constituents of Subsections A & B of 20.6.2.3103 NMAC shall be analyzed ..." This would suggest that all of the constituents listed in Subsections A and B of 20.6.2.3103 NMAC will be analyzed. The regulatory language of Paragraph (3) of 19.15.36.15.E NMAC states that the "operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years..." The "*methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC*" are those identified in Subsection F of 19.15.36.15 NMAC. Paragraph (5) of 19.15.36.15.F NMAC states "The concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by *EPA SW-846 methods 6010B or 6020* or other methods approved by the division." Please modify appropriately.

**Page 6.12**, Section 8.0, *Treatment Zone Closure Performance Standards:*

The bulleted items in the first paragraph do not fully express the intent of the provision it is addressing. Paragraph (1) of 19.15.36.15.G NMAC states "If the operator achieves the closure performance standards specified in Subsection F of 19.15.36.15 NMAC, then the operator may either leave the treated soils in place, or, with prior division approval, dispose or reuse of the treated soils in an alternative manner." All of the bulleted items require division approval. Please modify appropriately to reflect the requirements of the provision. Also, please provide

additional information and details regarding the proposal to "spread on the facility." OCD is unable to determine the extent of what would be involved. Please clarify.

The fifth bullet of the fourth paragraph references method "DPA 300.0" for analyzing chlorides. The correct test method is EPA method 300.0. Please modify appropriately.

The sixth bullet of the fourth paragraph begins by stating "the concentration of constituents listed in Subsections A & B of 20.6.2.3103 NMAC (regulated metals will be tested by U.S. EPA Method 6010B or 6020, and other constituents will be tested by appropriate U.S. EPA Methods) shall not exceed..." Paragraph (5) of 19.15.36.15.F NMAC states "The concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by *EPA SW-846 methods 6010B or 6020* or other methods approved by the division." It does mention testing for "other" 20.6.2.3103 NMAC constituents. Please modify appropriately.

**Page 6.13**, Section 9.0, *Final Disposition of Treated Soils:*

The bulleted items in the second paragraph do not fully express the intent of the provision they are addressing. Paragraph (1) of 19.15.36.15.G NMAC states "If the operator achieves the closure performance standards specified in Subsection F of 19.15.36.15 NMAC, then the operator may either leave the treated soils in place, or, with prior division approval, dispose or reuse of the treated soils in an alternative manner." All of the bulleted items require division approval. Please modify appropriately to reflect the requirements of the provision. Also, please provide additional information and details regarding the proposal to "spread on the facility." OCD is unable to determine the extent of what would be involved. Please clarify.

The fifth paragraph misquotes the regulatory requirement. Paragraph (4) of 19.15.36.15.G NMAC states that the "operator may request approval of an alternative soil closure standard from the division, provided that the operator shall give division-approved public notice of an application for alternative soil closure standards in the manner provided in 19.15.36.9 NMAC." The provision addresses an "alternative soil closure standard," not an "alternative soil closure method(s)" as proposed in the permit application. Please modify appropriately.

**Page 6.13**, Section 10.2, *Facility Requirements:*

The bulleted items in the second paragraph do not fully express the intent of the provision it is addressing. The requirements of Subsection B of 19.15.36.13 NMAC addresses the siting criteria for any type of surface waste management facility; specifically areas and conditions where such a facility shall not be located. It does not address the placement of contaminated soils, as proposed in the permit application. Subsection B of 19.15.36.13 NMAC allows the operator to determine the extent of the surface waste management facility boundary based upon the siting criteria setbacks. The placement of contaminated soils is addressed in the operational requirements 19.15.36.15 NMAC. Paragraph (2) of 19.15.36.15.C NMAC states "The operator shall not place contaminated soils received after the effective date of 19.15.36 NMAC within 100 feet of the surface waste management facility's boundary." The facility berms cannot be constructed of contaminated soils or "waste" as proposed in the permit application. Please modify appropriately.

Please reference the section of the permit application which demonstrates compliance to the siting requirements of 19.15.36.13.B NMAC and the size requirement of 19.15.36.13.C NMAC.

**Page 6.13**, Section 10.3, *Berms*:

The use of remediated soils for the construction of landfarm cell berms requires compliance with Paragraph (1) of 19.15.36.15.G NMAC. Please provide a clarifying statement that Crowe Blanco must demonstrate that the treated soils proposed for the construction of landfarm cell berms satisfy the closure performance standards of 19.15.36.15.F NMAC and must obtain prior division approval for reuse of treated soils in an alternative manner.

**Page 6.14**, Section 10.8, *Run On/Off Control:*

In the third bullet of the second paragraph, please provide a regulatory citation that supports the proposed stormwater reuse for remediation criteria of 1000 mg/kg for chlorides. Please note that the unit mg/kg is used to represent concentrations in solids, not liquids. Also, a separate permit issued under the Water Quality Control Commission Regulations 20.6.2 NMAC is required, if Crowe Blanco wishes to discharge contaminated stormwater to the surface, such as for dust control.

**Page 7.1**, *Table 1:*

When addressing the inspection of berms and retention ponds, the proposed frequency of the task states "Bi-weekly and/or within 24 hours of the end of a storm event (0.5" or greater) or a major windstorm." OCD was unable to determine the source of the proposed criteria specifying the volume of "0.5" or greater." The regulatory requirements do not recognize the specified volume in the regulatory language of Part 36. Pursuant to Paragraph (3) of 19.15.36.13.L NMAC, each operator shall have an inspection and maintenance plan that includes "inspections of the berms and the outside walls of pond levees quarterly and after a major rainfall or windstorm, and maintenance of berms in such a manner as to prevent erosion." Please modify the proposed language to correctly reflect the requirements or provide a demonstration that justifies the proposed 0.5 inches as the minimum amount of rainfall to be classified as a "major rainfall" for the San Juan Basin.

**Page 7.3**, *Inspection and Maintenance Checklist continued:*

At the top of the checklist, one of the protocols proposed to address fugitive dust is to add moisture to the unpaved roads. For this to be considered an option, the source of the moisture must be identified. A separate permit issued under the Water Quality Control Commission Regulations 20.6.2 NMAC may be required, if Crowe Blanco wishes to discharge contaminated water to the surface for dust control. Please clarify.

**Page 8.4**, Section IV, *Signs and Markers:*

The required ANSI standard and language for the sign are specified and recognized in regulatory language of 19.15.11.10 NMAC, but not in the permit application. Please modify the response to recognize the requirements of the provision.

**Page 8.4**, Section IV, *Regulatory Threshold:*

The second to the last sentence identifies the Permissible Exposure Limit (PEL) for hydrogen sulfide (H2S) as "in excess of 10 ppm." OSHA and NIOSH identify the PEL or Time Weighted Average (TWA) as 10 ppm; not greater than 10 ppm as proposed in the permit

application. Please modify the response to reflect the appropriate regulatory exposure limit as designated by the proper regulated authority and agency.

**Page 8.5**, *Activation Levels:*

The first paragraph misquotes the regulatory language by stating that the plan will be activated at "... 500 ppm at a public road or 3000 feet from the release site." The regulatory language of Subsection C of 19.15.11.9 NMAC states "At a minimum, the person shall activate the plan whenever a release may create a hydrogen sulfide concentration of more than 100 ppm in a public area, 500 ppm at a public road or 100 ppm 3000 feet from the site of release." Please modify the response to properly reflect the regulatory requirement. Also, "public area" and "public road" are defined terms in 19.15.11.7 NMAC. Without providing the definition for each term, the requirements of Subsection C of 19.15.11.9 NMAC cannot be fully understood. Please provide the definition for "public area" as provided in Subsection I of 19.15.11.7 NMAC and for "public road" as provided in Subsection J of 19.15.11.7 NMAC.

The fourth paragraph instructs employees to return to work if the H2S is less than 15 ppm and at greater than 15 ppm instruct employees to wear individual H2S monitors. OSHA and NIOSH identify the PEL or Time Weighted Average (TWA) for H2S as 10 ppm and the Short Term Exposure Limit (STEL) as 15 ppm. The STEL is the maximum concentration permitted for a continuous 15-minute exposure period. There may be a maximum of four such periods per day, with at least 60 minutes between exposure periods, and provided the daily TWA is not exceeded. Please modify the response to reflect the appropriate regulatory exposure limits as designated by the proper regulated authority and agency.

The fifth sentence states that "If the H2S levels reach 100 ppm... the CP will be implemented." This statement contradicts the protocols within the H2S contingency plan. The first sentence of the third paragraph, of this section of the contingency plan, states that the "emergency alarm system will activate at 10 ppm or higher." It goes on to state that "local emergency responders will be notified that the alarms have indicated an H2S level of greater than 10 ppm..." Also, OSHA and NIOSH identify the Immediate Danger to Life and Health limit (IDLH) for H2S as 100 ppm. Please modify the response to reflect the implementation of the proposed H2S contingency plan and the appropriate regulatory exposure limits as designated by the proper regulated authority and agency.

**Page 8.6**, Section V, *General Evacuation Procedures for Building/Facility Occupants:*

The fourth step provided in this section states that the "appropriate authorities will be notified in the event of a release..." Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, the contingency plan, at a minimum, shall include "information concerning the responsibilities and duties of personnel during the emergency, an immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC, and telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities..." Please identify which employee (by title) is responsible for the notice and to which appropriate authority they are to notify. Please clarify in the response the H2S concentration that would constitute a "release." Also, please reference the location of the contact telephone list within the H2S contingency plan.

The fifth step discusses primary and alternative exits and evacuation routes. Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, the contingency plan shall also include "the

locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans." Please reference the location of the document(s) which identifies the evacuation routes and road blocks within the H2S contingency plan.

**Page 8.6**, Section VI, *Disabled Occupants:*

The first sentence in this section states that in a release of H2S "in excess of 10 ppm" a self contained breathing apparatus (SCBA) would be provide to any disabled occupant(s) that are unable to exit the building without assistance. The use of the phrase "in excess of 10 ppm" is inappropriate in a H2S contingency plan. Use of the phrase could be applied by others to mean 15 ppm (STEL), 100 ppm (IDLH), or 1000 ppm which could result in death in a few minutes. The contingency plan is written so that the alarm system activates at 10 ppm or greater. It instructs employees to evacuate when the alarm sounds (10 ppm or greater). OSHA and NIOSH identify the PEL or Time Weighted Average (TWA) for H2S as 10 ppm. This section provides protocols and instructions on how to assist disabled occupants/employees during an evacuation. Please modify the text to coincide with events occurring at the same time.

