

November 4, 2019 Via E-mail

To: Mr. Jim Griswold
Environmental Bureau Chief/Special Projects Manager
New Mexico Oil Conservation Division

Reference: Milestone C-137 Application

Subject: Amendments to Original Application

Dear Mr. Griswold,

On Oct 4, 2019 Milestone's consultant (Wayne Price-Price LLC) met with you concerning the pending Milestone C-137 application that was submitted on June 24, 2019.

Pursuant to OCD rule 19.15.39.9.A you published the application on the OCD website on the day of our meeting Oct 04, 2019.

Our meeting consisted of you going thru the application line by line. As a result, you pointed out certain issues and requested that Milestone amend the permit application to reflect these findings.

You noted once these issues were addressed, then OCD would be able to notice a draft permit and Milestone would be able to issue public notice.

The following issues were noted:

1. Milestone had requested an exception to having to place a secondary liner under the concrete impoundment, i.e. below grade structure. As a result you requested the following in order to satisfy the exceptions and waivers of 19.15.36.A., that basically requires requested alternatives to provide equivalent protection of fresh water, public health and the environment.

- A. OCD recommended three vadose zone monitor wells.

Milestone hereby commits to installing three 2" vadose zone monitoring wells around the below grade structure and 10 feet below the bottom. These will be monitored on a quarterly basis and reported to OCD. The construction will consist of drilling 4" holes, install a minimum of 10 feet of slotted screen, gravel/sand pack, and cemented to surface.

- B. OCD requested the concrete be coated to withstand the fluids and UV issues.

Milestone hereby commits to coating the concrete containment with a coating that is resistant to fluids contained in the device and have a UV rating. The product to be used is attached in Appendix I.

- C. OCD requested that the sumps from the unloading station to the below grade device have secondary liners.

Milestone commits to installing a 20-mil HDPE liner or equivalent, under the unloading sumps and troughs.

2. Milestone had requested a waiver on using the C-133 permits for out-of-state trucks. OCD denied that request at the meeting.

Milestone hereby commits to requiring the C-133 form and process for all trucks hauling produce water that comes into the facility.

3. Milestone requested an alternative method for the protection of migratory birds, i.e. netting. OCD approved the methods listed in the application, but requested that Milestone report to OCD if this alternative method is not working.

Milestone hereby commits to reporting to OCD any issues concerning migratory birds within 48 hours of discovery.

4. OCD requested that Milestone install a high level cutoff switch so the below grade structure to prevent overflows.

Milestone hereby commits to installing a high level cutoff switch and alarm system.

5. OCD requested a written description of the fence around the facility.

Milestone plans to install a typical six-foot chain link fence with locking gates at all entry points. This fence will be show on the site plan.

6. OCD requested that to enhance the H2S plan that all employees, visitors, or customers to site must have a H2S monitor or be provide one.

Milestone will implement this request and write it in the H2S safety plan.

7. OCD noted that after the "Draft Permit" is published, that Milestone include in the required Public Notice, all exceptions, waivers, and alternatives to the permit.

Milestone hereby agrees and will provide OCD a copy of the Public Notice for approval before publishing.

8. OCD pointed out that certain standard conditions would be in the draft permit.

Milestone understands.

9. OCD requested a Surveyed Site layout on the 10-acre property, scaled to show all significant features, buildings, wells, unloading areas, tanks, below grade devices, fence locations, storm water run-on and run-off berms, ingress/egress areas, etc.

Milestone Engineers have prepared a detail site plan and have included a 3-D pictorial of the process areas. See Appendix II.

10. OCD requested a written narrative on the closure plan.

Milestone Engineers have prepared a written narrative and is included in Appendix III.

If you have question or concerns please do not hesitate to call Wayne Price (505-715-2809) or E-mail wayneprice@q.com.

Milestone hereby requests a rapid review and publishing of the "Draft Permit".

Sincerely,

A handwritten signature in blue ink, appearing to read "W P Price".

