

**PROPOSED TERMS OF REFERENCE
ENVIRONMENTAL IMPACT ASSESSMENT REPORT
FOR DOVER OPERATING CORP.'S PROPOSED
DOVER COMMERCIAL PROJECT**

Approximately 95 km northwest of Fort McMurray, Alberta

ISSUED BY: Dover Operating Corp.

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PURPOSE OF THE TERMS OF REFERENCE

The purpose of this document is to identify for Dover Operating Corp., aboriginal communities and appropriate stakeholders the information required by government agencies for an Environmental Impact Assessment (EIA) report prepared under the *Environmental Protection and Enhancement Act* (EPEA) for the Dover Commercial Project (the Project).

The Dover Commercial Project, which is now operated by Dover Operating Corp, was previously operated by Athabasca Oil Sands Corp. Dover Operating Corp. is an Alberta company that is indirectly and jointly owned by PetroChina International Investment Company Limited and Athabasca Oil Sands Corp.

The Dover Commercial Project is located approximately 95 kilometers northwest of Fort McMurray, Alberta, within the Regional Municipality of Wood Buffalo in Townships 92, 93, 94, 95, 96 and 97, Ranges 15, 16, 17 and 18W4M.

The Project will use steam assisted gravity drainage (SAGD) technology and will be constructed in phases to reach an ultimate design capacity of approximately 39,747 m³/d (approximately 250,000 barrels per day (bpd)) of bitumen production. The Project will recover an estimated 636 million m³ (4 billion barrels) of bitumen over its estimated 50 year life. Over the operating life of the Project, two processing facilities will be required: Dover North Plant (DNP) and Dover South Plant (DSP).

These Terms of Reference have been prepared to reflect specific conditions of the Dover Commercial Project, which is located in an area that has been included in the environmental assessment of Dover Operating Corp.'s MacKay River Commercial Project as well as the environmental assessments of previous industrial developments. The Project is located immediately northwest of Suncor Energy's MacKay River Project and adjacent to Southern Pacific's McKay leases. The local and regional study areas used for the Environmental Impact Assessment of the Dover Operating Corp. MacKay River Commercial Project and Suncor's MacKay River Project included portions of the Dover Lease Area. Given that the Project area has been studied and the fact that the Project is located adjacent to other industrial development, the Terms of Reference have been designed to address specific impacts associated with this type of project within that context. Specifically, the following principles were used in developing the Terms of Reference:

- The purpose of the EIA is to provide information to the Energy Resources Conservation Board (ERCB) in support of the public interest decision;
- The focus is on the Project Area and the Application Case, and the main emphasis of the technical assessment is on air emissions, the terrestrial components and hydrogeology (water source and disposal);
- The EIA focuses on a limited number of key indicators on which to design the Project and assess and manage impacts; and
- Common requirements (e.g., residual impacts and monitoring) were placed in separate sections to reduce duplication.

SCOPE OF THE EIA REPORT

The Dover Operating Corp. shall prepare and submit an EIA report that examines the environmental and socio-economic effects of the Project.

The EIA report shall be prepared considering all applicable provincial and federal legislation, codes of practice, guidelines, standards and directives.

The EIA report shall be prepared in accordance with these Terms of Reference and the environmental information requirements prescribed under EPEA and associated regulations, and the *Canadian Environmental Assessment Act* if applicable. The EIA report will form part of the Dover Operating Corp.'s application to the Energy Resources Conservation Board (ERCB). An EIA report summary will also be included as part of the ERCB Application.

CONTENT OF THE EIA REPORT

1 PUBLIC ENGAGEMENT AND ABORIGINAL CONSULTATION

- [A] Describe the concerns and issues expressed by the public and the actions taken to address those concerns and issues, including how public input was incorporated into the Project development, impact mitigation and monitoring.
- [B] Describe the concerns and issues expressed by aboriginal communities and the actions taken to address those concerns and issues, including how aboriginal community input was incorporated into the Project development, impact mitigation and monitoring. Describe consultation undertaken with aboriginal communities and groups with respect to traditional ecological knowledge and traditional use of land.
- [C] Describe plans to maintain the public engagement and aboriginal consultation process following completion of the EIA report to ensure that the public and aboriginal peoples will have an appropriate forum for expressing their views on the ongoing development, operation and reclamation of the Project.

