CORAL PRODUCTION CORP.
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March 8, 2013

Mr. John Axelson, PG
Environmental Protection Specialist
Colorado Oil & Gas Conservation Commission
1120 Lincoln St., Suite 801
Denver, CO 80203

Re: Christiansen Remediation Workplan, Remediation Number 1761329;

Dear Mr. Axelson:

On behalf of Coral Production Corp., I am submitting the attached Remediation Workplan for Unexcavated Soils as required in the Administrative Order by Consent and Settlement Agreement, Docket Number 1108-OV-22.

As outlined in this workplan, Coral will provide an addendum for Phase III detailing the procedure for remediation of the stockpiled soil.

Should you have any questions or require further information please contact me at (303) 623-3573, extension 101.

Sincerely,

James C. Wieger,

Geologist and Environmental Coordinator

REMEDIATION WORKPLAN FOR UNEXCAVATED SOILS

Coral Production Corp., Christiansen Lease, Washington Co., CO
By
Jim Wieger, Coral Production and Paul B. Trost, MV-REGS
28 Feb 2013

INTRODUCTION

Coral Production has been diligently pursuing the delineation and removal of oily soils associated with the old skim pits. Previous work has included detailed sampling of the general skim pit area, excavation and stockpiling of approximately 6000 cy of oily soil for future remediation, and general surface cleanup of the area.

Past sampling has shown that additional oily soils are present to the west and south of the present excavated pit area; however these oily soils are located beneath both the operating water and production tanks. Thus the Administrative Order of Consent and Settlement Agreement (AOC) has stated that excavation of these soils supporting the existing water and production tanks can be postponed until operations cease at the lease. However delineation of the extent of these oily soils lying beneath the Water and Production tanks is required by the AOC. In addition sampling of certain areas within the excavated pit bottom has shown minor concentrations of residual oil impregnating the soil. Thus additional sampling will be required both within the pit bottom and around the water tanks and on the east side of the production tanks to define the vertical and lateral extent of unexcavated oily soils. Due to safety considerations the excavated pit on the west side of the former skim pits was backfilled with clean soil to ensure slope stability for the production tanks. This backfilled material will thus have to be removed, segregated from the main stockpiles, sampled, and then the pit bottom under this material can be further sampled and excavated from the pit bottom while simultaneously shoring up the face of the soil adjacent, and close, to the production tanks.

Delineation of the oily soil related to the skim pits will occur in two phases as outlined below.

The Work Plan for final Remediation of the Currently Stockpiled soils **plus** the future soils to be excavated in the pit bottom after sampling results have outlined the vertical and horizontal extent of the contamination is also included per direction of the AOC.

WORKPLAN FOR DELINEATION OF EXTENT OF OILY SOIL CONTAMINATION UNDER WATER AND PRODUCTION TANKS

PHASE I Horizontal and Vertical Delineation of oily soils under Water Tanks and East side of Production Tanks

Sampling shall consist of utilization of a Geoprobe to determine both the horizontal and vertical extent of the oily soils located under the Water Tanks wherein such oily soil contamination is directly related to the Skim Pit source. No GeoProbe sampling will occur to the north of the Water Tanks in the narrow zone between said tanks and the pit wall due to safety considerations of possible pit wall failure with heavy equipment operating in this narrow region. (Please refer to Figure 1). However horizontal sampling, using a handheld auger, equipped to probe up to 6 ft. horizontally will occur in this zone from the pit wall to the north edge of the Water Tanks. Recovered samples will be only visually evaluated for oily soil contamination. GeoProbe sampling to the south of the Water Tanks will serve as the confirmatory defining soil contamination. GeoProbe samples, on 5 ft. intervals vertically, and 15 ft. intervals horizontally, located immediately south of the Water Tanks burm, will then be completed. If visual contamination is observed during execution of the GeoProbe sampling, a second series of GeoProbe sampling will occur ~5 ft. (to be field determined) further south of the Water Tanks. Such step out sampling shall continue until no visual contamination has been observed. To facilitate field decisions, GeoProbe recovered samples shall be tested on site immediately with a solvent (hexane) to test in a semi quantitative

approach using coloration in the solvent (hexane) to facilitate field sampling sites. All extracted soils and hexane will of course be removed and properly disposed of after testing. In addition composite 5 ft. vertical samples will be sent to an approved lab for analysis by EPA method 8015C, which method is consistent with previous sampling and analysis.

Phase II Horizontal and Vertical Sampling Delineation of Residual Unexcavated Soils Lying Under the Clean Backfilled Area (for slope stability safety considerations)

As previously stated a portion of the west side of the skim pits was backfilled with clean soil to prevent slope failure and damage to the existing production tanks. At the time of initiation of remediation activities, and when earth moving equipment is present on site, the backfilled clean soil will be removed from the west side of the skim pits, and stockpiled on an impermeable membrane separated from the main existing stockpiled soil. Sampling of this segregated soil will also occur to ensure no oily contamination has been incorporated into this segregated material. Any contaminated material will be added to the main existing stockpiled soils. After excavation of the clean backfilled soils, a handheld auger capable of 6 ft. of penetration will be utilized to define the vertical extent of contamination in the pit floor. In addition shoring of the near vertical slope under the production tanks will occur for safety considerations. Areas of oily contamination will then be removed and placed on the main stockpile for future remediation/disposal. Additionally the 6ft hand auger will be used to determine the extent of contamination under the production tanks on the west wall of the former skim pits. All samples will be tested in the same manner as described in Phase 1 above. After such removal of the contaminated soil, the west area of the skim pits will be immediately backfilled with clean soil, however a vertical impermeable barrier will be first placed to differentiate the clean backfilled soils from the oily soil under the production tanks.

Phase III Remediation of All Stockpiled Soils and Future Pit Utilization

J. Wieger to complete in accordance with consent plan and landowner for pit backfilling and/or stock tank usage.