

SCOPING NOTICE
for
Elk Petroleum, Inc.
GRIEVE UNIT CO₂ ENHANCED OIL RECOVERY PROJECT

Bureau of Land Management
Lander Field Office
October 2011

Background

Elk Petroleum, Inc. (Elk) operator of the existing Grieve Unit in central Wyoming submitted a proposal for enhanced oil recovery (EOR) of existing oil field to the Bureau of Land Management (BLM), Lander Field Office. Elk proposes inject of CO₂ and water in the oil bearing zones to increase the amount of recoverable crude oil compared to the current primary recovery of this aging oil field. The EOR is expected to extend the field's productive life while sequestering CO₂ gas. This notice is to inform the public that BLM Lander Field Office will prepare an Environmental Assessment (EA) for this proposed project.

The proposed project is located approximately 53 miles west of Casper in western Natrona County, Wyoming, and within the administrative boundary of the BLM's Lander Field Office. The Grieve Unit comprises approximately 2280 acres of State, Fee and Federal minerals and surface lands within the boundary of the Unit. Approximately 77% of the surface and minerals are administrated by BLM and the remaining 22% are State and Fee holdings.

The Grieve Field began producing crude oil from the Cretaceous Muddy "Grieve Sand" in 1954. In this same year an exploratory agreement was approved and the field became known as the Grieve Unit. Initial developed and production was conventional until 1960 when production rates were enhanced through gas injection. In 1977, the reservoir was "blown down" as the natural gas and oil were depleted. Today, production continues at low rates with only two wells producing. The last well drilled in the unit was in 2009 and it was eventually shut-in.

Description of Proposed Project

Elk proposes to develop an EOR project consisting of the following operations and maintenance activities:

1. Install a CO₂ underground pipeline and meter station,
2. Install an overhead 25 kV three-phase distribution line,
3. Install and overhead 230 kV transmission line,
4. Head Switch Yard,
5. Drill 2 new crude oil producing wells,
6. Drill 8 new alternating CO₂ injection and water disposal wells(2 of these wells are on private or state lands within the Unit),

7. Convert 4 Production wells to CO₂ injection or water disposal wells
8. Install new unit underground gas gathering and distribution lines,
9. Install new underground water disposal line
10. Upgrade and construct new access roads

The proposed number, spacing, and arrangement of the wells are designed to provide maximum recovery of crude oil remaining in place in the unit. Downhole modifications to the existing wells would be permitted through the Sundry Notice process under to BLM regulations. New wells would be permitted through the Application for Permit to Drill process under BLM regulations. For injection wells, Elk would be required to obtain an Underground Injection Control (UIC) permit from the State of Wyoming.

The production infrastructure would include a combination of entrenched CO₂ and water distribution and crude oil gathering lines running either parallel to project roads or the most direct cross country route. Centralized gathering, production, metering and compression facilities will be located at the site of the existing unit facilities.

The overhead 25 kV three-phase distribution line would connect the meter station, located at the tie-in point of the Anadarko CO₂ line and the proposed Grieve Unit CO₂ pipeline, to the field central facility. The proposed power transmission line, connecting the in-field central facility to the WAPA system, would be an overhead, H-brace structured, 230 kV line. A Head Switch yard would be constructed near this connect with the WAPA system.

The project construction activities would begin with the installation of the CO₂ line and meter station, drilling of new wells and the installation of the overhead power distribution line to the CO₂ pipeline tie-in point meter station. The overhead power transmission line would be the final feature completed on the project.

It is anticipated that injection and production will not require enhanced compression or recovery units. However, in the event mechanical injection or production units are needed the existing overhead power system will be used. Additions to the existing in-field power will be underground, where technically feasible.

The crude oil produced from the proposed project would be transported to a Casper area crude oil terminal via the existing crude oil pipeline; this action would be approved through the Sundry Notice process and is not considered in the EA.

It is estimated that the four new well pads, access roads, CO₂ pipeline, power lines and all other new project facility disturbance would result in a potential maximum initial surface disturbance of approximately 160 acres. The construction of all aspects of the proposal is expected to last three to five years. All areas of new disturbance not needed for life of project operations will be reclaimed per BLM, or surface owner, specifications. Long term surface disturbance for the proposed project is estimated to be less than 20 acres.

IDENTIFIED RESOURCE MANAGEMENT ISSUES AND CONCERNS

The following issues and concerns have been identified. This list is not meant to be an all-inclusive list, but rather a starting point for further public input and a means of identifying the resource disciplines needed to conduct the analysis.

- Potential effects to wildlife habitat within the analysis area, including big game, raptors, sage grouse, white-tailed prairie dog, black-footed ferret, and mountain plover.
- Possible effects to listed, proposed, or threatened and endangered plant and animal species.
- Potential effects to wetlands and riparian habitat.
- Potential effects to cultural and historical values within the project area.
- Possible effects to surface and groundwater resources.
- Potential effects to air quality due to increased traffic, emissions, production activities and associated effects on existing county, state, and BLM roads.
- Consistency with the State of Wyoming commitment to CO₂ (Green House Gas) sequestration and enhanced recovery of oil from existing fields.
- Reclamation of disturbed areas and control of noxious weeds.
- Cumulative effects of the proposed project when combined with ongoing crude oil and natural gas drilling and development.
- Possible effects to rangelands.
- Possible effects to commercial outfitters use.
- Possible effects to recreational activities.
- Possible effects to visual resources.

PUBLIC INVOLVEMENT

Public input is important in establishing the level and scope of the analysis. The public is encouraged to participate throughout the environmental analysis process to help in identifying the level of analysis needed, alternatives to the proposed action, other issues or concerns that should be analyzed or mitigated, and any other comments or ideas to help ensure the completeness of the analysis process.

The BLM can best use comments and resource information if submitted before the close of the public scoping period (December 7, 2011 - January 13, 2012). Please submit written comments to:

Bureau of Land Management
Lander Field Office (c/o Chris Krassin)
1335 Main Street
Lander, WY 82520

Comments may also be submitted electronically to: lander_wymail@blm.gov

Please note that comments, names, email addresses, and street addresses of the respondents, will be available for public review and disclosure at

the above address during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays. Individual respondents may request confidentiality. If you wish to withhold your name, email address, or street address from public review or from disclosure under the Freedom of Information Act, you must state this plainly at the beginning of your comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

If you require additional information regarding this project, please contact Chris Krassin at the above email or street address or phone 307-332-8452.

Figure 1 - Proposed Grieve Unit CO2 Enhanced Oil Recovery Project

