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REPORTS

DATE:

11/15/2005

IR 454

November 15, 2005

Mr. Jack Ford
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Subject: **Request for Closure Work Plan Approval**
BP Pipelines, NA - Denton Gathering System Release
Section 11 - Township 15S - Range 37E
Lea County, New Mexico

Dear Mr. Ford:

On behalf of Atlantic Richfield, Delta Environmental Consultants, Inc. (Delta) is pleased to submit this closure plan for your approval. This correspondence provides three scenarios that, based on previous conversations, may be used to complete on-site activities at the above-referenced site. This is predicated on the meeting that we had on June 27, 2005, your email dated August 24, 2005, and the telephone conference that took place on October 21, 2005.

As discussed previously, confirmation sample results collected from the side walls and bottom of the remedial excavation indicate that soils affected with hydrocarbon concentrations above 10 mg/kg benzene, 50 mg/kg total BTEX and 100 mg/kg TPH have been removed from the release area. These soils are stockpiled on-site. The aforementioned meets the recommended remediation corrective action as described in the New Mexico Oil Conservation Division (NMOCD) "Guidelines for Remediation of Spills, Leaks, and Releases" dated August 13, 1993, specifically Section VI, A, 1. Based on this information and previous communications, Atlantic Richfield understands that no additional soil assessment or excavation activities are warranted.

Laboratory analytical results indicate that no concentrations of petroleum hydrocarbons above New Mexico Water Quality Control Commission (NMWQCC) standard levels (as outlined in 20.6.2 NMAC, Subpart III, Section 3103) are present in the groundwater underlying the site. Based on previous communications, closure has been granted for the groundwater phase of the remediation process.

With the above soil and groundwater remediation/assessment phases complete, only the closure work plan (e.g., the backfilling of the excavation) remains an issue. The

following three closure plan scenarios are provided for your review. Atlantic Richfield requests, in advance of initiating any site closure activities, that any of the three scenarios is acceptable to the NMOCD.

Closure Work Plans

Atlantic Richfield requests NMOCD approval of the following site closure work plans, which are in accordance with Section VI, A, 2, b, i, of the NMOCD "Guidelines for Remediation of Spills, Leaks, and Releases" dated August 13, 1993.

The proper plugging and abandoning of the on-site monitor wells MW-1, MW-2, MW-3 and MW-4 will be completed prior to initiating any of the three closure plan scenarios. The P&A activities will be performed in accordance with applicable federal, state, or local requirements.

Site activities will be conducted in accordance with Occupational Safety and Health Administration (OSHA) excavation standards (29 CFR 1926) and other applicable federal, state, or local requirements. All work will be conducted under a site-specific Health and Safety Plan (HASP) that addresses the physical, process and chemical hazards that may be encountered and outline the emergency procedures for the project team.

The site closure objectives are based on current and anticipated future land use and are consistent with current land use.

Scenario 1 – Off-Site Disposal of Impacted Soil

The site activities will consist of the following:

1. The soils stockpiled on-site, identified as North Stockpile, East Stockpile and West Stockpile, totaling approximately 5,000 cubic yards, will be transported off-site and properly disposed.
2. The excavation will then be backfilled with clean material. Backfill placed in the excavation shall be compacted by construction equipment in lifts not to exceed one foot.
3. A minimum of 6 inches to one foot of topsoil will be obtained and used to cover the excavation area.
4. The excavation will be "slightly crowned" to allow for subsequent settling of the backfilled soil.

Scenario 2 – Liner System – Partial Backfill of Impacted Soils

The site activities will consist of the following:

1. The soils identified as North Stockpile, totaling approximately 2,000 cubic yards, will be transported off-site and properly disposed at a permitted facility.
2. To provide an impermeable lower barrier, a minimum of a 20-mil poly-liner will be used to line the bottom and sides of the excavation. An approximate 6-inch to 1-foot layer of sand will be placed below and above the poly-liner to prevent tears or punctures.

3. The excavation will then be backfilled with the remaining stockpiled soils (East Stockpile (1,000 cubic yards) and West Stockpile (2,000 cubic yards)); the least impacted soils (West Stockpile) will be utilized in the lower lifts. Backfill placed in the excavation shall be compacted by construction equipment in lifts not to exceed one foot. Refer to the attached proposed cross section of backfill layers.
4. The poly-liner will be folded over the backfilled soils, and a minimum 1-foot layer of clay (red bed) will be added, compacted and crowned.
5. Above that to the surface will be placed clean material.
6. A minimum of 6 inches to one foot of topsoil will be obtained and used to cover the excavation area.
7. The excavation will be "slightly crowned" to allow for subsequent settling of the backfilled soil.

Scenario 3 – Landfarm Below 100 mg/Kg/Backfill of All Soils

The site activities will consist of the following:

1. The soils identified as North Stockpile, East Stockpile and West Stockpile, totaling approximately 5,000 cubic yards, will be spread along the pipeline right-of-way (ROW) in lifts not to exceed one foot. A rock crusher/pulveriser may be utilized to ensure equal sizing/aeration of impacted soils.
2. The impacted soils will be periodically tilled with a tractor fitted with a disc implement to aerate the soils. Fertilizer (30-0-0) may be added to the soils and hydrated to enhance biodegradation.
3. Soil samples will be periodically field screened with a photoionization detector (PID) to monitor the reduction of petroleum hydrocarbon concentrations.
4. Once laboratory analytical results indicate that TPH concentrations (using Method identified in the confirmation samples are below 100 mg/Kg, the material will be utilized to backfill the excavation.
5. Backfill placed in the excavation shall be compacted by construction equipment in lifts not to exceed one foot.
6. A minimum of 6 inches to one foot of topsoil will be obtained and used to cover the excavation area.
7. The excavation will be "slightly crowned" to allow for subsequent settling of the backfilled soil.