**Page 8.6**, Section VII, *Accountability Procedures for Emergency Evacuation:*

The first paragraph, titled *Designated Meeting Sites*, recommends that parties should "meet outside the building in the prearranged designated meeting site." It goes on to state that "A list of primary and alternate designated sites will be posted..." Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, the contingency plan shall also include "the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans." Please reference the location of the document(s) which identifies the evacuation routes and designated meeting sites within the H2S contingency plan.

The OCD recommends adding an additional step, between steps 1 and 2, in the fifth paragraph which is to "monitor ambient hydrogen sulfide concentrations at designated meeting site. If H2S is detected at 10 ppm or greater move farther away from the source and re-establish a new designated meeting site and continue to monitor." When evacuating during a H2S release, parties should ensure that the area/location in which they assemble is safe to gather and remain.

**Page 8.7**, Section VIII, *Public Safety:*

This section identifies public roads, proposes evacuation routes for unidentified residents and the public, and identifies some of the proposed roadblocks. The information missing from this section and not provided elsewhere within the H2S contingency plan is the information required by Part 11 that addresses the regulatory requirements regarding public areas and the parties associated with such areas. Pursuant to Subsection I of 19.15.11.7 NMAC, a public area "means a building or structure that is not associated with the well, facility or operation for which the radius of exposure is being calculated and that is used as a dwelling, office, place of business, church, school, hospital or government building, or a portion of a park, city, town, village or designated school bus stop or other similar area where members of the public may reasonably be expected to be present." Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, "The plan shall also include the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the

public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans." Pursuant to Subparagraph (c) of 19.15.11.9.B.(2) NMAC, "The hydrogen sulfide contingency plan shall include maps and drawings that depict the area of exposure and public areas and public roads within the area of exposure. Please identify the parties within potentially affected public areas and the procedures for notification.

**Page 8.7**, Section IX, *Rescue/Emergency Response/Medical:*

The first sentence of the first paragraph, states "In the event of an emergency, staff will call 911." Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, "The hydrogen sulfide contingency plan shall include the activation level and a description of events that could lead to a release of hydrogen sulfide sufficient to create a concentration in excess of the activation level." Please identify the "activation level" or H2S concentration in which staff will contact 911. The last sentence of the paragraph indicates that "once 911 is contacted the emergency dispatch... will implement procedures to notify the public when necessary." OCD has been unable to locate any names, telephone numbers, and/or addresses of nearby parties within the H2S contingency plan. Without any of this information, how will the emergency dispatch notify the public? Please provide. The response also states that the "emergency dispatch... will implement procedures to notify the public when necessary." It does not indicate the method to provide notice nor does it indicate what the conditions will be to know when notification is "necessary." Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, "The plan shall also include the locations of potentially affected public areas and public roads and shall describe proposed evacuation routes, locations of road blocks and procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans." Please provide the notification procedures and the conditions and/or concentration in which notification will be required.

The last sentence of the second paragraph states "Everyone shall remain at the designated assembly point(s) and await instructions from law enforcement and emergency personnel or the on-site Emergency Coordinator." OCD agrees with the procedure, but recommends that prior to committing to an assembly point it should be assessed and continually assessed to determine if it is safe to assemble and remain. The OCD recommends adding an additional step to the protocol, which is to "monitor ambient hydrogen sulfide concentrations at designated meeting site. If H2S is detected at 10 ppm or greater move farther away from the source and re-establish a new designated meeting site and continue to monitor." When evacuating during a H2S release, parties should ensure that the area/location in which they assemble is safe to gather and remain.

The first sentence of the third paragraph indicates that the Emergency Coordinator notify the "appropriate agencies" if there are concerns to parties outside of the facility boundary due to a release. Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, the contingency plan shall contain "...telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities." Please identify the "appropriate agencies" and their contact numbers or reference their location within the H2S contingency plan. The next two sentences discuss the responsibilities of those initiating the evacuation process of neighboring properties. Please explain how or at what action level or concentration that the evacuation process of neighboring properties will begin and also either provide or reference the location of the contact information and addresses of the parties that might require evacuation.

**Page 8.8**, Section X, *Resource and Responsibilities List:*

The introductory sentence/paragraph states "The following lists includes the names or employees, managers, staff, or other personnel and their job titles, job positions and relative H2S CP collateral duties." Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, the contingency plan shall "contain information on emergency procedures the person will follow in the event of a release and shall include, at a minimum, information concerning the responsibilities and duties of personnel during the emergency..." The information provided in the section did not include any "relative H2S CP collateral duties." Please provide the require information.

**Page 8.9**, Section XI, *Operations Shutdown:*

The third paragraph (beneath the Table) provides the following regulatory reference at the end: 19.15.36.13.N.11. The hydrogen sulfide contingency plan required by Paragraph (8) of 19.15.36.8.C NMAC states that the permit application "shall include a hydrogen sulfide prevention and contingency plan that complies with those provisions of 19.15.11 NMAC that apply to surface waste management facilities." The contingency plan required by Subsection N of 19.15.36.13 NMAC, is not based upon compliance with Part 11, must "designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water." The regulatory reference, Paragraph (11) of 19.15.36.13.N NMAC, requires the operator to "describe how, if the surface waste management facility stops operations in response to fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or rupture in valves, pipes or the equipment, wherever this is appropriate." The paragraph only indicates that the "on-site supervisors will be responsible" for such activities, but does not describe how such activities will be accomplished.

**Page 8.9**, Section XII, *Training and Communications:*

The last sentence of the first indicates that only the "San Juan County Office of Emergency Management" will receive a copy of the H2S contingency plan and notifications of any changes or updates. Pursuant to Subsection D of 19.15.11.9 NMAC, the operator "shall submit the hydrogen sulfide contingency plan to the division." Pursuant to Subsection H of 19.15.11.9 NMAC, "On an annual basis, each person required to prepare one or more hydrogen sulfide contingency plans pursuant to 19.15.11 NMAC shall file with the appropriate local emergency planning committee and the state emergency response commission an inventory of the wells, facilities and operations for which plans are on file with the division and the name, address and telephone number of a point of contact." Please properly identify the parties which are required to have a copy (all copies should be current) of the H2S contingency plan.

In the second paragraph of this section, the use of the acronym "PEC" is utilized, but not defined. Please define the acronym "PEC." This paragraph focuses on training. The fourth sentence in this paragraph states that the "PEC will hold annual training and practice drills for the public, residents of the area and public official. The regulatory requirements identify what type of training or information must be provided to certain parties. Pursuant to Subparagraph (d) of 19.15.11.9.B.(2) NMAC, states that "hydrogen sulfide contingency plan shall also provide for training of residents as appropriate on the proper protective measures to be taken in the event of a release, and shall provide for briefing of public officials on issues such as evacuation or shelter-in-place plans." Please modify the response to demonstrate that the appropriate parties will receive their required training and/or information.

The first sentence of the last paragraph states that "In the event of a H2S release requiring the activation of the Hydrogen Sulfide Contingency Plan the division will be notified..." As the plan is currently written and proposed, the activation of the H2S contingency plan occurs at the first detection of H2S at 10 ppm or greater. Please include the activation level in the sentence. Also, the last part of this paragraph states that the Primary Emergency Coordinator "will submit a completed report on form C-141 with the 15 day time frame." Pursuant to Section 16 of 19.15.11 NMAC, the operator "shall submit a full report of the incident to the division on form C-141 no later than 15 days following the release." Please modify the sentence to indicate when the regulatory "time frame" begins.

**Page 8.12**, Toxic Effects Of Hydrogen Sulfide:

The second sentence of the introductory paragraph, states that the "acceptable ceiling concentration for eight-hour exposure is 10 PPM, which is .001% by volume." The OSHA Permissible Exposure Limit (PEL) for a ceiling concentration is 20 ppm hydrogen sulfide, a level which may not ever be exceeded. Please modify the response to reflect the most current exposure limits and their associated exposure times. The acceptable maximum peak, for 10 minutes only, once during an 8 hour day if there is no other measurable exposure, is 50 ppm. The ACGIH 2004 recommended threshold limit values (TLVs) are 10 ppm for an eight hour time weighted average (TWA) and 20 ppm for the short term exposure limit above the TLV. In May of 1994 CDC/NIOSH reduced the Immediate Danger to Life and Health (IDLH) concentration from 300 ppm to 100 ppm. Please update the information on this page to reflect the most current exposure and threshold limits for hydrogen sulfide.

When addressing hydrogen sulfide in TABLE #3, there is a Hazardous Limit column that indicates a concentration/rate of 250 ppm/hour. OCD is unfamiliar with such a limit. Please provide a regulatory reference to the 250 ppm/hour Hazardous Limit provided in Table 3.

Pursuant to Subparagraph (b) of 19.15.11.9.B.(2) NMAC, the "hydrogen sulfide contingency plan shall include a discussion of the characteristics of hydrogen sulfide and sulfur dioxide." The only information provided in the H2S contingency plan regarding exposure and threshold limits for sulfur dioxide are provided in the second row of Table 3. The proposed Hazardous Limit of 100 ppm is properly recognized by NIOSH as the IDLH concentration. The ACGIH 2006 recommended threshold limit values (TLVs) are 2 ppm for an eight hour time weighted average (TWA) and 5 ppm for the short term exposure limit above the TLV. Please create a new page that focuses on the toxic effects of sulfur dioxide and provide the most current exposure and threshold limits for sulfur dioxide.

**Page 8.13,**

OCD is uncertain if this page is a continuation of the pervious page or an attempt to provide information on the available safety equipment and supplies. Pursuant to Subparagraph (a) of 19.15.11.9.B.(2) NMAC, the H2S contingency "plan shall include information on the availability and location of necessary safety equipment and supplies." OCD has been unable to locate the required unlined information above. Please either update the information on this page or amend the H2S contingency plan and provide the require information.

**Page 8.14,** Toxicity of Hydrogen Sulfide to Humans:

The second row of the table represents H2S at 0.010 % or 100 ppm. In May of 1994 CDC/NIOSH reduced the Immediate Danger to Life and Health (IDLH) concentration from 300

ppm to 100 ppm. OCD is uncertain if the proposed symptom/ time exposure relationship is based upon the 1994 IDLH assessment or the 1972 IDLH assessment (as proposed on page 8.12). Please clarify and update if necessary.

The proposed percent value for 200 ppm H2S in the third row of the table is not correct. It proposes that 200 ppm is equivalent to 0.20 %. The correct assessment is 200 ppm is equivalent to 0.02 %. Please modify appropriately.