2 PROJECT DESCRIPTION

2.1 Overview

- [A] Provide a brief project description in sufficient detail to provide context for the EIA, including:
 - a) DOVER OPERATING CORP. information;
 - b) proposed extraction and bitumen processing technology;
 - c) amount and source of energy required for the Project;
 - d) water supply and disposal requirements, including process water and potable water requirements;
 - e) proposed method to transport product to markets; and
 - f) development plan and schedule.
- [B] Provide maps and/or drawings of the Project components and activities including:
 - a) existing infrastructure, leases and clearings, including exploration clearings;
 - b) proposed central processing/treatment and field facilities;
 - c) other buildings and infrastructure (pipelines and utilities);

- d) temporary structures;
 - e) transportation and access routes;
 - f) on-site hydrocarbon storage;
 - g) containment structures such as retention ponds and storage ponds (e.g., lime sludge, stormwater runoff, boiler blow-down);
 - h) water wells/intakes, pipelines, and storage structures;
 - i) sources of aggregate resources, borrow material and other construction material and locations of any stockpiles that will be developed; and
 - j) waste storage area and disposal sites.
- [C] Discuss the implications of a delay in proceeding with the Project, or any phase of the Project, or not going ahead with the Project.
- [D] Describe the benefits of the project, including jobs created, local training, employment and business opportunities, and royalties and taxes generated that accrue to:
- a) the Dover Operating Corp.;
 - b) local and regional communities, including Aboriginal communities;
 - c) the local authority;
 - d) Alberta; and
 - e) Canada.

2.2 Constraints

- [A] Discuss the process and criteria used to identify constraints to development, and how the Project has been designed to accommodate those constraints. Include the following:
- a) any applicable ALSA Regional Plan;
 - b) land use policies and resource management initiatives that pertain to the Project;
 - c) the environmental setting;
 - d) cumulative environmental impacts in the region;
 - e) cumulative social impacts in the region;
 - f) results of Project-specific or regional monitoring;
 - g) potential for new or additional technology to increase resource recovery at later times; and
 - h) potential for changes in the regulatory regime.
- [B] Discuss the selection criteria used, options considered, and rationale for selecting:
- a) location and route for linear infrastructure;
 - b) thermal energy and electric power required for the Project;
 - c) water supply sources;
 - d) wastewater treatment, wastewater management and wastewater disposal;
 - e) air emission and air quality management; and
 - f) waste disposal.

2.3 Regional and Cooperative Efforts

- [A] Discuss the Dover Operating Corp.'s involvement in regional and cooperative efforts to address environmental and socio-economic issues associated with regional development.
- [B] Describe opportunities for sharing infrastructure (e.g., access roads, utility corridors, water infrastructure) with other resource development stakeholders, and the rationale for not implementing any of these opportunities.

2.4 Transportation Infrastructure

- [A] Describe and map the locations of any new road or intersection construction, or any improvements to existing roads or intersections, related to the development of the Project, from the boundary of the Project Area up to and including the highway access, and
 - a) discuss the alternatives and the rationale for selection of the preferred alternative;
 - b) describe the impacts to local communities of the changes in transportation infrastructure;
 - c) provide a proposed schedule for the work; and
 - d) provide a summary of consultation with Alberta Transportation and the local authority, including their views on the compatibility of the proposed work with their own local or regional infrastructure development plans.
- [B] Identify the type, volume, location and availability of construction and reclamation materials for all road construction and road improvement work, related to the development of the Project, within and outside of the Project Area.

