

Informational Letter

IL 2002-1

January 18, 2002

To: All Oil, Gas, and Pipeline Operators¹

PRINCIPLES FOR MINIMIZING SURFACE DISTURBANCE IN NATIVE PRAIRIE AND PARKLAND AREAS

This Alberta Energy and Utilities Board (EUB) informational letter (IL) reflects a review of and supersedes *IL 96-9: Revised Guidelines for Minimizing Disturbance on Native Prairie Areas*. The review was undertaken by a team of representatives from government agencies having jurisdiction over petroleum industry activities as part of an ongoing process to monitor the effectiveness of the existing guidelines and to reflect continuing improvement in industry practices and understanding of native prairie and parkland environments.

In order to minimize disturbance in native prairie or parkland areas of Alberta (see map, Appendix 1), the following guiding principles apply:

- 1) **Industry should *avoid* disturbing native prairie.** This can often be done by using existing access or nonnative cover areas.
- 2) **If avoidance is not possible, disturbance should be *minimized*** to whatever degree is absolutely necessary for a project to be constructed or operated safely and successfully. Part of minimizing disturbance is the preparation of a best practices reclamation plan.
- 3) **Predevelopment planning and design must include analysis of needs to avoid or minimize disturbance to native prairie and parkland.** If properly done, such planning should help to minimize environmental impacts, reduce costs for site reclamation, and decrease the risk of incurring environmental liability. Both the construction and operations components of a project, as well as sound access and site management plans, should be carefully thought out and implemented to minimize disturbance. This should include contingency measures for unforeseen circumstances (e.g., blowout).

¹ Geophysical operations are administered through the Exploration Regulations under the authority of Alberta Sustainable Resource Development. This IL does not apply directly to geophysical operators; however, the guidelines *Petroleum Industry Activity in Native Prairie and Parkland Areas: Guidelines for Minimizing Surface Disturbance* (Native Prairie Guidelines Working Group, 2001), cited in this IL, provides practical best practices for geophysical operations in native prairie areas.

- 4) **Reduce overall effects.** The area and intensity of the overall footprint, including other phases of the project, should be minimized. This principle includes the avoidance of incremental environmental effects through coordination and cooperation with other native prairie users.
- 5) **A public consultation program appropriate to the scale of the project should be undertaken.** Information on public consultation programs is provided in *EUB Guide 56: Energy Development Application Guide*, available on the EUB Web site at www.eub.gov.ab.ca.
- 6) **Predevelopment site assessments of unique features (e.g., rare plants or plant communities, species of special concern, historical resources) improve potential to avoid or minimize disturbance of native prairie or parkland and should be conducted.** Services of qualified resource and reclamation specialists should be retained to assist in selecting suitable sites and routes, assessing environmental sensitivities, and developing protection and mitigation strategies.
- 7) **To expedite resolution of problems, qualified environmental specialists should be retained.** A qualified environmental specialist used to monitor construction and reclamation activities in areas of nonroutine activity can provide direction if problems arise and can complete any follow-up monitoring assessment programs specified by initial planning, regulatory agencies, land administrators, or landowners/occupants.
- 8) **Staff are an integral element of any plan to avoid or minimize disturbance of native prairie or parkland and should be well informed.** The proponent of a project should provide education and training regarding native prairie and parkland issues to staff involved in all phases of the project. It is the shared responsibility of everyone involved in a project to ensure that environmental protection values are well communicated, understood, and implemented.
- 9) **Developments should be located on lands that have been previously disturbed** or where long-term land-use commitment is less certain (e.g., tame pasture or cultivated lands) before selecting native prairie or parkland.
- 10) **Activities should be timed to minimize impacts.** Scheduling can address issues such as coordination with other land users, consideration of selected wildlife species, and optimal use of dry or frozen ground conditions.
- 11) **Disturbances must be reclaimed to an equivalent land capability (Environmental Protection and Enhancement Act, 1993).** This would be a comparable native prairie or parkland landscape, unless otherwise specified by the land administrator or landowner. It is recognized that time is an integral part of implementing this principle. The goal is to restore prairie ecosystem function as quickly as possible and to allow for the eventual restoration of the full range of biological structure and diversity.
- 12) **Wind and water erosion must be controlled to protect topsoil resources (Environmental Protection and Enhancement Act, 1993).** Erosion control measures

should be considered when establishing methods for construction, interim stabilization and reclamation, and final reclamation.