OCD was unable to locate the following information in the H2S contingency plan which is required by 19.15.11.9 NMAC. Please provide the following information:

- An immediate action plan as described in the API document referenced in Paragraph (1) of Subsection B of 19.15.11.9 NMAC;
- Telephone numbers of emergency responders, public agencies, local government and other appropriate public authorities;
- Procedures for notifying the public, either through direct telephone notification using telephone number lists or by means of mass notification and reaction plans;
- Information on the availability and location of necessary safety equipment and supplies; and
- Characteristics of sulfur dioxide.

**Page 9.3**, Section 1, *Introduction:*

The third paragraph states that "IEI will utilize up to four active cells for "treatment" of contaminated soils throughout the life of the facility." This also seems to be the basis of the financial assurance cost analysis. OCD wishes to clarify that if operations increase beyond four active cells, the financial assurance will have to be adjusted accordingly and approved by OCD prior to any placement of contaminated soils within the additional landfarm cells. Please modify the paragraph to recognize Crowe Blanco's responsibility to maintain the appropriate amount of financial assurance during operations.

The fourth paragraph, as written suggests that once the operator has confirmed, by laboratory analysis, that soils satisfy the treatment zone closure performance standards of Subsection F of 19.15.35.15 NMAC, OCD approval is not required to reuse the remediated soils for berm maintenance or for solidifying/stabilizing incoming liquid waste. In accordance with Paragraph (1) of 19.15.35.15.G NMAC "If the operator achieves the closure performance standards specified in Subsection F of 19.15.36.15 NMAC, then the operator may either leave the treated soils in place, or, with prior division approval, dispose or reuse of the treated soils in an alternative manner." Such activities as proposing to reuse remediated soils for berm maintenance or for solidifying/stabilizing incoming liquid waste require "prior division approval." Please modify the second sentence in the paragraph to properly express the regulatory requirement.

The fifth paragraph states that if any of the treatment and/or vadose sampling results indicate an exceedance of any of the applicable regulatory standards, "IEI will notify the Division and begin appropriate and agreed-upon remediation procedures." OCD is unsure what the "appropriate and agreed-upon remediation procedures" are mentioned in the response. The regulatory language of Section 18 of 19.15.36 NMAC provides clear instruction to the operator of their responsibilities during closure and post-closure. Pursuant to Subparagraph (a) of 19.15.36.18.D.(4) NMAC, during closure the operator shall ensure that "disking and addition of bioremediation enhancing materials continues until soils within the cells are remediated to the

standards provided in Subsection F of 19.15.36.15 NMAC, or as otherwise approved by the division." Pursuant to Subparagraph (c) of 19.15.36.18.D.(4) NMAC, during closure the operator shall ensure that "landfarmed soils that have not been or cannot be remediated to the standards in Subsection F of 19.15.36.15 NMAC are removed to a division-approved surface waste management facility and the landfarm remediation area is filled in with native soil and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC." In regards to the vadose zone sampling and post-closure, in accordance with Subsection F of 19.15.36.18 NMAC "If there has been a release to the vadose zone or to ground water, then the operator shall comply with the applicable requirements of 19.15.30 NMAC and 19.15.29 NMAC." Please modify the paragraph to reflect conformance to the closure and post-closure regulatory requirements of Part 36.

**Page 9.4**, Section 2, General Surface Waste Management Facility Closure:

The design description of the processing area provided in the first bullet of the first paragraph does not coincide with the design drawings provided on Sheet C105. The written description, on Page 9.4, identifies the height of the berms as two feet. Cross-section A-A on Sheet C105 illustrates the design height of the processing area perimeter berm as 2.5 feet. The written description, on Page 9.4, also states that there will be "four feet of soil on top of the liner. Cross-section C-C on Sheet C105 illustrates a 12 inch "clean sand layer buffer above liner." Please modify the text to reflect the proposed design or modify the design to match the text.

The second bullet of the first paragraph identifies the area of the landfarm as "± 289 acres." The landfarm area cannot be the same size as the property in which Crowe Blanco owns due to the siting criteria to establish the facility boundary, setback requirements for placement contaminated soil from the facility boundary, and areas that have been clearly identified as not part of the facility or not part of the permit. Please properly assess the area that can be considered the facility and the area that can be utilized for landfarming. Based upon the requirements of Part 36 the area should be different in size. Please modify the text appropriately.

The second sentence of the fourth paragraph identifies "OCD," the Division, as the responsible party to extend the Division's response time and notify the operator of the extension. In accordance to Paragraph (3) of 19.15.36.18.A NMAC, the regulatory language identifies the Director as the responsible party. "if the division does not notify the operator of additional closure requirements within 60 days as provided, the operator may proceed with closure in accordance with the approved closure plan; provided that the director may, for good cause, extend the time for the division's response for an additional period not to exceed 60 days by written notice to the operator." Please modify the text to reflect the regulatory language.

**Page 9.4**,

Please address and recognize the requirements of Subsection C of 19.15.36.18 NMAC. A short response similar to Subsection B of 19.15.36.18 NMAC can be utilized.

**Page 9.5**, Section 4, *Processing Area Closure:*

Cross-section C-C on Sheet C105 illustrates only a 12 inch "clean sand layer buffer above liner" regarding the containment design of the processing area. Cross-sections A-A and B-B on Sheet C107 illustrates that the recirculation and supply lines to and from the receiving tanks will be installed 3-4 below the interior grade of the processing area. Based upon the design drawings, the recirculation and supply lines running horizontally to and from the receiving tanks

will be installed 2-3 feet beneath the liner. The second sentence in the first paragraph states "All lines above the liner will be removed." Pursuant to Subparagraph (f) of 19.15.35.18.D.(4) NMAC, the operator shall ensure that "buildings, fences, roads and equipment are removed, the site cleaned-up and tests conducted on the soils for contamination." Please clarify if the design drawings properly reflect the complete design of the processing area or if an exception or wavier is being requested. See comments above for the first bullet of the first paragraph on Page 9.4, Section 2, *General Surface Waste Management Facility Closure.* Also, Crowe Blanco proposes to "leave the building containing the centrifuges in place after closure of the facility." Please clarify if the centrifuges will be removed from the building during closure and if an exception or wavier is being requested.

The second paragraph/sentence states that "soils beneath the processing area will be tested..." It does not continue to identify what steps will be taken if contamination is discovered. Any contaminated soils can be remediated in one of the existing landfarm cells if such soils satisfy the waste acceptance criteria after testing. Please identify all the steps required to complete the closure of the processing area.

Items not addressed in regards to the closure of the Processing Area are the closure activities in which the closure costs estimates are based upon, as provided in the second paragraph of Section 8, *Closure Costs,* on Page 9.6 of the permit application. Such closure activities include the removal and disposal of liquids and BS&W from the tanks; the removal of the tanks; the disconnecting of piping, disassembling, cleaning, and the disposing of waste from the tanks; the disassembly, removal, and disposal of the piping; the removal of the soils covering the liner; the removal and disposal of the liner; and testing of the soils beneath the liner. Additional items not included in the closure activities mentioned above are as follows: testing of the soils covering the liner to determine if contamination is present and if disposal or remediation might be required; the removal of equipment such as the shaker, the centrifuge, and any pumps and sumps associated with the tanks within the processing area; and the removal berms and fencing. This is the closure plan and this section specifically addresses the closure of only the processing area. The financial assurance cost estimates should be based the closure plan. In this case the cost estimates reflect costs of closure activities not proposed (but should be expressed) in the closure plan, but are expressed in second paragraph of Section 8, *Closure Costs,* on Page 9.6 of the permit application. Please modify this section to identify all of the closure activities required to complete the closure of the processing area.

**Page 9.5**, Section 5, *Landfarm Closure:*

The first sentence of the second paragraph refers to "standards listed in each section below." OCD was unable to locate any remediation/closure standards specifically identified in any of the "sections" below Section 5, but did locate regulatory references. Remediation/closure standards are provided in Table 1. Please modify the sentence to properly identify the location of the referenced "standards."

The second sentence of the second paragraph proposes to backfill the remediation area with remediated soils if soils have to be removed to a division-approved surface waste management facility. Pursuant to Subparagraph (c) of 19.15.36.18.D.(4) NMAC, the operator shall ensure that "landfarmed soils that have not been or cannot be remediated to the standards in Subsection F of 19.15.36.15 NMAC are removed to a division-approved surface waste management facility and the landfarm remediation area is filled in with native soil and re-

vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC." The regulatory language does not recognize or recommend the use of remediated soils as backfill material for the remediation areas. Please modify the sentence to demonstrate compliance to the provision or request an exception/waiver.

The first sentence of the third paragraph states "Upon final site closure and approval from OCD, the active "treatment" cells will be sampled for closure. The sequence of events proposed in the sentence does not coincide with the closure requirements of Part 36. OCD would not consider approval of the final closure until the operator demonstrates compliance with the applicable provisions of Subparagraph (c) of 19.15.36.18.D.(4) NMAC, which would not include the sampling of active "treatment" cells. The sampling of active "treatment" cells and the vadose zone from each "treatment" cell are closure activities identified in Paragraph (4) of 19.15.36.18.D NMAC that must be completed to achieve closure and proceed to post-closure. Please modify the sentence to reflect the sequence of the activities that must be completed by the operator prior to OCD's consideration of closure.

The fourth sentence of the third paragraph states "Cells that have not been re-vegetated will be seeded with a land owner approved seed mix." Any seed mixture applied for re-vegetation must satisfy the minimum requirements of "consisting of at least three native plant species, including at least one grass, but not including noxious weeds" and satisfy the coverage and time requirements for maintaining the vegetative cover as specified in Paragraph (6) of 19.15.36.18.A NMAC. Please modify the sentence to demonstrate compliance to the provision or request an exception/waiver.

The fourth paragraph proposes to backfill the cells with remediated soils if treated (remediated) soils have to be removed. Pursuant to Subparagraph (d) of 19.15.36.18.D.(4) NMAC, the operator shall ensure that "if treated soils are removed, the cell is filled in with native soils and re-vegetated in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC." The regulatory language does not recognize or recommend the use of remediated soils as backfill material. Please modify the sentence to demonstrate compliance to the provision or request an exception/waiver.

