



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**MARY E. JOHNSON**

Governor

**Betty Rivera**

Cabinet Secretary

**Lori Wrotenberg**

Director

Oil Conservation Division

April 25, 2002

**CERTIFIED MAIL**

**RETURN RECEIPT NO: 7001-1940-0004-3929-7235**

Mr. Robert C. Lang IV  
Chaparral Energy, Inc.  
701 Cedar Lake Blvd.  
Oklahoma City, Oklahoma 73114-7806

**RE: STAGE 1 ABATEMENT PLAN PROPOSAL (AP-18)  
SOUTH LANGLIE JAL UNIT  
JAL, NEW MEXICO**

Dear Mr. Lang:

The New Mexico Oil Conservation Division (OCD) has completed a review of the following Chaparral Energy, Inc. (Chaparral) documents:

- April 12, 2002 "STAGE 1 ABATEMENT PLAN PROPOSAL (AP-18), SOUTH LANGLIE JAL UNIT, JAL, NEW MEXICO".
- February 28, 2002 correspondence titled "STAGE 1 ABATEMENT PLAN, FOR THE SOUTH LANGLIE JAL UNIT CONSISTING OF PORTIONS OF SECTIONS 7, 8, 17 & 18, TOWNSHIP 25 SOUTH - RANGE 37 EAST, LEA COUNTY, NEW MEXICO" and accompanying February 2, 2002 "STAGE 1 ABATEMENT PLAN FOR THE SOUTH LANGLIE JAL UNIT CONSISTING OF PORTIONS OF SECTIONS 7, 8, 17 & 18, TOWNSHIP 25 SOUTH - RANGE 37 EAST, LEA COUNTY, NEW MEXICO".

The above documents contain Chaparral's amended proposed Stage 1 abatement plan for investigation of the extent of contamination related to Chaparral's South Langlie Jal Unit located in portions of Sections 7, 8, 17 and 18 of Township 25 South, Range 37 East, Lea County, New Mexico. These amended documents replace Chaparral's prior Stage 1 Abatement Plan Proposal for the South Langlie Jal Unit. The OCD has also reviewed a series of public comments and investigation documents related to Chaparral's Stage 1 investigation proposal.

OCD Exhibit No. 19

Case No. 13061

July 15, 2003 Sept 2, 2004

\* 1220 South St. Francis Drive \* Santa Fe, New Mexico 87505

\* Fax (505) 476-3462 \* <http://www.emnrd.state.nm.us>

The Stage 1 Abatement Plan Proposal, as contained in the above-referenced documents, is approved with the following conditions:

1. Chaparral shall investigate the extent of soil contamination at each of the sites identified in the amended Appendix F contained in Chaparral's April 12, 2002 correspondence.
2. In addition to the ground water monitoring wells proposed, Chaparral shall install ground water monitoring wells directly adjacent to and hydrologically downgradient of the following sites:
  - a. Winters "E" Tank Battery.
  - b. Winters "C" Tank Battery.
  - c. Gutman Lease Flare Pit.
  - d. The produced water release sites at the Injection Facility.
  - e. The source of the produced water pipeline leak between SLJU #9 and SLJU well #13.
  - f. At the site of temporary "Well #3" as shown on Appendix A.10 in Chaparral's February 2, 2002 "STAGE 1 ABATEMENT PLAN FOR THE SOUTH LANGLEIE JAL UNIT CONSISTING OF PORTIONS OF SECTIONS 7, 8, 17 & 18, TOWNSHIP 25 SOUTH - RANGE 37 EAST, LEA COUNTY, NEW MEXICO."
3. Chaparral shall complete all monitor wells as follows:
  - a. At least 15 feet of well screen shall be placed across the water table interface with at least 5 feet of well screen above the water table and 10 feet of well screen below the water table.
  - b. An appropriately sized gravel pack shall be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.
  - c. A 2-3 foot bentonite plug shall be placed above the gravel pack.
  - d. The remainder of the hole shall be grouted to the surface with cement containing 3-5% bentonite.
  - e. A concrete pad and locking well cover shall be placed around the well casing at the surface.
  - f. The well shall be developed after construction using EPA approved procedures.

4. No less than 24 hours after the wells are developed, ground water from all monitor wells shall be purged, sampled and analyzed for concentrations of benzene, toluene, ethylbenzene, xylene (BTEX), major cations and anions, total dissolved solids (TDS) and New Mexico Water Quality Control Commission (WQCC) metals using EPA approved methods and quality assurance/quality control (QA/QC) procedures.
5. Ground water samples from all pre-existing site monitor wells and private water wells within one mile and surface water samples from the small pond next to the Osborn's home shall be obtained and analyzed for concentrations of BTEX, major cations and anions, TDS and WQCC metals using EPA approved methods and QA/QC procedures.
6. All wastes generated shall be disposed of at an OCD approved facility.
7. A report on the investigations shall be submitted to the OCD Santa Fe Office by July 31, 2002 with a copy provided to the OCD Hobbs District Office. The report shall contain:
  - a. A description and discussion of all investigation actions and results as well as conclusions and recommendations.
  - b. Summary tables of all soil/waste and water quality sampling results including copies of laboratory analytical data sheets and associated QA/QC data.
  - c. Site maps showing the locations of all soil/waste sampling points, boreholes, monitor wells, ponds, private water wells with one mile of the unit and all relevant site features such as locations of all current and former production wells, injection wells, gathering systems, pipelines, tank batteries, disposal or storage pits and spill areas.
  - d. A ground water potentiometric map created using the water table elevations from all monitor wells and private wells within one mile of the site. The map will show the direction and magnitude of the hydraulic gradient.
  - e. Geologic/lithologic logs and well completion diagrams for each borehole and monitor well.
  - f. Soil and ground water isopleth maps for contaminants of concern such as BTEX, chloride, TDS and other significant contaminants found during the investigations.
  - g. A listing of all sites on the unit previously remediated under Chaparral's lease/well site cleanup program, a map showing their locations, a description of the cleanup activities which occurred, the nature of the remediation, and the results of all soil sampling conducted at the sites.
  - h. The disposition of all investigation derived wastes.
  - i. Any other information pertinent to the investigations.

8. The OCD defers comment on the proposed long term ground water monitoring program until the OCD has an opportunity to review an investigation report on the site.
9. Chaparral shall notify the OCD at least 24 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not limit Chaparral to the proposed work plan should the investigation actions fail to adequately define the extent of contamination, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve Chaparral of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact Bill Olson at (505) 476-3491.

Sincerely,



Roger C. Anderson  
Environmental Bureau Chief

RCA/wco

cc: Chris Williams, OCD Hobbs District Office  
Mary C. Claiborne, Mayor, City of Jal  
Clay Osborn  
Carroll H. Leavell  
Darrell E. Bailey  
Darrold E. Stephenson & JoAn R. Stephenson