

## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

Joanna Prukop Cabinet Secretary Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Mr. Dan Dolan Yates Petroleum Corporation 105 S 4<sup>th</sup> Street Artesia, NM 88210 December 5, 2005

## REMEDIATION WORK PLAN APPROVAL - FERGUSON IF NO. 1

The New Mexico Oil Conservation Division District 2 Office is in receipt of your letter dated 12-02-05 which provides an outline for work to remediate the release at the Ferguson IF No. 1 (30-015-22215).

Your proposed method of enhanced bioremediation (tilling and adding nitrate fertilizer and water to stimulate micro-organism growth to metabolize the organic compounds in the soil) is approved for this remediation under the following conditions:

- Because in-situ bioremediation is considered a long term remediation process, a quarterly report of activity associated with this project shall be submitted to the NMOCD District 2 Office until the remediation is completed. This report must contain:
  - o All work since last report including date of work, who performed the work, what work was performed, amount(s) of any additive(s) added to the soil including nutrients and water.
  - o Results of samples showing the level(s) of contaminants present and change since last report.
  - o First report must be submitted on March 1, 2005 and then every three months afterwards until site closure is approved.
- Aerobic conditions (sufficient oxygen in the soil to allow microorganism development) must be maintained
  throughout the contaminant impacted area. Tilling must be conducted to a depth that ensures contaminant and
  micro-organism contact and at a regular interval to ensure aerobic conditions are maintained.
- This methodology does not apply to chlorinated organics and inorganic salts because they are likely to be toxic to microorganisms. If high concentrations of chlorides (above background levels of the surrounding area) are found during remediation or if chlorides become present during the bioremediation process then an alternative remediation proposal must be submitted to the NMOCD District 2 Office.
- Contaminated soils requiring remediation should be remediated so that residual contaminant concentrations are
  below the recommended soil remediation action level. If soil action levels cannot practicably be attained, a detailed
  evaluation of risk may be performed and provided in writing to OCD for approval showing that the remaining
  contaminants will not pose a threat to present or foreseeable beneficial use of fresh water, public health and the
  environment.
- If alternate methods of remediation are to be used, prior approval from the OCD District 2 Office is required prior to beginning any work using these alternate methods. A specific proposal outlining the alternate methods must be submitted in writing.
- If ground water is encountered during the soil/waste characterization, excavation or remediation of the impacted soils, a sample should be obtained to assess the incidents potential impact on ground water quality and the OCD District 2 Office should be notified immediately.

- Notify OCD District 2 Office 24 hours prior to commencement of operations.
- Notify OCD District 2 Office 24 hours prior to obtaining samples where analysis of samples will be submitted to OCD.
- Upon termination of any required remedial actions, the area of a leak, spill or release may be closed, after obtaining approval for the closure from the OCD District 2 office, by backfilling any excavated areas, contouring to provide drainage, revegetating the area or other OCD approved methods. Upon completion of remedial activities a final report summarizing all actions taken to mitigate environmental damage related to the leak, spill or release will be provided to OCD for approval.
- For all Federal Lease wells, a "Like Approval" by the United States Bureau of Land Management may be required. It is the operators responsibility to obtain this approval and the approval of any other surface owner that may be required by law, regulation or contractual obligation of the operator and surface owner.

Further discussion of remediation techniques, site ranking criteria, remediation action levels and alternative methods for remediation may be found on our website. You are encouraged to use the OCD publication entitled "Remediation of Leaks, Spills and Releases" as a guide during your remediation of this location. This guide may be found on our web site at: http://www.emnrd.state.nm.us/emnrd/ocd/EH-MiscGuidelines.htm.

Acceptance of the remediation work plan does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of reports and work plans does not relieve the operator of responsibility for compliance with any other federal, state or local laws and/or regulations.

NMOCD District 2 Contact Person: Chris Beadle, Office: (505) 748-1283 x107 / Cell: (505) 626-0831 / Fax: (505) 748-9720 / E-mail: Chris.Beadle@state.nm.us

Thank you for your prompt attention to this matter and your efforts in helping to protect our environment and the infrastructure of the oil and gas industry.

Sincerely.

Artesia OCD District Office

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105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (505) 748-1471

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12-02-05 Chris Beadle NM Oil Conservation Division 1300 W. Grand Artesia NM 88210

RE: Ferguson 1F #1, API #30-015-22215

Mr. Beadle;

The contamination noted by you is being worked on at this time, Mr. Stubblefield requested a contractor to roto-till the area of concern, and mix in nitrate fertilizer. This will continue till the TPH levels are at or below 1000ppm as required in Rule 116. The area will have moisture added to aid in the bio-remediation process as needed, and intermediate sampling will be done to check the progress.

If any changes in method are required, you will be notified and your approval will be sought before changes are made.

The rankings for this location are as follows, Depth to ground water-10, Wellhead protection area-0, Distance to surface water-0.

These rankings were obtained from the State Engineers Water Site.

You will be notified 24hrs prior to any sampling for closure on this location, and the final samples will be sent to an independent lab.

If I may be of further assistance, please contact me at 748-4181

Dan Dolan

Environmental Regulatory Agent