The first sentence of the fifth paragraph states "Final Closure activities will also include removal of facility berms, buildings, fences, roads, and equipment to the extent required to achieve remediation standards (19.15.36.18.D.4.e and 19.15.36.18.D.4.f)." Based upon the regulatory references, OCD is unable to determine the "remediation standards" referred to in the sentence. The two provisions referenced in the sentence address the removal of the items identified and the testing of soils for contamination. It does not reference, state, or discuss remediation of soils or remediation standards. Any contamination discovered after the removal of the items required by the provision must be addressed pursuant to 19.15.29 and/or 19.15.30 NMAC, as applicable. Regarding the note at the end of the paragraph, Crowe Blanco needs to be clear in their permit application request of what they are currently asking OCD to consider in their permit application. The note states that Crowe Blanco "may choose to leave some structures in place, including fencing." If Crowe Blanco wishes to pursue this, please present all exception and waiver requests together, so that OCD can properly indentify and consider the requests. If Crowe Blanco wishes not to pursue this at this time, please provide a clarifying statement that Crowe Blanco may submit an exception/waiver request at a later date, but is not requesting one now. Please modify appropriately.

**Page 9.5**, Section 6, *Facility Post Closure:*

The first sentence of the section specifically links "clean closure" to only the "treatment" areas. Clean closure is compliance with the applicable provisions of Subsection D of 9.15.36.18 NMAC, which includes the remediation or removal of contaminated soils, the removal of equipment and infrastructure and sampling for contamination, and re-vegetation of the site. Please properly modify the response.

**Page 9.6**, Section 7, *Re-vegetation:*

Pursuant to Subsection G of 9.15.36.18 NMAC, "If the landowner contemplates use of the land where a cell or surface waste management facility is located for purposes inconsistent with re-vegetation, the landowner may, with division approval, implement an alternative surface treatment appropriate for the contemplated use, provided that the alternative treatment will effectively prevent erosion. If the division approves an alternative to re-vegetation, it shall not release the portion of the operator's financial assurance reserved for post-closure until the landowner has obtained necessary regulatory approvals and begun implementation of such alternative use." Please modify the response to clarify if the alternative is being request in this permit application and to recognize the holding of financial assurance while awaiting approvals and implementation of the alternative.

**Page 9.6**, Section 8, *Closure Costs:*

The closure costs should be based upon the closure protocol proposed in the closure plan. The cost estimate assessment demonstrates that the closure plan is incomplete. In this case the closure cost estimates are based upon closure protocols not expressed in the closure plan. Please submit a closure plan that identifies all the steps and protocols to complete closure pursuant to 19.15.36 NMAC. Also, please adjust the closure costs accordingly.

Closure activities identified in the second paragraph of this section are not identified in the proposed closure plan for the Processing Area. Such closure activities include the removal and disposal of liquids and BS&W from the tanks; the removal of the tanks; the disconnecting of piping, disassembling, cleaning, and the disposing of waste from the tanks; the disassembly, removal, and disposal of the piping; the removal of the soils covering the liner; the removal and disposal of the liner; and testing of the soils beneath the liner. Additional items not included in the closure activities mentioned above are as follows: testing of the soils covering the liner to determine if contamination is present and if disposal or remediation might be required; the removal of equipment such as the shaker, the centrifuge, and any pumps and sumps associated with the tanks within the processing area; and the removal berms and fencing. The financial assurance cost estimates should be based the closure plan. In this case the cost estimates reflect costs of closure activities not proposed (but should be expressed) in the closure plan, but are expressed in second paragraph of Section 8, *Closure Costs,* on this page of the permit application. Please modify this section to propose closure costs for all of the closure activities required to complete the closure of the processing area and based upon the protocols and steps provided in the closure plan.

Once again the details of the closure activities identified in the third paragraph of this section are not identified in the proposed closure plan for the Landfarm. Such closure activities include semi-annual monitoring, turning of the biopiles, and the application of soil enhancers. Please modify this section to propose closure costs for all of the closure activities required to

complete the closure of the landfarm area and based upon the protocols and steps provided in the closure plan. Also, please make the corresponding changes to the landfarm closure plan.

The fourth paragraph discusses the sampling protocols for the treatment and vadose zone. The second sentence indicates that a technician will "collect two treatment zone composite samples, collected from four discrete locations, per active "treatment" cell, and one discrete vadose zone sample collected from each of the "treatment' zone cells." The proposed method of treatment of contaminated soils is the use of biopiles, instead of landfarm cells. As discussed in the permit application, the development of the biopile is different than a landfarm cell. The operational requirements of Part 36 requires operators to apply lifts of contaminated soil, up to 8 inch or 1000 cubic yards per acre, across landfarm cells up to 10 acres in size and disk the soils bi-weekly. This allows the soils in a landfarm scenario to more likely become homogeneous in nature. The discussion of the construction of the biopiles, pages 6.5 through 6.8 of the permit application, and the associated sampling protocols, pages 6.10 trough 6.12, demonstrate the uniqueness of the biopile. The fourth paragraph of Section 7.1, page 6.10, of the permit application states "It is proposed that the size of each biopile will be approximately 750 cy – 12' base x 4' top x 8' height x 316' length. It is estimated that the total number of biopiles equivalent to the maximum thickness of treated soils allowed in a "landfarm cell" would be 4 biopiles per acre = 40 biopiles per landfarm cell (10 acres)." The second sentence of the third paragraph of this same section, Section 7.1 on page 6.10, states "A minimum of one composite soil sample, consisting of four discrete samples will be collected and analyzed from the treatment/biopile." This sampling protocol is practical since each individual biopile will be more likely to become homogeneous as lifts area applied and it is turned monthly. The same cannot be said about homogeneity of the 40 individual biopiles in a 10 acre "treatment" landfarm cell. In regards to treatment zone closure performance standard testing during closure, please clarify how "two treatment zone composite samples, collected from four discrete locations, per active "treatment" cell" can demonstrate compliance and represent 40 individual biopiles in a 10 acre "treatment" landfarm cell. Also, pursuant to the vadose zone sampling requirements of Paragraph (2) of 19.15.36.15.E NMAC the operator is required to "collect and analyze a minimum of four randomly selected, independent samples from the vadose zone at least semi-annually." Pursuant to Paragraph (1) of 19.15.36.15.E NMAC the operator "shall monitor the vadose zone beneath the treatment zone in each landfarm cell' and "shall take the vadose zone samples from soils between three and four feet below the cell's original ground surface." This equates to four vadose zone samples per cell rather than the proposed "one discrete vadose zone sample collected from each of the "treatment' zone cells." Please modify the closure treatment and vadose zone sampling protocols to demonstrate compliance and reflect the requirements of the regulatory provisions of Part 36.

The last sentence of the fourth paragraph states "Finally, the site will be re-vegetated, or another OCD-approved stabilization method will be used." OCD is uncertain of the nature or source of "another OCD-approved stabilization method" in regards to re-vegetation. Subsection G of 19.15.36.18 NMAC allows for alternatives to re-vegetation if the "alternative treatment will effectively prevent erosion." Please clarify the nature of "another OCD-approved stabilization method" in regards to re-vegetation.

The title page, page 9.1, for this section of the permit application is titled: *Closure and Post Closure Estimate.* OCD was unable able to locate a post-closure plan presented in this section. Please reference the location of or provide a section that identifies the post-closure

activities that Crowe Blanco will complete and that provide the basis of the post-closure cost estimates.

**Page 9.7**, Table 1, *Facility Closure Testing Requirements:*

In the second column of the row addressing Vadose Zone Monitoring, the number of samples is identified, but where they are required to be taken is not. Pursuant to the vadose zone sampling requirements of Paragraph (2) of 19.15.36.15.E NMAC the operator is required to "collect and analyze a minimum of four randomly selected, independent samples from the vadose zone at least semi-annually." Pursuant to Paragraph (1) of 19.15.36.15.E NMAC the operator "shall monitor the vadose zone beneath the treatment zone in each landfarm cell' and "shall take the vadose zone samples from soils between three and four feet below the cell's original ground surface." This equates to four vadose zone samples per cell. The same applies to the five year vadose zone sampling program. In the Analyses column regarding the testing of the constituents of 20.6.2.3103 NMAC, only the metals require analyses. The regulatory language of Paragraph (3) of 19.15.36.15.E NMAC states that the "operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years..." The "*methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC*" are those identified in Subsection F of 19.15.36.15 NMAC. Paragraph (5) of 19.15.36.15.F NMAC states "The concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by *EPA SW-846 methods 6010B or 6020* or other methods approved by the division." Please modify Table 1 appropriately.

In the second column of the row addressing Treatment Zone Closure, "1 discrete vadose" zone sample is proposed. OCD is unaware of any other sampling frequency for the vadose zone than those identified in Subsection E of 19.15.16.15 NMAC and are presented in the second row which is properly titled: Vadose Zone Monitoring. Please omit the proposed "1 discrete vadose" sample during the treatment zone closure sampling since it does not satisfy the minimum sampling requirements of Subsection E of 19.15.16.15 NMAC. Also, in the Analyses column regarding the testing of the constituents of 20.6.2.3103 NMAC, only the metals require analyses. Paragraph (5) of 19.15.36.15.F NMAC states "The concentration of constituents listed in Subsections A and B of 20.6.2.3103 NMAC shall be determined by *EPA SW-846 methods 6010B or 6020* or other methods approved by the division." It does mention testing for "other" 20.6.2.3103 NMAC constituents. Please modify Table 1 appropriately.

In the row addressing Processing Area Closure, please review the comments provided for Page 9.5, Section 4, *Processing Area Closure* above in this letter and modify Table 1 to include the testing of the soils covering the liner proposed for removal to determine if contamination is present and if disposal or remediation might be required.

**Page 9.8**, Table 2, *Processing Area Closure:*

Please review the comments above regarding the closure of the processing area and make the appropriate modifications and additions to Table 2.

**Page 9.9**, Table 3, *Landfarm Closure:*

Please review the comments above regarding the closure of the landfarm and make the appropriate modifications and additions to Table 3.

**Page 9.10**, *IEI Facility Closure Closure:*

Please update and revise the table after the above mentioned modifications and additions have been completed.

Also, pursuant to Subsection B of 19.15.36.11 NMAC, "The commercial facility's estimated closure and post closure cost shall be the amount provided in the closure plan the applicant submitted..." OCD has been unable to locate a post-closure plan and post-closure estimates within the permit application. Please provide the required information and include the estimated cost to the proposed financial assurance total.

**Page 10.1**, Section I, *Purpose and Objective:*

The last sentence in this section states "The plan will demonstrate that facility-specific emergency procedures have been developed and will be implemented whenever an emergency hazardous waste situation occurs at the facility." Pursuant to Subsection N of 19.15.36.13 NMAC, "The contingency plan shall be designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water. The operator shall carry out the plan's provisions immediately whenever there is a fire, explosion or release of contaminants or oil field waste constituents that could threaten fresh water, public health, safety or the environment; provided that the emergency coordinator may deviate from the plan as necessary in an emergency situation." The regulatory language does not mention or limit the contingency plan to only address an "emergency hazardous waste situation." Please modify appropriately to address the requirements of the provision.