2.5 Air Emissions Management

- [A] Provide emission profiles (type, rate and source) for the Project's operating and construction emissions including point and non-point sources and fugitive emissions. Consider both normal and upset conditions. Discuss:
 - a) odorous or visible emissions from the proposed facilities;
 - b) annual and total greenhouse gas emissions during all stages of the Project. Identify the primary sources and provide examples of calculations;
 - c) the intensity of greenhouse gas emissions per unit of bitumen produced;
 - d) the Project's greenhouse gas emissions on an annual basis;
 - e) the Dover Operating Corp.'s overall greenhouse gas management plans;
 - f) amount and nature of Criteria Air Contaminants emissions;
 - g) the amount and nature of acidifying emissions, probable deposition patterns and rates;
 - h) control technologies used to minimize air emissions;
 - i) emergency flaring scenarios (e.g., frequency and duration) and proposed measures to ensure flaring events are minimized;
 - j) upset condition scenarios (e.g., frequency and duration) and proposed measures to ensure upset conditions are minimized;
 - k) gas collection and conservation, and the applicability of vapour recovery technology;

- l) applicability of sulphur recovery, acid gas re-injection or flue gas desulphurization to reduce sulphur emissions; and
- m) fugitive emissions control technology to detect, measure and control emissions and odours from equipment leaks.

2.6 Water Management

2.6.1 Water Supply

- [A] Describe the water supply requirements for the Project, including:
 - a) the expected water balance during all stages of the Project. Discuss assumptions made or methods chosen to arrive at the water balances;
 - b) the process water, potable water, and non-potable water requirements and sources for construction, start-up, normal and emergency operating situations, decommissioning and reclamation. Identify the volume of water to be withdrawn from each source, considering plans for wastewater reuse;
 - c) the location of sources/intakes and associated infrastructure (e.g., pipelines for water supply);
 - d) the variability in the amount of water required on an annual and seasonal basis as the Project is implemented;
 - e) the expected cumulative effects on water losses/gains resulting from the Project operations;
 - f) potable water treatment systems for all stages of the Project;
 - g) type and quantity of potable water treatment chemicals used; and
 - h) measures for ensuring efficient use of water including alternatives to reduce the consumption of non-saline water such as water use minimization, recycling, conservation, and technological improvements.

2.6.2 Surface Water

- [A] Describe the surface water management strategy for all stages of the Project, including:
 - a) design factors considered; and
 - b) permanent or temporary alterations or realignments of watercourses, wetlands and other waterbodies.
- [B] Provide a description of navigable waterways and the results of any navigability assessment(s) conducted for waterways that may be affected by the Project, or a schedule for when the assessments may be completed.
- [C] Describe crossings of watercourses or waterbodies required and provide example diagrams of each type of crossing.

2.6.3 Wastewater Management

- [A] Describe the wastewater management strategy, including:
 - a) the source, quantity and composition of each wastewater stream from each component of the proposed operation (e.g., bitumen extraction and associated facilities) for all Project conditions, including normal, start-up, worst-case and upset conditions;
 - b) the proposed disposal locations and methods for each wastewater stream;

- c) formations for the disposal of wastewaters;
- d) design of facilities that will collect, treat, store and release wastewater streams;
- e) type and quantity of chemicals used in wastewater treatment; and
- f) sewage treatment and disposal.

2.7 Waste Management

- [A] Characterize and quantify the anticipated dangerous goods, and hazardous, non-hazardous, and recyclable wastes generated by the Project, and:
 - a) describe the composition and volume of specific waste streams and discuss how each stream will be managed;
 - b) describe how the disposal sites and sumps will be constructed; and
 - c) describe plans for pollution prevention, waste minimization, recycling, and management to reduce waste quantities for all stages of the Project.

