

PROGRESS REPORT

April 2010

INTERIM GROUNDWATER/AQUIFER POLLUTION PREVENTION, MITIGATION AND MONITORING PLAN

**PINEDALE ANTICLINE OIL AND GAS EXPLORATION AND DEVELOPMENT PROJECT
SUBLETTE COUNTY, WYOMING**

PROGRESS MADE SINCE LAST REPORTING PERIOD

Planning Documents, Budgeting, Meetings and Management

- Prepared for held project status meeting with USQ, BLM, EPA and DEQ in Cheyenne, Wyoming on March 10, 2010.
- Provided project status update to the PAWG Water Resources Task Group in Pinedale, Wyoming on March 30, 2010.
- Provided project status updates and maintained project communication/coordination with representatives of SCCD, USQ, DEQ and BLM.

Initial Vulnerability Assessment, Credible/Suitable Well Determination and Monitoring Program Augmentation

- No activity.

Hydrogeologic Data Gaps Study

- Revised study well drilling procedure to address handling and disposition of drill cuttings and discharge water and issued procedure to BLM for review and approval.
- Amended sundry notices for study wells on BLM-leased drilling pad locations (T-1, T-3 and T-4).
- Addressed the SEO's concerns related to sage grouse for study well site T-5.
- Continued attempts to obtain private property access permission for piezometer and well locations along the New Fork, Boulder and Green rivers.
- Prepared forms for USQ submittal to obtain BLM permission for exceptions to wildlife stipulations.
- Prepared and issued study well drilling/installation and piezometer installation bid packages to various contractors.
- Selected and subcontracted with Thomas Drilling, Afton, Wyoming, for study well drilling/installation services.
- Selected and subcontracted with EarthProbe Environmental Field Services, Bountiful, Utah for piezometer installations.
- Made arrangements for Contractor Orientation training for subcontractor and AMEC Geomatrix field personnel.
- Developed individual well site inspection form/punch list, updated health and safety plan and job safety analysis forms, and prepared equipment/supplies for field studies.

Low Level Petroleum Hydrocarbon Source Evaluation

- No activity.

Oil and Gas Industry Best Management Practices Evaluation and Mitigation Review

- Reviewed available, public domain sources for information on oil and gas best management practices (BMPs) for minimizing releases and impacts to environment.
- Conducted interviews with environmental and operations personnel at Ultra, Shell, and Questar.
- Completed field reconnaissance of USQ and minor operator sites and operations in the PAPA to help validate current practices.
- Prepared draft matrices for review during joint meeting with USQ and BDE in Cheyenne showing current operator practices for mitigating potential sources of impacts to surface and groundwater.
- Reviewed regulatory requirements affecting operator practices for inclusion in matrices.

HEALTH AND SAFETY

- No issues.

ISSUES AND PROPOSED RESOLUTIONS

- **Piezometer and Study Wells in River Corridors** – permission to access private property was gained from four landowners representing three of the seven stream valley locations. Due to the passing of one landowner who provided access, family members are reconsidering our access request. AMEC Geomatrix is working on the following:
 - X-2 piezometer and well site (alternate sites)
 - Upstream alternative location – Questar property in Section 15 (would allow access to east side of New Fork River [NFR] only) or
 - Downstream alternative location – State land in Section 36; possible access to east and west sides of NFR.
 - X-3 piezometer sites
 - Swift Rev. Trust along Boulder Creek and east side of NFR (waiting on reconsideration) or
 - Highway 191 state right-of-way
 - X-3 study well site (alternate site)
 - BLM land on west side of NFR (will submit ROW grant)
 - T-8 study well site (alternate site)
 - Still working to obtain permission from the Richie family
 - X-5 piezometer and well site, east side of NFR
 - Still trying to obtain permission from sellers of Wyoming 3 Bar ranch, or
 - State land in Sections 22/23
 - X-7 piezometers and study wells
 - State fishing access site in Section 15, or
 - BLM land in Section 15

- **Drilling/Well Installation Program** – AMEC Geomatrix intends to initiate piezometer installation on May 11 at as many locations where permissions/permits have been received. Likewise, rotary drilling is scheduled to begin the week of May 10. We intend to begin installations on drill pads, with the first being the Jensen 11-11 pad on private land.
- **SCCD Data for 2009** – We are attempting to obtain SCCD's database for July 31-December 31, 2009. Once received, we will update the geodatabase through 2009. Please note that none of SCCD's data in the geodatabase has been validated.
- **Change in Pinedale Field Office Local Contact** – We understand that Merry Gamper will remain the BLM lead for the Interim Plan, even when at her new position with BLM in Cheyenne. Merry indicated that NRS Kyle Schumacher will be AMEC Geomatrix's local BLM contact.

ANTICIPATED ACTIVITIES FOR NEXT REPORTING PERIOD

- The final draft version of the BMP matrix (e.g., updated "Rainbow Matrix") and recommended additional mitigation measures will be issued to USQ for review in May.
- The draft Sampling and Analysis Plan for the Low Level Petroleum Hydrocarbon Source Investigation will be issued to USQ in May.
- Piezometers and study well installation will be ongoing.
- Continued efforts to secure property access for study wells and piezometers.

SCHEDULE STATUS

- Relative to the schedule presented to USQ and the BDE in March 2010 and for reasons indicated above, the schedule for piezometer and well installations was modified to begin the week of May 10th.

DELIVERABLE STATUS

- Various project summaries were provided to USQ, BDE and the PAWG water resource task group during March 2010 meetings. These included: Updated project flow diagram, task status, updated project schedule, updated proposed well/piezometer location map, updated summaries of permitting status and private landowner permission status, and a draft of the BMP matrix.

STAFFING CHANGES

- Dale Holman, AMEC hydrogeologist, is working with Kevin Van Hook on the BMP matrix. Tom McManus, an AMEC hydrogeologist, will be the field manager overseeing piezometer and well installations. Hydrogeologist Beth Johnson of AMEC will be participating in the low level petroleum hydrocarbon source investigation.