**Page 10.4**, Section IV, *Waste Description:*

The second sentence of the second paragraph states that "liquid waste is managed in both tanks and pits at the "tank battery" area." This is the first time during the review that "pits" have been mentioned. If "pits" are to be utilized in the "tank battery" or processing area, the permit application and drawings will need to be updated to address design, construction, operations, maintenance, and closure (including closure and post-closure cost estimates). If "pits" are not to be utilized in the "tank battery" or processing area, please modify the permit application appropriately to reflect what the "pits" truly represent.

The first bullet under the paragraph titled "On-Site Generated Waste" mentions "pits" again. If "pits" are to be utilized in the "tank battery" or processing area, the permit application and drawings will need to be updated to address design, construction, operations, maintenance, and closure (including closure and post-closure cost estimates). If "pits" are not to be utilized in the "tank battery" or processing area, please modify the permit application appropriately to reflect what the "pits" truly represent.

**Page 10.5**, Section V, *Emergency Coordinators:*

The second sentence of the third paragraph states "The list will be updated, as necessary NMOCD will be promptly notified when any changes are made to the Emergency Coordinator(s) and/or their contact information." Pursuant to Subsection N of 19.15.36.13 NMAC, "The operator shall provide the division's environmental bureau with a copy of an amendment to the contingency plan, including amendments required by Paragraph (8) of Subsection N of 19.15.36.13 NMAC; and promptly notify the division's environmental bureau of changes in the emergency coordinator or in the emergency coordinator's contact information." Since

Subparagraph (d) of 19.15.36.13.N.(8) NMAC is "the list of emergency coordinators or their contact information changes" then a copy of the amendment to the contingency plan is required to be submitted to the division's environmental bureau as well. Please modify the response appropriately.

**Page 10.6**, Section VII, *Evacuation Plan:*

The last sentence of the second paragraph refers to the Emergency Evacuation Route map, provided in Addendum A, as "showing available exits from the area and the direction to the designated assembly point(s)." The map provided in Addendum A illustrated the locations of the poisonous (H2S) gas signs, roadblocks barricades, and emergency evacuation points, but does not illustrate any designated assembly point(s). Please modify the map to illustrate the recommended designated assembly point(s) where personnel and visitors should gather during an emergency.

**Page 10.6**, Section VIII, *Classification:*

The proposed classification system is based upon the notification and reporting limits for releases as specified within 19.15.29 NMAC. Such terms and definitions of terms are based upon those provided in Part 29, but do not satisfy the requirements of Subsection N of 19.15.36.13 NMAC due to their limiting factors. Examples would be the first two bullets which identify and define what would be considered "Minor Emergency Situations" on page 10.6. The first bullet identifies "small spills (more than 5 bbls but less than 25 bbls)" as a minor emergency situation. Based upon this limiting factor and as proposed in the permit application, a contingency plan would not address spills less than 5 barrels or 210 gallons. Another example is the second bullet which identifies "unauthorized releases of gases greater than 50 MCF but less than 500 MCF of gases" as a minor emergency situation. The proposed volumes would also apply to releases of hydrogen sulfide gas in which the concern is based upon concentration and potential exposure rather than volume. A release of less than 50 MCF hydrogen sulfide gas could be fatal to an employee, visitor, or neighbor if the concentration was high enough. The requirements of Part 29 for a surface waste management facility permit are addressed in the permit application when the operator recognizes compliance to Subsection K of 19.15.36.13 NMAC. In this permit application Crowe Blanco provides this on page 6.14 in Section 10.6, *Spill Reporting & Corrective Action Provisions.*

The purpose of this section is to submit a contingency plan based upon the requirements of Subsection N of 19.15.36.13 NMAC. In accordance with Subsection N of 19.15.36.13 NMAC, "The contingency plan shall be designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to air, soil, surface water or ground water." There is not a specified minimum release volume identified. Please modify this section appropriately to demonstrate compliance with Subsection N of 19.15.36.13 NMAC.

**Page 10.7**, Section VIII, *Classification:*

The section titled *Major Emergency* is also based upon the notification and reporting limits for releases as specified within 19.15.29 NMAC. The purpose of this section is to submit a contingency plan based upon the requirements of Subsection N of 19.15.36.13 NMAC. In accordance with Subsection N of 19.15.36.13 NMAC, "The contingency plan shall be designed to minimize hazards to fresh water, public health, safety or the environment from fires, explosions or an unplanned sudden or non-sudden release of contaminants or oil field waste to

air, soil, surface water or ground water." There is not a specified minimum release volume identified. Please modify this section appropriately to demonstrate compliance with Subsection N of 19.15.36.13 NMAC.

**Page 10.7**, Section IX, *Identification of Waste(s):*

In the second paragraph, titled *Oilfield Waste*, the second sentence mentions "pits" being located in the tank battery area. If "pits" are to be utilized in the "tank battery" or processing area, the permit application and drawings will need to be updated to address design, construction, operations, maintenance, and closure (including closure and post-closure cost estimates). If "pits" are not to be utilized in the "tank battery" or processing area, please modify the permit application appropriately to reflect what the "pits" truly represent.

**Page 10.10**, Section XII, *Control & Release Actions:*

The introductory paragraph to this section states "Control and response actions to be taken in specific situations are described in this Section." The four titled topics discussed in this section are as follows: Spill; Releases; Fires; and Explosions. Pursuant to Paragraph (1) 19.15.36.13.N NMAC, the contingency plan for emergencies shall "describe the actions surface waste management facility personnel shall take in response to fires, explosions or releases to air, soil, surface water or ground water of contaminants or oil field waste containing constituents that could threaten fresh water, public health, safety or the environment." OCD's review of this section revealed that only fire and explosions are addressed in a manner that complies with the provision above. Please provide the above underlined information.

**Page 10.10**, Section XII, *Control & Release Actions*, Spill (19.15.36.13.K):

As indicated by the regulatory reference provided in the title of this subsection, the response provided demonstrates compliance with the referenced provision rather than with Paragraph (1) 19.15.36.13.N NMAC. The response states "In the event of a spill, the facility will comply with spill reporting and corrective action provisions of 19.15.29 NMAC or 19.15.30 NMAC as outlined in the company Spill Prevention Control & Contingency Plan (Refer to SPCC)." The focus of the EPA SPCC Plan is protection of surface water or "US navigable waters or adjoining shorelines." A SPCC plan is not the contingency plan required by Subsection N of 19.15.36.13 NMAC. Please describe the actions surface waste management facility personnel shall take in response to "releases to air, soil, surface water or ground water of contaminants or oil field waste containing constituents that could threaten fresh water, public health, safety or the environment," as required by Paragraph (1) 19.15.36.13.N NMAC.

**Page 10.10**, Section XII, *Control & Release Actions*, Releases (19.15.29 NMAC):

The response provided in this subsection focuses its discussion on a release of hydrogen sulfide gas and reference the H2S contingency plan in the permit application as the source of the required information. OCD agrees with this type of response since a separate contingency plan specifically for hydrogen sulfide gas is required to be part of the permit application pursuant to Paragraph (8) of 19.15.36.8.C NMAC. The response also mentions that there "are no other potential life threatening gases associated with our process..." OCD agrees with the assessment of the "processes" but there are over a dozen natural gas transportation pipelines that cross the facility and proposed landfarm cells. If the integrity of one of these pipelines became compromised, what actions would surface waste management facility personnel take in response to a release? Please provide.

As for the regulatory reference (19.15.29 NMAC) provided in the title of the subsection, the regulatory language provided in Subsection N of 19.15.36.13 NMAC does not recognize or recommend its use in the development of the contingency plan required by this provision. Please omit the regulatory reference (19.15.29 NMAC) since it is not applicable.

**Page 10.12**, Section XIV, *Incompatible Waste(s):*

Pursuant to Paragraph (13) 19.15.36.13.N NMAC, the contingency plan for emergencies shall "describe how the emergency coordinator will ensure that no oil field waste, which may be incompatible with the released material, is treated, stored or disposed of until cleanup procedures are complete." The two sentence response did not provide the required underlined information above. Please modify appropriately and provide the required information.

**Page 10.12**, Section XV, *Post-Emergency Waste Treatment, Storage, & Disposal:*

Pursuant to Paragraph (12) 19.15.36.13.N NMAC, the contingency plan for emergencies shall "describe how the emergency coordinator, immediately after an emergency, will provide for treating, storing or disposing of recovered oil field waste, or other material that results from a release, fire or explosion at a surface waste management facility." The first sentence of the response states that emergency coordinator "will provide for the collection, treatment, and storage of contaminated materials" but does not "describe how" as required by the provision. The last two sentences address the disposal options. Please describe how the material will be treated and stored.

**Page 10.14**, Table A-3, *Emergency Equipment:*

Near the bottom of the table there is a row that addresses respiratory protection equipment. In the "Capabilities/Description" column for the respiratory protection equipment, it states "Respirators are selected and used on the basis of hazards to which are potentially exposed." Pursuant to Paragraph (4) 19.15.36.13.N NMAC, the contingency plan for emergencies shall "include a list, which shall be kept current, of emergency equipment at the surface waste management facility, such as fire extinguishing systems, spill control equipment, communications and alarm systems and decontamination equipment, containing a physical description of each item on the list and a brief outline of its capabilities." Based upon the information provided in the permit application, Crowe Blanco acknowledges that the potential exposure to hydrogen sulfide gas is real due to the proposed operations and waste. The response provided does not indicate or suggest that the respiratory protection equipment available is capable of providing the proper level of protection. Please make the appropriate modifications to demonstrate compliance.

**Page 10.16**, Section XX, *Pollution Incident History:*

The response for this section states "There are no records of a major pollution incident having occurred at this facility." OCD is unsure of which of the requirements of Subsection N of 19.15.36.13 NMAC is being addressed in this section of the facility contingency plan. The OCD thinks this may be an attempt to demonstrate compliance with Paragraph (6) 19.15.36.13.N NMAC, since it was not addressed elsewhere within the contingency plan. If this is provided to address another provision, please provide a regulatory reference and base the assessment on the incident history of the area in which the surface waste management facility is proposed. There will be no records available on a facility that currently does not exist, but there are several wells scattered across the proposed facility and several gas pipelines that could have been the source of a release or incident.

Pursuant to Paragraph (6) 19.15.36.13.N NMAC, the contingency plan for emergencies shall "include an evaluation of expected contaminants, expected media contaminated and procedures for investigation, containment and correction or remediation." This provision is not addressed in the contingency plan, please provide the required information.

