



COLORADO

Oil & Gas Conservation
Commission

Department of Natural Resources

1120 Lincoln Street, Suite 801
Denver, CO 80203



01761421

Conditions of Approval

January 28, 2015

CM Production, LLC - Operator #10352

SJ Warren #1, API #121-07034

Remediation Project #8179

Supplemental Soil Remediation Work Plan - Submitted October 2014

The Supplemental Soil Remediation Work Plan for Land Treatment of Oily Waste is approved with the following conditions:

1. Land Treatment of oily waste shall be performed in strict accordance with the requirements of COGCC Rule 907.e.(2).
2. At a minimum, collect soil samples from the proposed treatment areas twice per year to establish rate of biodegradation. Samples shall be collected consistently from the same approximate locations during each sampling event.
 - a. One sample shall be collected to represent each 100 cubic yards of soil being treated. A grid shall be established over the treatment area to represent 100 cubic yard volumes based on surface area and thickness of treated material.
 - b. Progress samples shall be analyzed for Total Petroleum Hydrocarbons (TPH) - gasoline range organics (GRO) and diesel range organics (DRO).
 - c. Final confirmation samples prior to reuse of the material shall be analyzed for TPH - GRO & DRO, Polycyclic Aromatic Hydrocarbons (PAH), Electrical Conductivity (EC), pH, Sodium Adsorption Ratio (SAR).
 - d. If one or more of the inorganics EC, pH or SAR exceed Table 910-1 standards, CM will be required to provide a plan for prior COGCC approval to either bury the waste with at least 3-feet of clean fill or reuse it in another location outside of active agricultural areas. If buried off site, land owner permission is required.
3. Submit semi-annual progress reports no later than April 30th and October 31st each year of treatment. Include the following information in each progress report:
 - a. Dates and description of work performed such as aeration by tilling or addition of nutrients, microbes, water or other amendments.
 - b. Include types and volumes of nutrients, microbes or other amendments.

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Commissioners: Thomas L. Compton - Chairman, Richard Alward, John H. Benton, DeAnn Craig,
James W. Hawkins, Tommy Holton, Andrew L. Spielman, Mike King, Dr. Larry Wolk

John W. Hickenlooper, Governor | Mike King, Executive Director, DNR | Matthew J. Lepore, Director



- c. Provide sample results with sample location diagram, summary table of results compared to Table 910-1 standards and laboratory reports.
 - d. Failure to submit the semi-annual progress reports by the due dates will result in the requirement to immediately dispose all oily waste off site at an appropriate disposal facility.
- 4. Implement stormwater controls to prevent contamination of stormwater runoff.
- 5. Control weeds in the disturbed areas associated with the land treatment.
- 6. CM shall complete remediation within three years of the date of this conditional approval - by January 28, 2018. In the event any treated waste fails to meet Table 910-1 standards within three (3) years, it must be removed and disposed of at a commercial facility within 30 days. Disposal documentation must be received by COGCC within 15 days following disposal.
- 7. If waste fails to meet Table 910-1 standards and is removed from the location for disposal, the underlying soil must be sampled to verify compliance with Table 910-1 standards.
- 8. The offsite treatment location must be reclaimed in accordance with Rule 1004.c. final reclamation threshold within three (3) months after treatment or disposal of oily waste is completed.
 - a. Final reclamation shall include incorporation of treated waste or other proposed reuse, final contouring, seeding and weed control until vegetation complies with the threshold for release.
- 9. To meet closure criteria for the remediation, submit a final report with a closure request and request for inspection once all confirmation samples comply with Table 910-1 standards. Final closure request shall be made no later than January 28, 2018.