2.8 Conservation and Reclamation

- [A] Provide a conceptual conservation and reclamation plan for the Project. Describe and map as applicable:
 - a) current land use and capability and proposed post-development land use and capability;
 - b) anticipated timeframes for completion of reclamation stages and release of lands back to the Crown including an outline of the key milestone dates for reclamation and how progress to achieve these targets will be measured;
 - c) constraints to reclamation such as timing of activities, availability of reclamation materials and influence of natural processes and cycles including natural disturbance regimes;
 - d) a revegetation plan for the disturbed terrestrial and aquatic areas;
 - e) reclamation material salvage, storage areas and handling procedures; and
 - f) existing and final reclaimed site drainage plans.
- [B] Discuss, from an ecological perspective, the expected timelines for establishment and recovery of vegetative communities and wildlife habitat, the expected success of establishment and recovery, and the expected differences in the resulting communities.
- [C] Discuss uncertainties related to the conceptual reclamation plan.

3 ENVIRONMENTAL ASSESSMENT

3.1 Air Quality

3.1.1 Baseline Information

- [A] Discuss the baseline climatic and air quality conditions including:
 - a) the type and frequency of meteorological conditions that may result in poor air quality; and
 - b) appropriate ambient air quality parameters.

3.1.2 Impact Assessment

- [A] Identify components of the Project that will affect air quality, and:

- a) describe the potential for reduced air quality (including odours and visibility) resulting from the Project and discuss any implications of the expected air quality for environmental protection and public health;
 - b) estimate ground-level concentrations of appropriate air quality parameters;
 - c) discuss any expected changes to particulate deposition, nitrogen deposition or acidic deposition patterns;
 - d) identify areas that are predicted to exceed Potential Acid Input (PAI) critical loading criteria; and
 - e) discuss interactive effects that may occur resulting from co-exposure of a receptor to all emissions.
- [B] Discuss mitigation strategies to minimize the potential impact of the Project on air quality.

3.2 Noise

- [A] Discuss the design, construction and operational factors to be incorporated into the Project to comply with the ERCB's Directive 38: Noise Control.

3.3 Hydrogeology

3.3.1 Baseline Information

- [A] Provide an overview of the existing geologic and hydrogeologic setting from the ground surface down to, and including, the oil producing zones and disposal zones, and:
- a) present regional and Project Area geology to illustrate depth, thickness and spatial extent of lithology, stratigraphic units and structural features; and
 - b) present regional and Project Area hydrogeology describing:
 - i) the major aquifers, aquitards and aquicludes (Quaternary and bedrock), their spatial distribution, properties, hydraulic connections between aquifers, hydraulic heads, gradients, groundwater flow directions and velocities. Include maps and cross sections,
 - ii) the chemistry of groundwater aquifers including baseline concentrations of major ions, metals and hydrocarbon indicators,
 - iii) the potential discharge zones, potential recharge zones and sources, areas of groundwater-surface water interaction and areas of Quaternary aquifer-bedrock groundwater interaction,
 - iv) water well development and groundwater use, including an inventory of groundwater users,
 - v) the recharge potential for Quaternary aquifers,
 - vi) potential hydraulic connection between bitumen production zones, deep disposal formations and other aquifers resulting from Project operations,
 - vii) the characterization of formations chosen for deep well disposal, including chemical compatibility and containment potential, injection capacity, hydrodynamic flow regime, and water quality assessments, and

- viii) the locations of major facilities associated with the Project including facilities for waste storage, treatment and disposal (e.g., deep well disposal) and describe aquifer and shallow groundwater conditions beneath these proposed facilities. Provide supporting geological information.

3.3.2 Impact Assessment

- [A] Describe Project components and activities that have the potential to affect groundwater resource quantity and quality at all stages of the Project.
- [B] Describe the nature and significance of the potential Project impacts on groundwater with respect to:
 - a) inter-relationship between groundwater and surface water in terms of surface water quantity and quality;
 - b) implications for terrestrial or riparian vegetation, wildlife and aquatic resources including wetlands;
 - c) changes in groundwater quality and quantity;
 - d) conflicts with other groundwater users, and proposed resolutions to these conflicts;
 - e) potential implications of seasonal variations; and
 - f) groundwater withdrawal for Project operations, including any expected alterations in the groundwater flow regime during and following Project operations.
- [C] Discuss mitigation strategies to minimize the potential impact of the Project on hydrogeology.

