

## **Environmental Assessment in Alberta – Streamlining is not Simplification**

**James D. Howell**

Senior Principal, Environmental Services, Stantec Consulting Ltd.

200-325 25 Street Southeast, Calgary, Alberta, Canada T2A 7H8, (p) 403-716-8000,  
(f) 403-716-8109

### **INTRODUCTION**

Over the past few years, Alberta regulatory bodies with an environmental responsibility have been in the process of adjusting the application requirements for proposed projects. These changes have been made to increase the efficiency of the approval process. While the goal has been to expedite the approval process, this has not resulted in a relaxation of the environmental requirements. In fact, the amount of environmental information and the degree of assessment now required for applications has increased. This paper examines the current environmental requirements for projects in Alberta and shows that environmental assessment rigour has increased over the past several years.

### **REGULATORY BODIES**

The principal environmental regulator in Alberta is the Ministry of Environment and Sustainable Resource Development (ESRD). This ministry is responsible for enforcing, amongst others, the *Environmental Protection and Enhancement Act* (EPEA) and the *Water Act*. Approvals under EPEA are required for industrial projects with certain projects requiring an environmental impact assessment (EIA) as part of the EPEA approval. Components of environmental assessment are also part of surface land use application requirements in Alberta, administered by ESRD. Other regulators in Alberta that require environmental assessment information in their applications are the Alberta Utilities Commission (AUC), which regulates power projects, the Energy Resources Conservation Board (ERCB) which regulates oil, gas, and coal projects, and the Natural Resources Conservation Board (NRCB) which regulates the province's non-energy natural resources such as pits and quarries. The NRCB's environmental assessment requirements are met through EIAs if required by ESRD.

### **ENVIRONMENTAL REQUIREMENTS**

The rigour of environmental assessment in Alberta has increased over the past decade as a result of increased public involvement in the environmental review process and the expectation that public and aboriginal concerns be considered in EIAs. This has led to regulators revising the environmental requirements in applications for potential projects.

## **Alberta Environment and Sustainable Resource Development**

### *Environmental Impact Assessments*

Mandatory activities for which an EIA is required, if certain size characteristics are met, are pulp and paper mills, quarries, dams, water diversion structures, large reservoirs, large tourist facilities, coal mines and processing plants, oil sands mines, power generating facilities, oil refineries, chemical plants, cement and fertilizer plants, hazardous waste incinerators and landfills that accept hazardous waste. The terms of reference (TOR) for such EIAs are developed by the proponent, typically based on past similar projects, and submitted to ESRD and the public for review. ESRD has now issued standardized TORs for coal mines, industrial plants, oil sands and in-situ projects, the most recent versions released in March 2013 (Alberta Environment and Sustainable Resource Development 2013 a, b, c and d). The standardized TORs are meant to be somewhat customized by proponents for their projects.

### *Environmental Protection and Enhancement Act Applications*

The EPEA applications are meant to provide sufficient project detail for emission limits to be set in approvals. ESRD issued an *Interim Guide to Content for Industrial Approval Applications: New, Renewal and Amendment* (Alberta Environment and Water 2012). This replaced their former guide (Alberta Environment 1999). The intent of the new guide is to ‘...improve the quality of the applications submitted by industrial applicants’, with the outcome being an improvement in the speed of the application review process and approval. The 2012 Guide provides greater detail on the regulator’s expectations and more detail in the environmental information required than what was in the 1999 Guide.

### *Land Use Applications*

In December 2012, the Government of Alberta released the *Enhanced Approval Process (EAP) Manual* for certain land use applications (Government of Alberta 2012a). The EAP addresses requirements under the *Public Lands Act* for land use applications (LUA) on mineral surface leases, licences of occupation for access, pipeline agreements and pipeline installation applications for oil and gas developments on public land in Alberta. It streamlines application submissions and approvals through the use of an integrated land management process which provides provincial standards and guidelines, access management tools and a common information base for environmental baseline data.

## **Energy Resources Conservation Board**

The ERCB regulates Alberta’s energy resources and has as its objectives, the achievement of high standards through effective and efficient regulations of public safety, environmental protection and energy resource conservation.

The ERCB has issued directives that present guidelines for applications for energy projects including Directive 23 for crude bitumen recovery and upgrading projects (ERCB 1991), Directive 61 for coal projects (ERCB 1983) and Directive 56 for energy development (ERCB 2011). Environmental assessments are mentioned in the directives with Directive 61 presenting the requirements for environmental and social impact assessments for coal projects (ERCB 1983, Section 5.6) and Informational Letter 93-09 (ERCB 1993) requiring an EIA for oil and gas activities on the southern

portion of the East Slopes of Alberta. In April 2013, a draft of an updated Directive 23, now titled for oil sands operations, was released (ERCB 2013). It has more comprehensive requirements for environmental assessment.

In December 2012, the *Responsible Energy Development Act* was passed in Alberta. The Act created the Alberta Energy Regulator (AER) which will combine duties of the ERCB with environmental assessment duties of ESRD for oil, gas, oil sands and coal projects in the province, providing a single-window approach for proponents. When the Act becomes effective on June 1, 2013, the AER will handle applications under the *Public Lands Act*, the *Environmental Protection and Enhancement Act*, the *Water Act* and the *Mines and Minerals Act*. These applications will still be individual submissions but to a single regulator. Although the regulations of the *Responsible Energy Development Act* have not been released, Alberta government's fact sheet on the Act states that the environmental legislation will remain as it was before the Act was passed (Alberta Government 2012b).

