



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

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**Oil Conservation Division**

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February 8, 2006

**REMEDICATION WORK PLANS –**  
Red Twelve State No. 4 (30-015-24991)  
Red State No. 1 (30-015-24855)  
Diamond State No. 2 (30-015-24760)

Mr. Wellbom,

The NMOCD District 2 Office has received your work plans for the above listed wells. Further information is requested on your remediation method for these locations. Please provide the following information prior to February 24, 2006:

1. Each of the remediation work plans states that the contaminated soils are to be remediated in-situ and are to be excavated, aerated and replaced.
  - a. In-situ is generally accepted to mean left in place and not excavated. If soils are to be left in place, unexcavated, how is the soil to be aerated and how often is aeration to occur? Also, how is full vertical and horizontal delineation to be accomplished for unexcavated soils?
  - b. If soils are to be excavated will the soils be placed on plastic or another impermeable liner and inside a bermed area during aeration to prevent leaching of the contaminants into the underlying soils? If yes, how will you ensure your aeration technique does not breach the liner?
  - c. Extremely low soil moisture content may limit biodegradation; will nutrients or moisture be added to the soils during aeration? If yes, what type, amount and frequency?
2. Since chlorides are not aerobically degradable organic compounds and can be toxic to microbes used during in-situ remediation and bioremediation of hydrocarbons, how will chloride contaminated soils be treated?
3. Since in-situ remediation and aerobic bioremediation (soil aeration to promote micro-organism development in order to degrade organic contaminants) is considered a long-term technology, what procedures are proposed to monitor any excavated materials during the remediation?

NMOCD District 2 Contact Person:

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Please feel free to contact me if I can be of further assistance.

Artesia OCD District Office