Wayne Price-Price LLC
Consultant for Milestone

Attachments-Appendix I, II, & III

Appendix I

PENETRON ADMIX®

CRYSTALLINE WATERPROOFING ADMIXTURE

DESCRIPTION

PENETRON ADMIX® (integral crystalline water-proofing admix) is added to the concrete mix at the time of batching. PENETRON ADMIX® consists of Portland cement and various active, proprietary chemicals. These active chemicals react with the moisture in fresh concrete and with the by-products of cement hydration to cause a catalytic reaction, which generates a non-soluble crystalline formation throughout the pores and capillary tracts of the concrete. Thus, the concrete becomes permanently sealed against the penetration of water or liquids from any direction. The concrete is also protected from deterioration due to harsh environmental conditions. PENETRON ADMIX® has been specially formulated to meet varying project and temperature conditions (see **Setting time and strength**). Consult with a Penetron technical representative for additional detailed support on your project.

APPLICATIONS

Reservoirs
Sewage and water treatment plants
Secondary containment structures
Tunnels and subway systems
Underground vaults
Foundations
Parking structures
Swimming pools
Precast, cast-in-place and shotcrete applications

ADVANTAGES

Resists extreme hydrostatic pressure from either positive or negative surface of the concrete slab
Becomes an integral part of the concrete
Highly resistant to aggressive chemicals
Can seal hairline cracks up to 1/51" (0.5 mm)
Allows concrete to breathe
Non-toxic (NSF 61 certified for potable water applications)
Less expensive than traditional methods
Permanent
Added to the concrete at the time of batching and therefore not subject to climatic restraints
Reduces construction scheduling time
Improves durability of concrete
Permeability Reducing Admixture for Hydrostatic conditions (PRAH)
Zero VOC – PENETRON powdered products contain zero volatile organic compounds and are safe for use both outdoors and in confined indoor spaces
Exceeds requirements of ASTM C494-S (Specific Performance Admixtures)

DIRECTIONS FOR USE

Dosage rate:

0.8-1.0% by weight of cement. Consult with Penetron's Technical Department for assistance in verifying the appropriate dosage rate and for further information regarding enhanced chemical resistance and optimum concrete performance for your project.

Mixing:

PENETRON ADMIX® must be added to the concrete at the time of batching.

The sequence of procedures for addition will vary according to the type of batch plant operation and equipment. The following are some typical mixing guidelines. For more detailed information on dosing procedures, contact your Penetron representative.

Ready mix plant - Dry batch operation: Add PENETRON ADMIX® in powder form to the drum of the ready-mix truck. Drive the truck under the batch plant and add 60%-70% of the required water, along with 300-500 lb (136-227 kg) of aggregate. Mix the materials for 2-3 minutes to ensure the PENETRON ADMIX® is distributed evenly throughout the mix water. Add the balance of materials to the ready-mix truck in accordance with standard batching practices.

Ready mix plant - Central mix operation: Mix PENETRON ADMIX® with water to form a very thin slurry (e.g. 40 lb (18 kg) of powder mixed with 6 gallons (22.7 l) of water). Pour the required amount of material into the drum of the ready-mix truck. The aggregate, cement, sand and water should be batched and mixed in the plant in accordance with standard practices (taking into account the quantity of water that has already been placed in the ready-mix truck). Pour the concrete into the truck and mix for at least 5 minutes to ensure even distribution of PENETRON ADMIX® throughout the concrete.

Precast batch plant: Add PENETRON ADMIX® to the rock and sand, then mix thoroughly for 2-3 minutes before adding the cement and water. The total concrete mass should be blended using standard practices.

NOTE: It is important to obtain a homogeneous mixture of PENETRON ADMIX® with the concrete. Therefore, do not add dry PENETRON ADMIX® powder directly to wet concrete as this may cause clumping and thorough dispersion will not occur. For further information regarding the proper use of PENETRON ADMIX® for a specific project, consult with a Penetron technical representative.