**Page 10.17**, Addendum A:

Please indicate the locations of the "designated assembly point(s)" of the map as stated in the last sentence of the second paragraph of Section VII, *Evacuation Plan,* on page 10.6 of the permit application.

**Page 14.2**, Section 2.4, *Obligations of the truck driver(s):*

The second sentence of the third paragraph states "All spillages outside the construction site must be thoroughly cleaned up immediately." This is the first time a "construction site" has been mentioned in the permit application. Please clarify where the "construction site" is located within the surface waste management facility boundary. Crowe Blanco personnel should respond to any unauthorized spills or releases that occur within the surface waste management facility boundary by the prescribed actions for such an event as specified in the facility contingency plan pursuant to Subsection N of 19.15.36.13 NMAC. Crowe Blanco personnel/staff shall also comply with the spill reporting and corrective action provisions of 19.15.29 NMAC and/or 19.15.30 NMAC, as applicable. Please modify the paragraph appropriately.

**Page 14.3**, Section 2.5, *Obligations of General Personnel:*

The third paragraph mentions the generation of "wash-down water produced during clean-up of equipment..." This is the first time the generation of the equipment wash-down water is mentioned in the permit application. It has not been recognized as waste generated at the proposed facility in the application, therefore there are no methods of collection, containment, storage, or disposal discussed. If allowed to drain directly onto the 1-5 foot layer of soil covering the lined containment for the processing area, Crowe Blanco will need to update the closure plan and cost estimates for the processing area for the removal and disposal of liquids that accumulate on top of the liner and testing, remediation, and/or disposal of the contaminated soils. If the wash-down water is generated from cleaning the inside of tanks and equipment that contained exempt waste, then the rinsate would be considered by EPA to be RCRA exempt E&P waste. If the wash-down water is generated from cleaning the outside of equipment, such as for servicing and maintenance, the rinsate would be considered by EPA to be RCRA non-exempt waste. Both waste streams (exempt and non-exempt) may be generated, but Crowe Blanco should attempt to manage each waste stream separately. The secondary containment design for the processing area does not include a sump feature to collect and remove any liquids that accumulate on top of the liner. As the liquids accumulate the 1-5 feet layer of soil covering the liner will become saturated and contaminated by the liquids. The lined processing area will become the primary containment feature for the wash-down waste water and can no longer be consider secondary containment for the above-grade tanks. Please address the management of the wash-down waste water throughout the applicable sections of the permit application.

**Page 14.4**, Section 3.2, *Equipment Maintenance:*

The sixth bullet, under the titled section *Best Management Practices,* states "Where possible, ensure the servicing of vehicles/equipment occurs at a location where spillage will not

contaminate the stormwater system." Based upon the proposed language, it is OCD's understanding that vehicle and equipment repairs and maintenance will be performed outside with potential releases to the ground surface (soils). As presented, any soil contaminated from such a release (lubricating oils, glycol, waste oil, etc...) will not be addressed and left in-place. Any waste and contaminated soils generated from the servicing of vehicle/equipment are not "intrinsically derived from the primary field operations" and are considered by EPA to be RCRA non-exempt waste.

The seventh bullet, under the titled section *Best Management Practices,* states "Vehicles/equipment must be washed in the site wash-down area..." OCD has been unable to locate any other discussion of the wash-down area or any drawings of the facility that indicate its design and location within the facility boundary. Please address the management of the wash-down waste water throughout the applicable drawings and sections of the permit application. A separate permit issued under the Water Quality Control Commission Regulations 20.6.2 NMAC is required, if Crowe Blanco wishes to discharge wastewater to the ground surface.

The ninth bullet, under the titled section *Best Management Practices,* states "It is the responsibility of all personnel to properly manage the disposal of wash-down water generated during the cleaning process. Options for collection, treatment, and disposal of the wash-down water should be discussed with the site manager." The details of the "collection, treatment, and disposal of the wash-down water" should be addressed directly in the permit application. Please address the management of the wash-down waste water throughout the applicable drawings and sections of the permit application.

**Page 14.5**, Section 4, *Fugitive Dust & Odor Emissions:*

The first bullet, under the titled section *Road and Yard Dust,* states that "...unpaved roadways will be sprayed recycled (centrate water which does not have a chloride concentration exceeding 500 mg/kg and does not contain Hydrogen Sulfide levels in excess of 10 ppm)..." A separate permit issued under the Water Quality Control Commission Regulations 20.6.2 NMAC is required, if Crowe Blanco wishes to discharge wastewater to the surface, such as for dust control. Please make the appropriate modifications and changes.

**Page 14.5**, Section 4, *Fugitive Dust & Odor Emissions:*

The first bullet, under the titled section *Odor Control,* states that nuisance odors will be minimized by "When feasible, manure, used as part of the bioremediation process, will be stored on areas of the facility furthest from nearby residence(s)." Please provide the details regarding the storage of the manure. As recognized in the response, the manure is "part of the bioremediation process." Pursuant to Paragraph (5) of 19.15.36.8.C NMAC, the application shall include "engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments."

The first bullet, under the titled section *Odor Control,* states that nuisance odors will be minimized by "reducing the holding time waste disposed of in the concrete impoundment." This is the first time that it has been mentioned in the permit application that a "concrete impoundment" will be utilized at the proposed surface waste management facility. OCD has been unable to locate any other discussion of its use or any drawings of the facility that indicate

its design and location within the facility boundary. Please address the "concrete impoundment" throughout the applicable drawings and sections of the permit application.

**Page 14.5**, Section 5, *Stormwater:*

The third bullet in this section proposes the reuse of stormwater for dust control "when it meets acceptable reuse criteria (*does not contain chloride concentrations exceeding 500 mg/kg)." A separate permit issued under the Water Quality Control Commission Regulations 20.6.2 NMAC is required, if Crowe Blanco wishes to discharge stormwater run-off which has come in contact with contaminates to the ground surface. Please modify appropriately.

The second sentence of the introductory paragraph to this section lists potential wastewater and stormwater pollutants, which include "oilfield waste, aggregate, bioremediation additive mixtures, fuels, and lubricants." The status (RCRA exempt or RCRC non-exempt) of the stormwater will depend on the nature and source of the pollutant. This will be important when determining the type of injection well/facility can be utilized for disposal. Class II injection wells are only allowed to accept RCRA exempt material. Class I injection wells are allowed to accept both RCRA exempt and RCRA non-exempt material. RCRA non-exempt material may require hazardous characteristic testing to demonstrate that the waste is non-hazardous prior to be accepted at a Class I injection well/facility if its permit limits the waste acceptance to non-hazardous material. Please clarify this issue in the third bullet in this section regarding the off-site disposal of contaminated stormwater.

**Page 14.7**, Section 8, *Storage:*

For this type of facility, OCD requires the owner/operator to ensure that all aboveground containers have impermeable secondary containment, which will contain a volume of at least one-third greater than the total volume of the largest container or all interconnected containers, unless such aboveground containers hold fresh water. Please modify the third bullet of this section to properly address aboveground tanks.

**Page 14.8**, Section 12, *Centrate Water (Waste Water):*

This section proposes to reuse the centrate water (wastewater) as dust control on the roadways within the facility. A separate permit issued under the Water Quality Control Commission Regulations 20.6.2 NMAC is required, if Crowe Blanco wishes to discharge wastewater to the surface, such as for dust control. Please modify appropriately.

**Page 16.1**, Form C-137:

The Form C-137 needs to be revised to properly identify the owner/applicant and to have the correct responsible party's signature. Pursuant to Paragraph (1) of 19.15.36.8.C NMAC, the permit application shall include "the names and addresses of the applicant and principal officers and owners of 25 percent or more of the applicant." The "principal officers and owners of 25 percent or more of the applicant" identified on Page 1.1 of the permit application are for only persons associated with Crowe Blanco Properties, LLC. Only Crowe Blanco Properties, LLC, their corporate address, contact person and telephone number should be provided in Section 4 of the Form C-137. Also, someone from Crowe Blanco Properties, LLC must sign the certification statement in Section 25 of the Form C-137. Please resubmit an updated revised Form C-137.

**SPCC Spill Prevention Control & Countermeasures:**

**Page 7**, Section 2.1, *Facility Description:*

The last half of the first complete paragraph on this page describes the design of the processing area. In the discussion of the lined area, it states that the liner will be "covered with a 6-inch layer of sand protecting the liner, followed by approximately 24-inches of topsoil..." It goes on to reference the permit application "with engineering drawings for specifications." This description of the placement of soils over the liner is presented and described differently at least three times throughout the permit application. The engineer design drawing, Section C-C on Sheet C105, illustrates a 12-inch clean sand layer buffer above the liner and does not indicate or illustrate the placement of any additional soils. A written description provided the first bullet at the top of Page 9.4 states that there will be "four feet of soil on top of the liner. Please clarify the final design thickness of the soils covering the liner and modify all of the appropriate drawings and sections of the permit applications accordingly.

**Page 8**, Section 2.1, *Facility Description:*

Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas*." OCD was unable to locate the engineering designs of underlined items above. On this page two separate chemical storage areas are mentioned. The first is the chemical storage area with secondary containment in the warehouse and the second is an acid storage area outside of the warehouse. Also, OCD has been unable to locate any construction/installation diagrams of the warehouse within the processing area. Only a foot print of the area in which is proposed has been provided. Please provide all of the required construction/installation diagrams.

**Page 12**, Section 3.1, *Containment and Diversionary Structures:*

The first bullet, titled *Secondary Containment*, discusses some of the design features of the processing area. The third sentence mentions a "0.5 % bottom slope, which will drain accumulated fluids to a basin in the central portion of the containment area." It also goes on to discuss two penetration points through the liner and installation of seals at those points. None of these design details are illustrated on any of the drawings provided in the permit application. Pursuant to Paragraph (5) of 19.15.36.8.C NMAC, the application shall include "engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments." Also, please explain how the "accumulated fluids" will be removed on a regular basis. If the lined containment area is not designed with a feature that removes the "accumulated fluids" on a regular basis and is designed to hold the accumulate fluids and have constant hydraulic head, then the containment feature become primary containment for the accumulated fluids and cannot be considered secondary containment for any of the above-grade tanks.

The fifth sentence of the first bullet states "piping penetrates the liner and berms in two locations, to allow centrate to be transported and septic waste from the warehouse restrooms to discharge into the septic system." As written, it is not clear to OCD if the centrate will be discharged into the septic system drain field or not. Please clarify where the centrate will be "transported." Also, please clarify that if the septic system is proposed for the acceptance of the

domestic liquid waste only that Crowe Blanco will obtained the proper permit from the appropriate regulatory agency – the New Mexico Environment Department.