3.4 Hydrology

3.4.1 Baseline Information

- [A] Describe and map the surface hydrology in the Project Area.
- [B] Identify any surface water users who have existing approvals, permits or licenses.

3.4.2 Impact Assessment

- [A] Describe the extent of hydrological changes that will result from disturbances to groundwater and surface water movement:
 - a) include changes to the quantity of surface flow, water levels and channel regime in watercourses (during minimum, average and peak flows) and water levels in waterbodies;
 - b) assess the potential impact of any alterations in flow on the hydrology and identify all temporary and permanent alterations, channel realignments, disturbances or surface water withdrawals;
 - c) discuss both the Project and cumulative effect of these changes on hydrology (e.g., timing, volume, peak and minimum flow rates, river regime and lake levels), including the significance of effects for downstream watercourses; and

- d) identify any potential erosion problems in watercourses resulting from the Project.
- [B] Describe impacts on other surface water users resulting from the Project. Identify any potential water use conflicts.
- [C] Discuss mitigation strategies to minimize the potential impact of the Project on hydrology.

3.5 Surface Water Quality

- [A] Describe the potential impacts of the Project on surface water quality and proposed mitigation measures to maintain surface water quality at all stages of the Project.

3.6 Aquatic Ecology

3.6.1 Baseline Information

- [A] Describe and map, as appropriate, the fish, fish habitat and aquatic resources of the lakes, rivers, ephemeral water bodies and other waters in the Project Area and identify:
 - a) species composition, distribution, relative abundance, movements and general life history parameters;
 - b) identify key indicators that the Dover Operating Corp. used to design the project and propose to use to monitor impacts and discuss the rationale for their selection;
 - c) critical or sensitive areas such as spawning, rearing, and over-wintering habitats. Discuss seasonal habitat use including migration and spawning routes; and
 - d) current and potential use of the fish resources by aboriginal, sport or commercial fisheries.

3.6.2 Impact Assessment

- [A] Describe the potential impacts to fish, fish habitat, and other aquatic resources.
- [B] Discuss the design, construction and operational factors to be incorporated into the Project to minimize effects to fish and fish habitat and protect aquatic resources.
- [C] Identify plans proposed to offset any loss in the productivity of fish habitat. Indicate how environmental protection plans address applicable provincial and federal policies on fish habitat including the development of a “No Net Loss” fish habitat objective.

3.7 Vegetation

3.7.1 Baseline Information

- [A] Describe and map vegetation communities, wetlands, rare plants, old growth forests, communities of limited distribution and plants for traditional, medicinal and cultural purposes in the Project Area.

- [B] Qualitatively describe the current extent of habitat fragmentation in the Local Study Area.
- [C] Identify key vegetation indicators that the Dover Operating Corp. used to design the Project and proposes to use to monitor impacts and discuss the rationale for their selection.

3.7.2 Impact Assessment

- [A] Identify the vegetation and wetland communities to be disturbed for all stages of the Project.
- [B] Discuss any potential effects the Project may have on vegetation communities, wetlands, rare plants, old growth forests, communities of limited distribution and plants for traditional, medicinal and cultural purposes in the Project Area.
- [C] Discuss temporary (include timeframe) and permanent changes to vegetation and wetland communities and comment on:
 - a) the effects and their implications for other environmental resources (e.g., habitat diversity and quantity, water quality and quantity, erosion potential); and
 - b) the effects and their implications to recreation, aboriginal and other uses.
- [D] Discuss the effects of the Project on upland, riparian and wetland habitat fragmentation in the Local Study Area.
- [E] Describe how weeds and non-native invasive species will be assessed and controlled prior to and during operation and reclamation.
- [F] Discuss the mitigation measures to minimize Project impacts on vegetation communities, wetlands, rare plants, old growth forests, communities of limited distribution and plants for traditional, medicinal and cultural purposes.

