



## COLORADO

Oil & Gas Conservation  
Commission

Department of Natural Resources

1120 Lincoln Street, Suite 801  
Denver, CO 80203



REM 8209

Document 2313779

### Conditions of Approval

January 28, 2015

CM Production, LLC - Operator #10352

Oliver Warren #1, API #121-07039

Remediation Project #8209

Supplemental Soil Remediation Work Plan - Submitted November 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 30<sup>th</sup> and October 31<sup>st</sup> 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.