As stated above, Atlantic Richfield requests a letter from your office that indicates your agreement that:

- No further soil assessment/excavation;
- No further groundwater assessment is required;
- The on-site monitor wells can be properly plugged and abandoned, in advance of initiating final closure activities; and,
- The three proposed closure work plans are acceptable.

We appreciate your time and consideration. If you have any questions please call me at 972-416-7171 or email me at mhenn@deltaenv.com. You can also contact Mike Whelan with Atlantic Richfield at (281) 366-7485 / whelamr@bp.com.

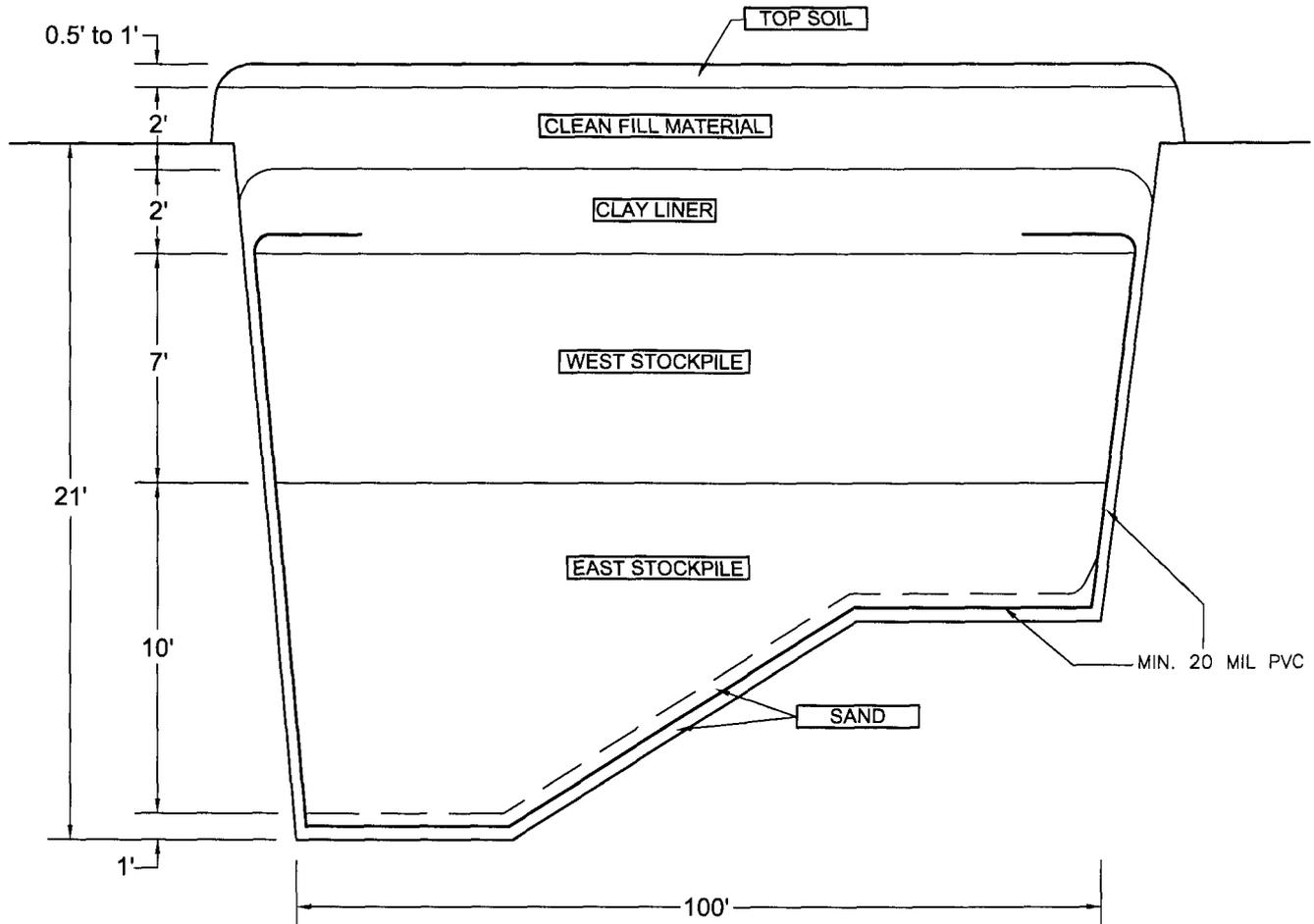
Respectfully,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Michael Henn
Project Manager

Attachment – Cross Section of Backfill Layers

cc: Mike Whelan – Atlantic Richfield
Jim Lucari – BP Legal



CAPACITIES

| | | | |
|---------------------|-------|-------|------------------|
| TOP SOIL | | 300 | YD. ³ |
| CLEAN FILL MATERIAL | | 1,500 | YD. ³ |
| CLAY LINER | | 500 | YD. ³ |
| WEST STOCKPILE | | 2,000 | YD. ³ |
| EAST STOCKPILE | | 1,000 | YD. ³ |
| SAND | | 150 | YD. ³ |

NOTES:

- 1.) CAPACITIES ARE APPROXIMATE.
- 2.) DRAWING NOT TO SCALE.

FIGURE
STOCKPILE SAMPLING CROSS SECTION
BP PIPELINES (NORTH AMERICA)
DENTON GATHERING
LOVINGTON, NEW MEXICO

| | | |
|----------------------|-------------------|------------------------|
| PROJECT NO. G09RT | PREPARED BY MH | DRAWN BY DD |
| DATE 11/10/05 | REVIEWED BY | FILE NAME G09RT-Sec |