3.8 Wildlife

3.8.1 Baseline Information

- [A] Describe and map existing wildlife habitat and habitat disturbance (including exploration activities) in the Project Area. Identify those habitat disturbances that are related to existing and approved Project operations.
- [B] Describe wildlife identified in the Project Area and their use and potential use of habitats. Identify any species that are:
 - a) listed as “at Risk, May be at Risk and Sensitive” in The Status of Alberta Species (Alberta Sustainable Resource Development);
 - b) listed in Schedule 1 of the federal *Species at Risk Act*; and
 - c) listed as “at risk’ by COSEWIC.
- [C] Identify key wildlife and wildlife habitat indicators that the Dover Operating Corp. used to design the Project and proposes to use to monitor impacts and discuss the rationale for their selection.

3.8.2 Impact Assessment

- [A] Describe Project components and activities that may affect wildlife and wildlife habitat.
- [B] Describe and assess the potential impacts of the Project on key indicator species and any species identified in 3.7.1[B], and relate those impacts to wildlife populations and wildlife habitats, addressing:
 - a) how the Project will affect wildlife relative abundance, movement patterns, distribution and recruitment into regional populations for all stages of the Project;
 - b) how improved or altered access may affect wildlife including potential obstruction of daily and seasonal movements, increased vehicle-wildlife collisions, and increased hunting pressures;
 - c) how increased habitat fragmentation may affect wildlife considering edge effects, the availability of core habitat, and the influence of linear features and infrastructure on wildlife movements and other population parameters;
 - d) the spatial and temporal changes to habitat availability and habitat effectiveness (types, quality, quantity, diversity and distribution);
 - e) potential effects on wildlife resulting from changes to air and water quality, including both acute and chronic effects to animal health;
 - f) potential effects on wildlife from the Dover Operating Corp.'s proposed and planned exploration, seismic and core hole activities, including monitoring/4D seismic; and
 - g) the resilience and recovery capabilities of wildlife populations and habitats to disturbance.
- [C] Comment on the availability of species for traditional use considering habitat loss, habitat avoidance, vehicle-wildlife collisions, increased non-aboriginal hunting pressure and other Project related effects on wildlife populations.
- [D] Discuss mitigation strategies to minimize the potential impact of the Project on wildlife and wildlife habitat.

3.9 Biodiversity

- [A] Describe any unique features of the Project Area that affect its biodiversity in comparison to the Local Study Area.
- [B] Describe the changes to the biodiversity of the Project Area during operations and post-reclamation and the significance of these changes in a local and regional context.
- [C] Discuss mitigation strategies to minimize the potential impact of the Project on regional biodiversity.

3.10 Terrain and Soils

3.10.1 Baseline Information

- [A] Describe and map the terrain and soils conditions in the Project Area.

- [B] Describe and map soil types in the areas that are predicted in 3.1.2[A]d) to exceed Potential Acid Input (PAI) critical loading criteria.

3.10.2 Impact Assessment

- [A] Describe Project activities and other related issues that could affect soil quality (e.g., compaction, contaminants) and:
 - a) indicate the amount (ha) of surface disturbance from plant, field (pads, pipelines, access roads), aggregate and borrow sites, construction camps, drilling waste disposal and other infrastructure-related construction activities;
 - b) discuss the relevance of any changes for the local and regional landscapes, biodiversity, productivity, ecological integrity, aesthetics and future use resulting from disturbance for all stages of the Project;
 - c) identify the potential acidification impact on soils and discuss the significance of predicted impacts by acidifying emissions resulting from the Project; and
 - d) describe potential sources of soil contamination.
- [B] Discuss:
 - a) the environmental effects of proposed drilling methods on the landscape and surficial and bedrock geology;
 - b) the potential for changes in the ground surface during steaming and recovery operations (e.g., ground heave and/or subsidence) and their environmental implications; and
 - c) the potential impacts caused by the mulching and storage of woody debris considering, but not limited to vulnerability to fire, degradation of soil quality, increased footprint, etc.
- [C] Discuss mitigation strategies to minimize the potential impact of the Project on soils or terrain.