### Alberta Utilities Commission

The AUC regulates the utilities sector, natural gas and electricity markets in Alberta. The AUC has input to the EIA terms of reference for power and utilities projects that require an EIA and in the review of the EIA documents. Formerly, the AUC review commenced following the ESRD review but they now commence at the same time. This decreases the review time. The AUC application includes environmental information not specifically required by an EPEA application and the Commission can request additional information beyond the scope of the EIA if deemed in the public interest. Rule 007, the guide for applications to AUC was updated in April 2013 and provides more detail on environmental assessment requirements (AUC 2013).

### RIGOUR OF ENVIRONMENTAL ASSESSMENT IN ALBERTA

The EIA is a planning tool, with the objective to provide information to the regulatory decision makers (i.e, ESRD under the EPEA, AUC, ERCB). With the exception of land use applications, most projects not requiring an EIA still require an EPEA approval. Projects for which an EIA is mandatory undergo the most rigorous environmental assessment and these are usually the larger projects.

Table 1 presents the multi-regulator approach to the assessment of environmental effects in Alberta with examples of the types of projects requiring environmental assessment.

<b>Application Requirement<sup>1</sup></b>	<b>Example</b>
EPEA	A gravel pit <2 ha in size
EPEA+EIA	A quarry producing >45,000 tonnes per year
AUC+EPEA	A natural gas-fired power plant
AUC+EPEA+EIA	A coal-fired power plant with a capacity of 100 MW or greater
ERCB+EPEA	An underground coal mine
ERCB+EPEA+EIA	A bitumen upgrader
LUA	A geotechnical drilling program

EPEA = *Environmental Protection and Enhancement Act* Application, EIA = Environmental Impact Assessment, AUC = Alberta Utilities Commission Application, ERCB = Energy Resources Conservation Board Application, LUA = Land Use Application

Table 2 presents the environmental components required by ESRD for EIAs, EPEA applications and Land Use Applications; by the ERCB and by AUC.

<b>Table 2: Environmental Information Requirements for Projects in Alberta</b>				
<b>Environmental Assessment</b>	<b>EPEA Application</b>	<b>Land Use Application</b>	<b>ERCB Application</b>	<b>AUC Application</b>
air quality & climate noise	air quality		air quality noise	air quality noise
terrain & soils vegetation reclamation	soils vegetation reclamation	vegetation reclamation	soils vegetation & wetlands reclamation	soils terrain vegetation & wetlands
hydrology surface water quality hydrogeology aquatic ecology	surface water groundwater aquatic environment	surface water drainage	hydrology surface water quality hydrogeology fisheries	surface water fish fish habitat groundwater
wildlife biodiversity	wildlife	sensitive areas species at risk	wildlife	wildlife wildlife habitat
land use & management		land use planning	land use	land use regional plans
public health & safety	human health			
historical resources TEK & land use			historical resources	historical resources
socio-economics training, employment & business benefits to aboriginal communities			population services & infrastructure housing quality of life economic activity transportation	
pre-development conditions	pre-development conditions			visual aesthetics
Aboriginal consultation		Aboriginal consultation	Aboriginal consultation	
cumulative effects	cumulative effects			
significance determination			significance determination	significance determination
follow-up and monitoring	follow-up and monitoring	follow-up and monitoring	follow-up and monitoring	follow-up and monitoring

The pre-development condition (i.e. the pre-existing base case) has been asked for in recent oil sands EIAs. This involves describing the environment before any development took place in the area. Pre-development conditions are also asked for in the EPEA applications but the level of detail requested is much less.

The EPEA application focuses on the operations of a facility and the emission limits. Information on cumulative effects is now requested but more so for putting the facility into a local context (i.e., what other activities are occurring in the area) as opposed to a more rigorous cumulative effects

assessment as required in an EIA, for which guidelines have been developed (EUB, Alberta Environment and NRCB 2010).

Aboriginal consultation, while not specifically mentioned in the EPEA or AUC guidelines, is a requirement on Alberta projects as stated in government policy and guidelines (Government of Alberta 2005, 2007).

## **DISCUSSION**

The requirements for environmental assessment in Alberta are tied to the laws of the province. While the procedures for project applications have been or are in the process of being streamlined, the laws have not changed. The environmental assessment requirements have not been made less rigorous; in fact, the requirements for EIAs and industrial approvals under EPEA are more rigorous now than they have been in the past.

The increased rigour in environmental assessment is a result of a number of factors. Public interest and involvement in environmental assessment has grown in recent years and the requirement for examining the socio-economic consequences of environmental effects has taken a greater role. There is an increased expectation that stakeholder and aboriginal concerns are incorporated into the scope of EIAs. First Nations' role in environmental assessment, particularly in the review of EIAs, requires increased consultation with them and greater efforts at incorporating traditional knowledge into the assessment. Project effects on human and ecological health and cumulative effects have been receiving greater attention in EIAs and at public hearings. Increased emphasis has been placed on the development of environmental management plans.

With the increased scrutiny environmental assessments and regulatory approvals have come under, there is greater need for clarity, defensibility and completeness in EIAs and applications. These attributes are critical to the success of streamlining the regulatory process in Alberta and to providing the public with a better understanding of environmental issues, the measures that are taken to address these issues and means to mitigate environmental effects of projects.

## **SUMMARY AND CONCLUSIONS**

Regulators in Alberta have been moving towards streamlining the approval process for projects in the province. This streamlining of the approval process has not resulted in a decrease of rigour in the environmental assessment of projects in the province.

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