



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

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**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 - MALLARD HM NO. 2

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 Mallard HM No. 2 (30-015-22052).

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:
  - 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.
  - Results of samples showing the level(s) of contaminants present and change since last report.
  - 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.
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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](mailto: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

MARTIN YATES, III  
1912 - 1985  
FRANK W. YATES  
1936 - 1986



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

**RE: Mallard HM #2, API #30-015-22052**

Mr. Beadle;

The areas around this tank battery that you noted are being corrected, the leak in the gun barrel has been repaired, and Mr. Stubblefield called for a contractor to roto-till the contaminated soil with a mixture of nitrate fertilizer. This process will be continued till TPH levels are at or below 1000ppm. The Ranking for this location is as follows, Depth to ground water-10, Wellhead protection area-0, distance to surface water-0, a preliminary test for BTEX was done by Mr. Stubblefield with a PID as required in rule 116, and showed a reading of 0ppm.

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

The work on this location was due to start on 11-14-05, and will continue till all requirements are met. Moisture will be added to this location to aid the bio-remediation process, and intermediate samples will be taken to judge the progress and make any adjustments if needed. Any changes that are made will be communicated to you to keep you informed.

Please call for more information if needed 748-4181.

Dan Dolan  
Environmental Regulatory Agent