3.11 Land Use and Management

3.11.1 Baseline Information

- [A] Describe and map the current land uses in the Project Area, including all Crown land and Crown Reservations (Holding Reservation, Protective Notation, Consultative Notation).
- [B] Indicate where Crown land dispositions may be needed for roads or other infrastructure for the Project.
- [C] Identify and map unique sites or special features in the Project Area and Local Study Area such as Parks and Protected Areas, Heritage Rivers, Historic Sites, Environmentally Significant Areas, culturally significant sites and other designations (World Heritage Sites, Ramsar Sites, Internationally Important Bird Areas, etc).
- [D] Describe and map land clearing activities, showing the timing of the activities.
- [E] Describe the status of timber harvesting arrangements, including species and timing.

[F] Describe access control measures proposed for the Project Area.

3.11.2 Impact Assessment

- [A] Identify the potential impact of the Project on land uses, including:
- a) impacts to unique sites or special features;
 - b) impacts caused by changes in public access arising from linear development, including secondary effects related to increased hunter, angler and other recreational access and decreased access to traditional use sites;
 - c) potential impacts to aggregate reserves that may be located on land under the Dover Operating Corp.'s control and reserves in the region;
 - d) the impact of development and reclamation on commercial forest harvesting and fire management in the Project Area;
 - e) the amount of commercial and non-commercial forest land base that will be disturbed by the Project, including the Timber Productivity Ratings for the Project Area. Compare the pre-disturbance and reclaimed percentages and distribution of all forested communities in the Project Area;
 - f) how the Project impacts Annual Allowable Cuts and quotas within the Forest Management Agreement area;
 - g) the potential impact on existing land uses of anticipated changes (type and extent) to the pre-disturbance topography, elevation and drainage pattern within the Project Area; and
 - h) impacts of the Project on public access, regional recreational activities, aboriginal land use and other land uses during and after development activities.
- [B] Provide a fire control plan highlighting:
- a) measures taken to ensure continued access for firefighters to adjacent wildland areas;
 - b) forest fire prevention, detection, reporting, and suppression measures, including proposed fire equipment;
 - c) measures for determining the clearing width of power line rights-of-way; and
 - d) required mitigative measures for areas adjacent to the Project Area based on the FireSmart Wildfire Assessment System.
- [C] Discuss mitigation strategies to minimize the potential impact of the Project on land uses.

4 HISTORIC RESOURCES

- [A] Describe the Historic Resource Impact Assessment (HRIA) work done to date for the Project, and provide a schedule for any future work.
- [B] Describe the impacts of the findings of the HRIA work on Project design and scheduling.
- [C] Describe any Project uncertainties arising from the need for future HRIA work.

5 TRADITIONAL ECOLOGICAL KNOWLEDGE AND LAND USE

- [A] Provide:
- a) a map of traditional land use areas (if the aboriginal community or group is willing to have these locations disclosed);
 - b) a map of cabin sites, spiritual sites, graves and other traditional use sites considered historic resources under the *Historical Resources Act* (if the aboriginal community or group is willing to have these locations disclosed), as well as traditional trails and resource activity patterns;
 - c) a description of the extent of traditional use of land in both the Project Area and the Local Study Area, including fishing, hunting, trapping, nutritional or medicinal plant harvesting, and cultural use by affected aboriginal peoples; and
 - d) a discussion of:
 - i) access to traditional lands in the Project Area during all stages of the Project,
 - ii) the vegetation and wildlife used for traditional, food, ceremonial, medicinal and other purposes, and
 - iii) aboriginal views on land reclamation.
- [B] Determine the impact of the Project on traditional uses and culture and identify possible mitigation strategies.