Setting time and strength:

The setting time of concrete is affected by the chemical and physical composition of ingredients, temperature of the concrete and climatic conditions. Retardation of set may occur when using PENETRON ADMIX®. The amount of retardation will depend upon the concrete mix design and

PENETRON ADMIX®

the dosage rate of PENETRON ADMIX®. However, under normal conditions, PENETRON ADMIX® will provide a normal set concrete. Concrete containing PENETRON ADMIX® may develop higher ultimate strengths than plain concrete. Trial mixes should be carried out under project conditions to determine setting time and strength of the concrete.

Concrete treated with PENETRON ADMIX® should be placed and finished in accordance with good concrete practices. ACI guidelines and recommendations should be observed.

SPECIAL CONSIDERATIONS

When incorporating PENETRON ADMIX®, the temperature of the concrete mix should be above 40°F (4°C).

PACKAGING

PENETRON ADMIX® is available in 40 lb (18 kg) bags, 55 lb (25 kg) pails, and 6.6 lb (3 kg) soluble bags. For large projects, customized packaging is available.

STORAGE / SHELF LIFE

PENETRON products must be stored dry at a minimum temperature of 45°F (7°C). Shelf life is one year when stored under proper conditions.

TECHNICAL SERVICES

For more detailed instructions, alternative application methods, or information concerning the compatibility of the PENETRON treatment with other products or technologies, contact the Penetron Technical Department or your local Penetron representative.

SAFE HANDLING INFORMATION

PENETRON ADMIX® is alkaline. As a cementitious powder or mixture, PENETRON ADMIX® may cause significant skin and eye irritation. Penetron International, Ltd. also maintains comprehensive and up-to-date Safety Data Sheets on all its products. Each sheet contains health and safety information for the protection of your employees and customers. KEEP OUT OF REACH OF CHILDREN.

Contact Penetron International, Ltd. or your local Penetron representative to obtain copies of Safety Data Sheets prior to product storage or use.



004aCPR2013-7-10

EN 934-2

Penetron International, Ltd.
601 South Tenth Street, Unit 300
Allentown, PA 18103

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PENETRON ADMIX
Crystalline Capillary Admixture
Water Resisting Admixture

Chloride content: < 0,10 % by mass

Alkali content: < 10,3 % by mass

Compressive strength: ≥ 85 % of control

Conventional dry material content: > 99,5 %

Air content in fresh concrete: ≤ 2 % by volume

Capillary Absorption (after 90 day curing): ≤ 60 % by mass

WARRANTY: PENETRON INTERNATIONAL, LTD. warrants that the products manufactured by it shall be free from material defects and will conform to formulation standards and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON INTERNATIONAL, LTD. shall be limited to replacement of the material proven to be defective, and PENETRON INTERNATIONAL, LTD. shall in no case be liable otherwise or for incidental or consequential damages. **PENETRON INTERNATIONAL, LTD. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.** User shall determine the suitability of the product for its intended use and assume all risks and liability in connection therewith.

PENETRON INTERNATIONAL, LTD.

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Appendix II

**Appendix II contents removed as they are deemed
proprietary and confidential by the applicant**

Appendix III

CLOSURE SCENARIO

Description

This closure scenario is developed for the Milestone Environmental Services, LLC Jal, NM Facility (Facility) as proposed in an application to the Oil Conservation Division of New Mexico (OCD) for the facility. The scenario is based on an operating facility that must be closed by a third party.

Given Information

The full 10-acre facility is described in detail in the Application. For closure scenario purposes, the facility at full development includes the following:

- One (1) SWD well and related components.
- One (1) canopy unloading area with seven (7) bays.
- One (1) truck washout area with two (2) bays.
- One (1) 7,055 bbl concrete receiving pit
- One (1) 860 bbl mixing tank and (1) 640 bbl shaker tank, including concrete containment area.
- One (1) tank farm including one (1) 1,000 bbl skim tank, two (2) 500 bbl oil storage tanks, one (1) 700 bbl desanding/buffer tank, and four (4) 750 bbl saltwater storage tanks, including concrete containment area.
- One (1) SWD pumping facility, including canopy.
- One (1) pump pad area including pumps and containment area.
- One (1) Solids handling area
- One (1) Maintenance shop
- One (1) Office building
- Miscellaneous facility structures, roadways, parking and utilities