The last two sentences of the first bullet mentions a "separate secondary containment" feature for the diesel tank by the office. OCD was unable to locate any design drawings for this secondary containment feature. Please identify the location of such drawings or provide.

The second bullet, titled *No-Discharge Facility*, discusses how the facility will be "enclosed by a 6-foot high earthen berm and silt fencing to prevent run-on from entering the site..." Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and *detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas.*" OCD was unable to locate the engineering designs of berms and fencing discussed in this section. Please provide the required engineering designs.

**Page 13**, Section 3.2, *Inspections, Tests, and Records:*

The last sentence/paragraph to this section states "Inspection, training, and other records are retained for at least five years in Appendix 7 of this plan." This statement is not completely correct. Pursuant to Subsection P of 19.15.36.13 NMAC, "Each operator shall conduct an annual training program for key personnel that includes general operations, permit conditions, emergencies proper sampling methods and identification of exempt and non-exempt waste and hazardous waste. The operator shall maintain records of such training, subject to division inspection, for five years." Pursuant to Subsection G of 19.15.36.13 NMAC, "The operator of a commercial facility shall maintain records reflecting the generator, the location of origin, the location of disposal within the commercial facility, the volume and type of oil field waste, the date of disposal and the hauling company for each load or category of oil field waste accepted at the commercial facility. The operator shall maintain such records for a period of not less than five years after the commercial facility's closure, subject to division inspection. Pursuant to Paragraph (9) of 19.15.36.15.C NMAC, "The operator shall maintain records of the landfarm's remediation activities in a form readily accessible for division inspection." This would be equivalent to the life of the facility. Please modify the response to properly reflect the regulatory requirements for record keeping.

**Page 15**, Section 3.7, *State Rules:*

Based upon Crowe Blanco's proposal to discharge contaminated oilfield (centrate) wastewater onto the ground surface for dust control and allow wash-down wastewater from the cleaning of vehicles and equipment onto ground surface, Crowe Blanco did not identified 20.6.2 NMAC, the New Mexico Water Quality Control Commission Regulations, as one of the State rules which they must demonstrate compliance. Please update this section.

**Page 15**, Section 3.8.1,

This section discusses how stormwater will be handled in the processing area. It states "if significant accumulation occurs, the stormwater will be removed by vacuum truck." OCD is unsure how the vacuum truck will be used to extract the stormwater. The only design drawing of the processing area containment is a cross-section, Section C-C, of the design profile which does not coincide with written descriptions provided throughout the permit application. The written

description, on Page 9.4 of the permit application, states that there will be "four feet of soil on top of the liner. How will the vacuum truck be able to access the water on the liner for removal? How much accumulation would be considered "significant"? If the lined containment area is not designed with a feature that removes the "accumulated fluids" on a regular basis and is designed to hold the accumulate fluids and have constant hydraulic head, then the containment feature become primary containment for the accumulated fluids and cannot be considered secondary containment for any of the above-grade tanks. Please provide design drawings of all of the construction/installation features of the processing area containment area.

Please consider that the primary purpose of the processing area containment area is to provide secondary containment to the above ground primary containment features. One of those features is for (hydrofluoric) acid storage. Hydrofluoric acid is a listed hazardous waste – U134. EPA mixing rules state that if a listed hazardous waste is mixed with any other type of waste then all of the mixed waste takes on the listed hazardous waste status. Other contaminates captured in the containment area may include non-exempt characteristic hazardous waste such as vehicle/equipment wash-down water. The last sentence in this section states "all removed water will be pumped into the tanks and entered into the facility's liquid hydrocarbon processes." Depending on the nature and characteristics of the accumulated water on the liner of the containment area, the acceptance of allowing it to be processed at the facility may be prohibited. Please present a protocol to access the wastewater to determine if off-site disposal is required or if it can be processed as a waste stream at the surface water management facility.

**Page 15**, Section 3.8.2, *Inspection of field drainage systems*:

The last sentence in this section states that any accumulation in the ditches and retention ponds "will be promptly reported to the IEI Facility Manager and removed." Please clarify what will happen to the "removed" water. Will it be hauled off-site disposal or reused? Please clarify.

**Page 16**, Section 3.9.2, *Secondary Containment:*

The last sentence of this paragraph describes the design of the processing area. In the discussion of the lined area, it states that the liner will be "covered with a 6-inch layer of sand protecting the liner, followed by approximately 24-inches of topsoil…" It goes on to reference the permit application "with engineering drawings for specifications." This description of the placement of soils over the liner is presented and described differently at least three times throughout the permit application. The engineer design drawing, Section C-C on Sheet C105, illustrates a 12-inch clean sand layer buffer above the liner and does not indicate or illustrate the placement of any additional soils. A written description provided the first bullet at the top of Page 9.4 states that there will be "four feet of soil on top of the liner. Please clarify the final design thickness of the soils covering the liner and modify all of the appropriate drawings and sections of the permit applications accordingly.

**Appendix 1**, Secondary Containment Calculations, *Processing Area:*

In the first calculations at the top of the page, not titled like the rest of the calculations, seems to be demonstrating the storage capacity of the processing area. If so, please include the two shaker tanks and the two slurry tanks since they will be holding petroleum contaminated waste material. Also, please explain the column titled "Volume Within Containment" of what is represents and how it is calculated.

In the *Displacement Volumes* calculations, please include the calculated displacement volumes for the fresh water tanks. Much like the warehouse and Hydrofluoric acid storage area, the presence of the fresh water tanks within the processing area, they will also take up space considered for containment. Please adjust the other calculations accordingly.

**Appendix 1**, Secondary Containment Calculations, *Diesel:*

The berm dimensions and calculated volume does not coincide with the written description provided in the SPCC plan. The last two sentences in the first bullet, *Secondary Containment*, of Section 3.1 on page 12 of the SPCC plan, state that the 1000 gallon diesel tank is "stored within a 1,278 gallon tray, a 4,000 gallon earthen secondary containment is also in-place." Since drawings were not provided of the office building and the associated containment feature and the dimensions of the diesel tank are not provided, OCD is unable to determine which design is correct and if the calculations are appropriate. Please clarify.

**Appendix 3**, *Monthly Facility Visual Inspection Form* (Page 1 of 2)

The first item listed under Facility Drainage is "No operations within 200' of drainage." Most of the drainage (stormwater collection) ponds are near or at the facility boundary. OCD wishes to clarify that the siting criteria identified in 19.15.36.13.B NMAC determines the surface waste management facility boundary. The placement of the contaminated soils is addressed in Paragraph (2) of 19.15.36.15.C NMAC which states the "operator shall not place contaminated soils received after the effective date of 19.15.36 NMAC within 100 feet of the surface waste management facility's boundary." The facility boundary and the outer boundary of the landfarm cells (placement of contaminated soils) are not the same. Please modify if required.

**Appendix 6**, Emergency Spill Procedures, Page 2:

The bold font introductory sentence/paragraph states the condition in which the following steps must be taken in case of a release. As stated on page 1, this Appendix is provided to demonstrate compliance with 40 CFR 112.7(a)(5), 19.15.29 NMAC, 19.15.30 NMAC, and 19.15.36 NMAC. The condition is as follows: "For any release (greater than five (5) barrels) that occurs on site, that enters a drainage within CBP Facility boundary." The drainages "within CBP Facility boundary" as presented on the drawings are defined as a watercourse in 19.15.2.7 NMAC. Pursuant to Subparagraph (b) of 19.15.29.7.A.(2) NMAC a major release can be "an unauthorized release of a volume that will reach a watercourse." Also, pursuant to Paragraph (4) of 19.15.29.7.A NMAC a major release can be "a release of a volume that may with reasonable probability be detrimental to water or exceed the standards in Subsections A and B or C of 19.15.30.9 NMAC." There is no specific volume associated with these types of releases compared to the written description. Please properly identify the conditions as specified in the regulations.

In Step 7.a on this page, there is a regulatory mis-quote or spelling error in this sentence. Please replace the word "excel" with "excess" for the correct language.

**Appendix 6**, Emergency Spill Procedures, Page 3:

The bold font introductory sentence/paragraph states the condition in which the following steps must be taken in case of a release. As stated on page 1, this Appendix is provided to demonstrate compliance with 40 CFR 112.7(a)(5), 19.15.29 NMAC, 19.15.30 NMAC, and 19.15.36 NMAC. The condition is as follows: "For any release (greater than five (5) barrels) that occurs on site, that enters a drainage outside of the CBP Facility boundary." The drainages

that extend through the facility boundary as presented on the drawings are defined as a watercourse in 19.15.2.7 NMAC. Pursuant to Subparagraph (b) of 19.15.29.7.A.(2) NMAC a major release can be "an unauthorized release of a volume that will reach a watercourse." Also, pursuant to Paragraph (4) of 19.15.29.7.A NMAC a major release can be "a release of a volume that may with reasonable probability be detrimental to water or exceed the standards in Subsections A and B or C of 19.15.30.9 NMAC." There is no specific volume associated with these types of releases compared to the written description. Please properly identify the conditions as specified in the regulations.

In Step 8.a on this page, there is a regulatory mis-quote or spelling error in this sentence. Please replace the word "excel" with "excess" for the correct language.

**Appendix 6**, Emergency Spill Procedures, *Release Reporting Important Phone Numbers and Compliance Documentation Log*:

As stated on page 1, this Appendix is provided to demonstrate compliance with 40 CFR 112.7(a)(5), 19.15.29 NMAC, 19.15.30 NMAC, and 19.15.36 NMAC. The conditions regarding OCD notification in the "When to Notify" column does not represent all of the conditions identified in 19.15.29 NMAC. Pursuant to Paragraph (2) of 19.15.29.7.A NMAC a major release can be an unauthorized release of a volume that: "(b) will reach a watercourse; (c) may with reasonable probability endanger public health; or (d) results in substantial damage to property or the environment." Also, pursuant to Paragraph (4) of 19.15.29.7.A NMAC a major release can be "a release of a volume that may with reasonable probability be detrimental to water or exceed the standards in Subsections A and B or C of 19.15.30.9 NMAC." Please include the conditions above that would also require OCD notification.

**Drawings:** Sheet C102,

*Piping Notes*:

Note 1 states that "all piping shall be placed 3' below finish grade." OCD is uncertain which finish grade is applicable. In the case of the containment feature for the processing area, does this mean the finish grade above the liner? If so, then based upon the cross-section, Section C-C, on Sheet C105 the piping would penetrate the liner. Please provide design drawings that illustrate the feature that will be installed to prevent the lost of liquids at the piping/liner interface.