6 PUBLIC HEALTH AND SAFETY

6.1 Public Health

- [A] Describe those aspects of the Project that may have implications for public health or the delivery of regional health services. Determine whether there may be implications for public health arising from the Project.
- [B] Document any health concerns raised by stakeholders during consultation on the Project;
- [C] Document any health concerns identified by aboriginal communities or groups resulting from impacts of existing development and of the Project specifically on their traditional lifestyle and include an aboriginal receptor type in the assessment;
- [D] Describe the potential health impacts resulting from higher regional traffic volumes and the increased risk of accidental leaks and spills.
- [E] Discuss mitigation strategies to minimize the potential impact of the Project on human health.

6.2 Public Safety

- [A] Describe those aspects of the Project that may have implications for public safety. Determine whether there may be implications for public safety arising from the Project. Specifically:
- a) describe the Dover Operating Corp.'s emergency response plan, including public notification protocol and safety procedures, to minimize adverse

- environmental effects, including emergency reporting procedures for spill containment and management;
- b) document any safety concerns raised by stakeholders during consultation on the Project;
- c) describe how local residents will be contacted during an emergency and the type of information that will be communicated to them;
- d) describe the existing agreements with area municipalities or industry groups such as safety cooperatives, emergency response associations, regional mutual aid programs and municipal emergency response agencies; and
- e) describe the potential safety impacts resulting from higher regional traffic volumes.

7 SOCIO-ECONOMIC ASSESSMENT

7.1 Baseline Information

- [A] Describe the existing socio-economic conditions in the region and in the communities in the region.
- [B] Describe factors that may affect existing socio-economic conditions including:
 - a) population changes;
 - b) workforce requirements for the Project, including a description of when peak activity periods will occur;
 - c) planned accommodations for the workforce for all stages of the Project;
 - d) the Dover Operating Corp.'s policies and programs regarding the use of regional and Alberta goods and services;
 - e) the project schedule; and
 - f) the overall engineering and contracting plan for the Project.

7.2 Impact Assessment

- [A] Describe the effects of construction and operation of the Project on:
 - a) housing,
 - b) availability and quality of health care services;
 - c) local and regional infrastructure and community services;
 - d) recreational activities,
 - e) hunting, fishing, trapping and gathering, and
 - f) First Nations and Métis (e.g., traditional land use and social and cultural implications);
- [B] Describe the socio-economic effects of any construction camp required for the Project and identify:
 - a) its location,
 - b) the number of workers it is intended to house,
 - c) whether the camp will service the Project only or other clients,
 - d) the length of time the camp will be in service, and
 - e) describe what services will be provided in the camp (e.g., security, recreation and leisure, medical services).
- [C] Provide the estimated total Project cost, including a breakdown for engineering and project management, equipment and materials, and labour for both

construction and operation stages. Indicate the percentage of expenditures expected to occur in the region, Alberta, Canada outside of Alberta, and outside of Canada.

- [D] Discuss mitigation strategies to minimize the potential impact of the Project on socio-economic conditions in the region and communities in the region.

8 RESIDUAL IMPACTS

- [A] Describe the residual impacts of the Project following implementation of the Dover Operating Corp.'s mitigation measures and the Dover Operating Corp.'s plans to manage those residual impacts.

9 MONITORING

- [A] Describe the Dover Operating Corp.'s current and proposed monitoring programs with respect to:
 - a) source air emissions, including fugitive emissions;
 - b) wastewater treatment and release; and
 - c) hazardous and non-hazardous waste treatment and storage.
- [B] Describe the monitoring programs proposed to assess any Project impacts and to measure the effectiveness of mitigation plans.
- [C] Discuss the Dover Operating Corp.'s regional monitoring activities including:
 - a) monitoring that will be undertaken to assist in managing environmental effects, confirm performance of mitigation measures and improve environmental protection strategies;
 - b) monitoring done independently by the Dover Operating Corp.;
 - c) monitoring performed in conjunction with other stakeholders, including aboriginal communities and groups; and
 - d) new monitoring initiatives that may be required as a result of the Project.
- [D] Discuss:
 - a) how monitoring data will be disseminated to the public or other interested parties; and
 - b) how the results of monitoring programs and publicly available monitoring information will be integrated with the Dover Operating Corp.'s environmental management system.