Issued for permitting purposes

October 24, 2019
4 Pages of Calculations

Assumptions

The closure scenario is based on the following:

- The costs are based on projected 2018 dollars.
- The closure activities will need to be overseen by a licensed professional engineer.
- The SWD well is not operational and cannot be used for the disposal of fluids. The cost for plugging and abandoning the SWD well is covered under the H-1 permit for the well.
- The concrete collection pit is full of liquids/solids.
- The mixing tank and shaker tank are full of liquids/solids.
- All tanks in the tank farm are full of liquids.
- The solids handling slab is covered with material to a depth of two (2) feet.
- All waste handling or processing components of the facility will be cleaned, demolished and removed from the site. Support facilities, including the office building and shop, roadways, parking, and utilities will remain and it is assumed that they will be repurposed in a future use of the site.
- All liquid waste will be hauled approximately 2 miles to a SWD well for disposal. Disposal cost includes disposal fee, loading/unloading, and hauling costs.
- All solid waste will be hauled approximately 5 miles to a Type 1 landfill authorized to accept oilfield waste. Disposal cost includes disposal fee, loading/unloading, and hauling costs.

- Loading, hauling and disposal costs are included in the various “Common Cost Elements” as stated.
- Soil backfill material volume calculations assume 25% additional material will be needed due to compaction.
- Construction quality control must be provided for all activities.

CLOSURE SCOPE ITEMS

1. Engineering

The following activities will be required for a professional engineer to oversee the closure activities:

- 1.1 An updated topographic survey of the entire site
- 1.2 Modifying and updating the facility closure plan to reflect current conditions
- 1.3 Preparing closure bid documents
- 1.4 Bidding and procurement of closure contractors
- 1.5 Construction phase engineering during closure, including review and processing of pay estimates, and coordination with contractor(s)
- 1.6 Weekly site visits during closure, for a period of three (3) months. Site visits include travel time, mileage, lodging, and per diem.
- 1.7 Soils compaction testing
- 1.8 Preparation of a final closure report

2. SWD Well

The following closure activities will be required:

- 2.1 Demolish and dispose of above ground piping (assume 800 l.f.) and equipment

3. Canopy Unloading Area

The following closure activities will be required:

- 3.1 Clean/wash infrastructure: concrete trenches, paving, and lower canopy structure (assume 115 bbls of water used for cleaning)
- 3.2 Haul cleaning water to an offsite injection well
- 3.3 Demolish and remove canopy structure and associated equipment
- 3.4 Demolish concrete paving, trenches, and aprons (254 cy of rubble generated)
- 3.5 Concrete rubble (254 cy) will be hauled to an offsite disposal facility
- 3.6 Level canopy unloading area and haul in soil fill material and backfill trench (375 cy)

4. Truck Washout Area

The following closure activities will be required:

- 4.1 Clean/wash infrastructure: concrete trenches, paving, and lower canopy structure (assume 40 bbls of water used for cleaning)
- 4.2 Haul cleaning water to an offsite injection well
- 4.3 Demolish concrete paving, trenches, and aprons (1 cy of rubble generated)
- 4.4 Concrete rubble (040 cy) will be hauled to an offsite disposal facility
- 4.5 Level truck washout area and haul in soil fill material and backfill trench (220 cy)

5. Receiving Pit

Collection Pit operational capacity is 7,055 bbls

Assume pit volume is 85% liquids, 15% accumulated sediments

Pit liquid volume = 7,055 bbls x 85% = 5,997 bbls

Total solids = 7,055 bbls x 15% = 1,058 bbls x 42 gal/bbl x 1 ft³/7.48 gal x 1 cy/27 ft³ = 220 cy

The following closure activities will be required:

- 5.1 Remove liquids (7,055 bbls) from receiving pit and haul to an offsite injection well
- 5.2 Remove solids (220 cy) and haul to an offsite disposal facility
- 5.3 Clean/wash infrastructure: concrete structure, piping, equipment, piping and equipment supports, and guardrails (assume 120 bbls of water used for cleaning)
- 5.4 Haul cleaning water to an offsite injection well
- 5.5 Remove piping, equipment, piping and equipment supports, and guardrails
- 5.6 Demolish concrete receiving pit structure (415 cy of rubble generated)
- 5.7 Concrete rubble (415 cy) will be hauled to an offsite disposal facility
- 5.8 Haul in soil fill material, backfill pit and level site (2,480 cy)

6. Mixing/Shaker Tanks

The mixing and shaker tank capacities are 860 bbls and 640 bbls respectively for a total of 1,500 bbls.

The following closure activities will be required:

- 6.1 Remove liquids from tanks (1500 bbls) and haul to an offsite injection well
- 6.2 Clean/wash tanks, concrete containment area, piping, guardrails, stairs and equipment (assume 26 bbls of water used for cleaning)
- 6.3 Haul cleaning water to an offsite injection well
- 6.4 Remove tanks, piping, guardrails, stairs and equipment
- 6.5 Demolish concrete containment area (60 cy of rubble generated)
- 6.6 Concrete rubble (60 cy) will be hauled to an offsite disposal facility
- 6.7 Haul in soil fill material, backfill containment area and level site (59 cy)

7. Tank Farm

Tank Summary		
Tank	Volume (bbl)	Disposition of Contents
Skim Tank (1)	1,000	Offsite injection well
Oil Storage (2)	500 ea; 1,000 total	Salvage/remove
Desanding/Buffer (1)	700	Offsite injection well
Salt Water (4)	750 ea; 3,000 total	Offsite injection well

The following closure activities will be required:

- 7.1 Remove pumps, support structures, stairs, walkways, and piping
- 7.2 Remove and dispose of 4,700 bbls of liquids from the skim tank, desanding tank, and salt water tanks in an offsite injection well
- 7.3 Remove and dispose of 1,000 bbls of oil in the oil storage tanks
- 7.4 Clean concrete containment structure (assume 50 bbls of water used for cleaning)
- 7.5 Haul cleaning water to an offsite injection well

- 7.6** Demolish/salvage storage tanks
- 7.7** Demolish concrete containment area (202 cy of rubble generated)
- 7.8** Concrete rubble (202 cy) will be hauled to an offsite disposal facility
- 7.9** Haul in soil fill material, backfill containment area and level site (200 cy)

8. SWD Pumping Station

The following closure activities will be required:

- 8.1** Remove/salvage pumps, equipment, canopy, etc.
- 8.2** Demolish concrete foundation (68 cy of rubble generated)
- 8.3** Concrete rubble (68 cy) will be hauled to an offsite disposal facility
- 8.4** Haul in soil fill material, backfill foundation area and level site (16 cy)

9. Pump Pad

The following closure activities will be required:

- 9.1** Remove and salvage pumps and equipment
- 9.2** Clean concrete foundation (assume 5 bbls of water used for cleaning)
- 9.3** Haul cleaning water to an offsite injection well
- 9.4** Demolish concrete foundation (025 cy of rubble generated)
- 9.5** Concrete rubble (025 cy) will be hauled to an offsite disposal facility
- 9.6** Haul in soil fill material, backfill foundation area and level site (39 cy)

10. Solids Handling Area

The following closure activities will be required:

- 10.1** Remove 277 cy of material and haul to an offsite disposal facility
- 10.2** Clean concrete structure (assume 60 bbls of water used for cleaning)
- 10.3** Haul cleaning water to an offsite injection well
- 10.4** Demolish concrete foundation (122 cy of rubble generated)
- 10.5** Concrete rubble (122 cy) will be hauled to an offsite disposal facility
- 10.6** Haul in soil fill material, backfill foundation area and level site (149 cy)

11. Miscellaneous Facility Structures, Paving and Utilities

The following closure activities will be required:

- 11.1** Remove portable 500 gallon double contained diesel storage tank
- 11.2** Vegetation/Seeding and Watering

Total Closure Cost: \$ 332,783