Note 7 indicates that the piping of the pumps will be contained within a box enclosure that will be buried three feet below grade. OCD was unable to locate the design drawing for this feature. Please provide.

*Legend*:

The indicates that the symbol, ____x____, represents a eight foot game fence. OCD was unable to locate the design drawing for this feature. Please provide.

Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the permit application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas." Please provide the information requested above.

**Drawings:** Sheet C105,

Section A-A:

The drawing of the processing area containment berm indicates that slopes to the berms will be 3:1 (run to rise). Based upon the dimensions provided with the illustration, the run will be 2.5 feet and the rise will be 2.5 feet making a 1:1 slope. Please modify the design to illustrate the correct slope.

Section B-B:

The drawing of the tank battery berm indicates that slopes to the berms will be 5:1 (run to rise). Based upon the dimensions provided with the illustration, the run will be 1 foot and the rise will be 1 foot making a 1:1 slope. Please modify the design to illustrate the correct slope.

Section C-C:

The drawing of the processing area containment feature design illustrates that a "12" clean sand layer buffer" will be installed above the liner. Other sections of the permit application described the different profiles and thickness of soil above the liner. OCD is uncertain of the design. Please present one design throughout the permit application and modify the drawing accordingly. Also, the cross-section of the processing area containment feature is incomplete. In the SPCC plan, a written description is provided that suggests that the containment feature will slope toward the center and that some type of sump feature will be incorporated for the removal of fluids off the liner by a vacuum truck. There is also a written description that indicates piping will penetrate the liner in two locations and seals/boots will be installed. Please provide additional drawings that illustrate the design of these features.

Chain Link Gate:

In the written text within the permit application, it is discussed that the processing area will be fenced and gated. Please clarify if the proposed gate design is only associated with the processing area. Also, please provide a design height.

Chain Link Fence Foundation:

In the written text within the permit application, it is discussed that the processing area will be fenced and gated. Please clarify if the proposed fence design is only associated with the processing area. Also, please provide a design height.

Within the written text of the permit application, there is mention of two separate chemical storage areas within the processing area. The first is a concrete bermed chemical storage area within the warehouse and the second is the acid storage area outside the warehouse. Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the permit application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas." Please provide drawings for the underlined above.

**Drawings:** Sheet C108,

The piping flow diagram indicates that liquids (centrate) from the centrifuge will be transported to the centrate tanks for storage, but the overview of the processing area illustrates a

pipeline that continues to or beyond the containment berm. Please clarify within the written text where this pipeline goes and what purpose it serves or please modify the drawings appropriately.

**Drawings:** Sheet 3 of 17,

The drawing utilizes the symbol, -x-x-x-, for the proposed new fence for the surface waste management facility. The symbol, -----, represents the "100' property line setback." The issue is that the facility fence and setback extend into a northeast portion that is has been clearly defined and illustrated in blue on Sheet 6 of 17 as not part of the permit. Please modify the drawings to illustrate compliance to the surface waste management facility siting criteria of Subsection B of 19.15.36.13 NMAC and the operational setback requirements of Paragraphs (2) and (3) of 19.15.36.15.C NMAC.

**Drawings:** Sheet 6 of 17,

The illustration and location of the berms on the drawing do not coincide with the placement of landfarm cell berms and contaminated soil by regulation. The siting criteria identified in 19.15.36.13.B NMAC determines the surface waste management facility boundary. The placement of the contaminated soils is addressed in Paragraph (2) of 19.15.36.15.C NMAC which states the "operator shall not place contaminated soils received after the effective date of 19.15.36 NMAC *within 100 feet of the surface waste management facility's boundary*." The facility boundary and the outer boundary of the landfarm cells (placement of contaminated soils) are not the same. The berms along the watercourses can be considered facility berms, but based upon the siting criteria of 19.15.36.13.B NMAC the watercourses cannot be considered part of the permitted facility as proposed. Please clarify and modify the drawings accordingly.

**Drawings:** Sheet 6 of 17, *Notes* (Not Keyed Notes):

Note 2 states that "each 10 acre land cell shall be used as a process transfer and storage area." This concept is not expressed within the written portion of the permit application. Please clarify this proposed use of the landfarm cells and provide design drawings for the storage containment features, if applicable.

**General Comments Regarding Drawings:**

Please provide drawings that clearly indicate and illustrate the areas and total area that can be considered for the permitting of a surface water management facility. Pursuant to Paragraph (1) of 19.15.36.13.B NMAC states that "no surface waste management facility shall be located within 200 feet of a watercourse, lakebed, sinkhole, or playa lake." All of the drawings and within the written text of the permit application, the designated watercourses and their setback are included in the proposed acreage of the proposed boundary of the surface waste management facility. This area cannot be considered part of the permitted area for the facility. Please modify the drawings and written text appropriately.

Pursuant to Paragraph (4) of 19.15.36.8.C NMAC, the permit application shall include "a description of the surface waste management facility with a diagram indicating the location of fences and cattle guards, and detailed construction/installation diagrams of pits, liners, dikes, piping, sprayers, tanks, roads, fences, gates, berms, pipelines crossing the surface waste management facility, buildings and chemical storage areas." Please provide the required "detailed construction/installation diagrams" for the proposed shaker and slurry tanks. Several fence and gate designs have been mentioned in the written text, but not illustrated as a drawing or diagram. Please provide the required "detailed construction/installation diagrams" for the

facility fencing and various access gates. Several berm designs have been mentioned in the written text, including a six foot high facility berm. Please provide the required "detailed construction/installation diagrams" for the facility berm and the landfarm cell berm. Only the foot print of processing area warehouse is illustrated. Please provide the required "detailed construction/installation diagrams" of the warehouse, specifically how it will be constructed and installed within the containment feature of the processing area. The two chemical storage areas are discussed in the SPCC plan. Please provide the required "detailed construction/installation diagrams" for each chemical storage area (the one within the warehouse and the acid storage area outside the warehouse).

Pursuant to Paragraph (5) of 19.15.36.8.C NMAC, the permit application shall include "engineering designs, certified by a registered professional engineer, including technical data on the design elements of each applicable treatment, remediation and disposal method and detailed designs of surface impoundments." Within the written text of the permit application, manure has been recognized as "part of the bioremediation process." Please illustrate and provide the details regarding the storage of the manure. On page 14.5, the first bullet, under the titled section *Odor Control,* states that nuisance odors will be minimized by "reducing the holding time waste disposed of in the concrete impoundment." This is the first time that it has been mentioned in the permit application that a "concrete impoundment" will be utilized at the proposed surface waste management facility. OCD has been unable to locate any other discussion of its use or any drawings of the facility that indicate its design and location within the facility boundary. Please address the "concrete impoundment" throughout the applicable drawings and sections of the permit application.

## Jones, Brad A., EMNRD

**From:** Jones, Brad A., EMNRD
**Sent:** Tuesday, October 25, 2011 1:40 PM
**To:** Van Dyke, Mark, LTGOV
**Subject:** FW: Crowe Blanco Permit Application

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**From:** Jones, Brad A., EMNRD
**Sent:** Tuesday, October 25, 2011 1:30 PM
**To:** 'Marcella Marquez'; Bailey, Jami, EMNRD
**Cc:** Montoya, Rod, LTGOV; 'Terry Lattin'; 'Jake Hatcher'
**Subject:** RE: Crowe Blanco Permit Application

Marcella,

OCD received the revised application on September 20, 2011 and began the review process upon receipt. OCSD has just completed the review of the entire submittal, including design drawings. The review of the submittal is to determine if any additional information or modifications may be required before considering deeming the permit application complete. The revised submittal provided new information and additional sections in a new format which were not addressed in the original permit application. Such information must be considered and reviewed as a completely new application. The greatly expanded (doubled in size/paper) permit application is a significant improvement over the original submittal, but will still require additional information and clarification before OCD can consider it to be complete. Yesterday, OCD began generating a its written review (a request for additional information - RAI). OCD hopes to have it completed and mailed within the next 2-3 weeks, subject to reassignments to other priority projects. If you have any questions regarding this matter, please do not hesitate to contact me.

Brad

***Brad A. Jones***
*Environmental Engineer*
*Environmental Bureau*
*NM Oil Conservation Division*
*1220 S. St. Francis Drive*
*Santa Fe, New Mexico 87505*
*E-mail: brad.a.jones@state.nm.us*
*Office: (505) 476-3487*
*Fax: (505) 476-3462*

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**From:** Marcella Marquez [mailto:marcella@industrialecosystems.com]
**Sent:** Friday, October 21, 2011 11:23 AM
**To:** Jones, Brad A., EMNRD; Bailey, Jami, EMNRD
**Cc:** Montoya, Rod, LTGOV; 'Terry Lattin'; 'Jake Hatcher'
**Subject:** Crowe Blanco Permit Application
**Importance:** High

Brad:

As per your email correspondence on 10/6/11, you stated "OCD is responding to daily requests such as this and others, while attempting to continue the review. OCD is unable at this time to predict when the review will be completed."

While we acknowledge that OCD staff continues to work on daily tasks, we were assured by Jami Bailey and John Bemis (meeting 08/18/11) that the process to review the revised application would be prompt.

It has been one month since the revised Crowe Blanco SWMF Permit Application was received by NMOCD (09/20/11). We respectfully request an update on the review status of the application.

***Thanks,***
***Marcella Marquez, HSE Administrator***
***Industrial Ecosystems, Inc.***
***Phone: (505) 632-1782***
***Fax: (505) 632-1876 or (505) 334-1003***

## Jones, Brad A., EMNRD

**From:** Marcella Marquez <marcella@industrialecosystems.com>
**Sent:** Monday, September 19, 2011 11:56 AM
**To:** Jones, Brad A., EMNRD
**Cc:** Bailey, Jami, EMNRD; 'Terry Lattin'; 'Jake Hatcher'
**Subject:** SWMF Permit Application - 2nd Submittal - Reply to Request for Information

**Importance:** High

Brad:

This email is to notify you that I am re-submitting the Crowe Blanco Properties (Operated by *Industrial Ecosystems, Inc.*) SWMF permit application today. It will be sent via FedEx and you should receive it sometime tomorrow.

As per previous discussions, you only requested one (1) copy of the binder and 1 copy of each set of maps (1-from Souder Miller and 2-from Cheney, Walters & Echols).

The maps may come in a separate box from the binder (not sure yet how the shipping company will want to send it).

***Thanks,***
***Marcella Marquez, HSE Administrator***
***Industrial Ecosystems, Inc.***
***Phone: (505) 632-1782***
***Fax: (505) 632-1876 or (505) 334-1003***