



Electronic Correspondence

April 26, 2012

Mr. Mike Bratcher
State of New Mexico
Oil Conservation Division
811 S. 1st Street
Artesia, NM 88210
mike.bratcher@state.nm.us

Re: Corrective Action Plan Amendment
LINN Energy, Skelly Unit-Produced Water Tank – LC 029419-A
Legal: Unit A, Sec. 22, T17S, R31E, Eddy County, NM
Lat-Long: 32.82668N – 103.85056W
Event No. (BLM): NU12095TG

Dear Mike:

Etech Environmental & Safety Solutions, Inc. (Etech) submits the following amended corrective action plan on the aforementioned site for your review and approval.

Current Project Status

1. The status of the remediation of the site to date is as follows:
2. The impacted area (approximately 80' by 30') has been excavated to a depth of 6 feet vertical.
3. Numerous lines have been encountered within the confines of the excavation including a 6" high pressure line, 4" steel line, 8" poly line and a 8" inch steel line. The lines traverse through all parts of the excavation.
4. All side walls of the excavation below the regulatory threshold levels of 1,000 mg/kg with the exception of an area where the impacted soils run underneath production equipment that is in use.
5. The bottom of the excavation still has elevated levels of chlorides ranging from 1150 to 4880 mg/kg. A map showing the sample locations and analytical results along with a copy of the analysis is attached.
6. The presence of the lines has restricted further excavation due to safety concerns. Three (3) soils borings via hand auger were advanced within the bottom of the excavation to attempt to delineate the vertical extent of the impact. Refusal was

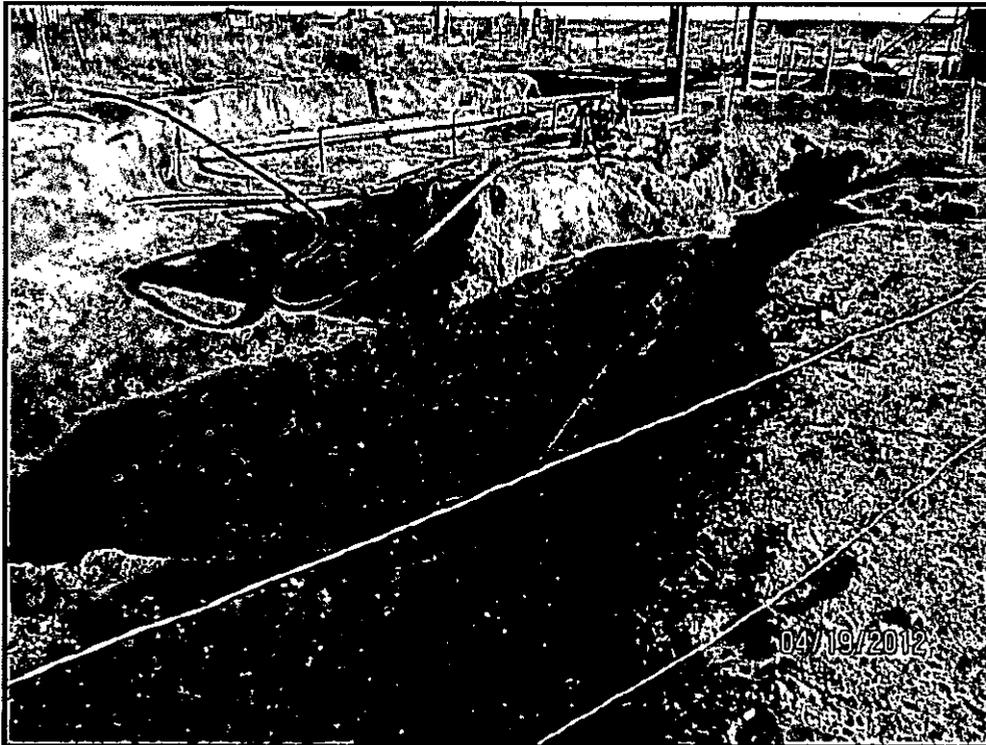
**Skelly A Water Tank
Corrective Action Plan Amendment
(Continued)**

encountered at 12' due to the presence of gravel. The chlorides were still above regulatory threshold levels. The results of the laboratory analysis of samples collected from the bottom of the soil borings are as follows:

ID	Cl (mg/kg)	ID	Cl (mg/kg)	ID	Cl (mg/kg)	ID	Cl (mg/kg)
SP1 -6-7'	1280	SP2 11-12'	3320	SP3 11-12'	3160	SP4 11-12'	3640

Field screening data using a YSI chloride probe and the laboratory analysis of the bottom of the soil borings is attached.

A photograph of the site is provided below:



Proposed Corrective Action

LINN is proposing an amendment to the corrective action to this site. The factors used to determine this corrective action include first the safety of all persons related to performing additional excavation within the site. In addition, based upon available data, groundwater in the area is believed to be in excess of 300 feet and the current depth of the excavation is of sufficient depth that vegetation should be able to be successfully established when the site

**Skelly A Water Tank
Corrective Action Plan Amendment
(Continued)**

restoration is complete. The corrective actions evaluated for the site (based upon the above) are presented as follows:

1. Backfill with clean compacted fill material to within 1.5 – 2 feet of surface then complete the backfill with compatible soil which is conducive to growing vegetation.
2. Apply a calcium amendment to the bottom of the excavation (gypsum) then backfill with clean compacted fill material to within 1.5 – 2 feet of surface then complete the backfill with compatible soil which is conducive to growing vegetation.
3. Irrigate the bottom of the excavation with freshwater until the chloride levels are under regulatory threshold levels for the bottom two feet of the excavation. This action was considered after reviewing the data associated with the Turner B Premier South Tank Battery Remediation where impacts within the bottom of the arroyo were effectively flushed vertically from the soils well below any established root zone. Once the irrigation is complete, the excavation will be backfilled with clean compacted fill material to within 1.5 – 2 feet of surface then complete the backfill with compatible soil which is conducive to growing vegetation.
4. Installation of a 20 mil polyethylene liner in the bottom of the excavation, then backfill with clean compacted fill material to within 1.5 – 2 feet of surface then complete the backfill with compatible soil which is conducive to growing vegetation.

After review of the above options, LINN believes that Option 2, utilizing the application of a calcium amendment to the bottom of the excavation (gypsum) then backfill with clean compacted fill material to within 1.5 – 2 feet of surface then complete the backfill with compatible soil which is conducive to growing vegetation. Using gypsum will effectively ensure that the any residual chlorides in the bottom of the excavation will migrate further vertically and not cause any adverse impact to the reclamation of the site.

As noted in the stipulations from the BLM, the reclamation of the site with regards to contouring and vegetation of the site will still apply.

Thank you for your assistance on this matter. Also, attached is the initial C-141 for your reference. Should you have any questions, require additional information, or have any additional stipulations for this site, please contact Mr. Ron Ragland at (575) 738-1739 (Office) or via email at RRagland@linnenergy.com or myself at (432) 563-2200 (office) or via email at fred@etechnv.com.

Respectfully:



Fred Holmes
Environmental Professional

cc: Terry Gregston, BLM Carlsbad District Office