- 13) **Native plants should be used in reclamation plans where appropriate (Native Plant Revegetation Guidelines for Alberta, 2001).** Reclamation planners should select seed mixes and plant materials that allow the eventual re-establishment of the complete range of native species. To ensure compatibility with surrounding areas, available native plant materials adapted to local growing conditions may be required.
- 14) **Monitoring reclamation is critical to improved performance.** An effective monitoring program should be undertaken to ensure that reclamation objectives are met. Erosion control, revegetation success and sustainability, and weed control are considered key components of any monitoring program. Long-term monitoring of the revegetated areas should be conducted until the native species community has been established. If revegetation objectives are not being achieved within a reasonable time, the program should be evaluated and changed as necessary.

A set of guidelines entitled *Petroleum Industry Activity in Native Prairie and Parkland Areas: Guidelines for Minimizing Surface Disturbance* (Native Prairie Guidelines Working Group, 2001) recommends best practices for the petroleum industry and facilitates implementation of the principles described in this IL. The guidelines document can be found on the EUB Web site <www.eub.gov.ab.ca>.

A companion document, available from the Alberta Environment Information Centre, is *Prairie Oil and Gas: A Lighter Footprint* (Sinton, 2001). It complements the information provided in this IL and the guidelines.

The guiding principles of this IL and the best practices described in the guidelines apply to all disturbances associated with petroleum industry development (see footnote on page 1). Their **implementation is encouraged for development in native prairie and parkland areas on both public and private land.** Although the IL and guidelines were developed specifically for the petroleum industry, the principles and practices are applicable to any other activities proposed for an area of native prairie or parkland.

Direct any questions to Laura Roberts, Alberta Energy and Utilities Board, at (403) 297-7302.

References

Environmental Protection and Enhancement Act, 1993, Conservation and Reclamation Regulation 115/93. Available at <<http://www.gov.ab.ca/qp>>.

Native Plant Working Group, 2001, *Native Plant Revegetation Guidelines for Alberta*, H. Sinton, ed. (Edmonton: Alberta Agriculture, Food and Rural Development and Alberta Environment), 58 p.

Native Prairie Guidelines Working Group, 2001, *Petroleum Industry Activity in Native Prairie and Parkland Areas: Guidelines for Minimizing Surface Disturbance*. (Calgary: EUB), 38 p. Available from EUB Information Services (403-297-8190) or on the EUB Web site <www.eub.gov.ab.ca>.

Sinton, H. M., 2001, *Prairie Oil and Gas: A Lighter Footprint*. (Edmonton: Alberta Environment), ISBN 0-7785-177-X, 67 p. Available from Alberta Environment Information Centre, 9920-108 Street, Edmonton, Alberta T5K 2M4; phone: (780) 422-2079.

<Original signed by>

Morley Barrett
Assistant Deputy Minister
Fish and Wildlife Division
Alberta Sustainable Resource Development

<Original signed by>

Neil McCrank, Q.C.
Chairman
Alberta Energy and Utilities Board

<Original signed by>

Cliff Henderson
Acting Assistant Deputy Minister
Public Lands Division, and
Assistant Deputy Minister
Forest Protection Division
Alberta Sustainable Resource Development

<Original signed by>

Jay Slempp
Chairman
Special Areas Board

<Original signed by>

R. W. (Bob) Taylor
Assistant Deputy Minister
Oil Development Division, Alberta Energy

<Original signed by>

Doug Tupper
Assistant Deputy Minister
Environmental Assurance
Alberta Environment

Appendix 1 Map of Natural Regions in Prairie and Parkland Alberta

Native prairie is found largely in the Grassland and Parkland Natural Regions, as well as in the Montane Subregion of Alberta. Remnant sites occur elsewhere in the province. (For further information, see the Natural Regions map in *Native Plant Revegetation Guidelines for Alberta*, Native Plant Working Group, 2001, or on the Web at www.agric.gov.ab.ca/publiclands/nprg/index.html.)

Information on the amount of native vegetation in every quarter section of the Grassland Natural Region can be obtained on the Prairie Conservation Forum Web site www.albertpcf.ab.ca/background.htm.

NATURAL REGIONS IN PRAIRIE AND PARKLAND ALBERTA

GRASSLAND NATURAL REGION

-  Mixedgrass Subregion
-  Foothills Fescue Subregion
-  Northern Fescue Subregion
-  Dry Mixedgrass Subregion

PARKLAND NATURAL REGION

-  Foothills Parkland Subregion
-  Central Parkland Subregion

NOTE: Significant grassland communities also occur at other locations in Alberta, predominantly, but not exclusively, in the Montane and Peace River Parkland Subregions.

PROVINCIAL LOCATION

