



Section 5 – EPEA Application

TABLE OF CONTENTS

5. APPROVAL APPLICATION..... 1

5.1 APPLICATION 1

5.2 PROJECT DESCRIPTION..... 1

5.3 ENERGY & UTILITIES BOARD APPROVAL 1

5.4 ENVIRONMENTAL ASSESSMENT 1

5.5 EXISTING APPROVALS..... 2

5.6 PROJECT SCHEDULE..... 2

5.7 EMISSIONS AND CONTROL..... 2

5.8 ENVIRONMENTAL MONITORING SUMMARY 2

5.9 EMISSION CONTROL PERFORMANCE 2

5.10 EMISSIONS JUSTIFICATION AND CONTROL..... 3

5.11 WASTE MANAGEMENT..... 3

5.12 ENVIRONMENTAL IMPACTS 3

5.13 EMERGENCY RESPONSE..... 3

5.14 ACCIDENTAL RELEASE CONTINGENCY PLANS..... 3

5.15 CONSERVATION AND RECLAMATION..... 3

5.16 PUBLIC CONSULTATION 3

5.17 SUPPLEMENTARY SUBMISSIONS..... 4

5.18 ADDITIONAL INFORMATION..... 4

5. APPROVAL APPLICATION

5.1 APPLICATION

Grizzly Oil Sands (Grizzly) makes application under Part 2, Division 2 of the Environmental Protection and Enhancement Act (EPEA) for approval to construct and operate the Algar Lake SAGD Project. The information provided in this application is in compliance with the requirements of Alberta Regulation 113/93. Each sub-section in the regulation is cross-referenced to the relevant section in the preceding documentation to facilitate the review process.

5.2 PROJECT DESCRIPTION

Grizzly Oil Sands (Grizzly) plans to develop a project to extract bitumen from their leases located approximately 45 km southwest of Fort McMurray in north-eastern Alberta ([Figure 1.1.1](#)). The Project is expected to produce 1800 m³/day (11,300 bopd) of bitumen per day for 30 years.

The location and description of the Grizzly Algar Lake SAGD Project is included in [Section 1](#) and [Figure 1.1.1](#) and [1.1.2](#) and [Section 2](#).

AR 113/93 reference: 3(1)(b)

Grizzly is applying for approval to construct and operate the Algar Lake SAGD Project. Specific project details are outlined in [Section 2](#).

AR 113/93 reference: 3(1)(c)

5.3 ENERGY & UTILITIES BOARD APPROVAL

An application to the ERCB is included in [Sections 1](#) to [4](#) of this integrated application document.

AR113/93 reference: 3(1)(d)

5.4 ENVIRONMENTAL ASSESSMENT

As per Schedule 2 of AR 111/93 this project is not a Mandatory Activity and therefore an Environmental Impact Assessment Report is not required for this application.

Specialized consultants have been hired to complete reports related to the Algar Lake SAGD Project. These reports are included in the application ([Consultant Reports 1 – 10](#)). Summaries of relevant environmental studies are included in [Section 4](#) of this integrated application document.

AR 113/93 reference: 3(1)(e)

5.5 EXISTING APPROVALS

There are no existing approvals for the Algar Lake SAGD Project with respect to EPEA. Alberta Energy Resources Conservation Board (ERCB), Alberta Environment (AENV) and Alberta Sustainable Resources Development (ASRD) approvals have been issued for the survey, corehole drilling and seismic in the area of the Algar Lake SAGD Project.

AR 113/93 reference: 3(1)(f)

5.6 PROJECT SCHEDULE

A project schedule is provided in [Section 1.8.1](#) and [Figure 1.8.1](#).

AR 113/93 reference: 3(1)(g)

5.7 EMISSIONS AND CONTROL

The primary emissions from the Algar Lake SAGD Project are related to air. A description of the predicted air emissions, from the Algar Lake SAGD Project plant site is found in [Section 4.1](#) and [Consultants Report 1, Section 3.0](#).

A description of wastewater disposal is included in [Section 2.7.5](#). Drilling fluid and solid waste disposal is discussed in [Section 2.4.3](#). Surface runoff from the plant site and well pads is discussed in [Section 2.7.4](#).

A summary of the Grizzly waste management program is included in [Section 2.9.2.3](#).

AR 113/93 reference: 3(1)(h)

5.8 ENVIRONMENTAL MONITORING SUMMARY

There has been no previous environmental monitoring as this is a new project. [Section 4](#) contains a summary of the environmental information provided in the application including monitoring information.

AR 113/93 reference: 3(1)(i)

5.9 EMISSION CONTROL PERFORMANCE

A description of the predicted air emissions is found in [Section 4.1.3](#) and [CR #1 Section 3.0](#); the proposed mitigation measures are included in [Section 4.1.4](#).

The materials and energy balance is included in [Section 2.6](#) and the water management program in [Section 2.7](#).

AR 113/93 reference: 3(1)(j)

5.10 EMISSIONS JUSTIFICATION AND CONTROL

A description of the predicted air emissions is found in [Section 4.1.3](#) and [CR #1 Section 3.0](#), and proposed mitigation measures are found in [Sections 4.1.4](#).

AR 113/93 reference: 3(1)(k)

5.11 WASTE MANAGEMENT

Waste generated from the construction and operation of the Algar Lake SAGD Project will be minimal. The measures that will be implemented to minimize the amount of waste produced and a list of the wastes, including the disposal methods, is provided in [Section 2.9](#).

AR 113/93 reference: 3(1)(l)

5.12 ENVIRONMENTAL IMPACTS

The environmental impacts are summarized in [Section 4](#).

AR 113/93 reference: 3(1)(m)

5.13 EMERGENCY RESPONSE

An Emergency Response Plan will be filed with the Regional Municipality of Wood Buffalo for the Grizzly leases. A description of the emergency response plan to be developed for the Algar Lake SAGD Project is included in [Section 2.9.2.2](#).

AR 113/93 reference: 3(1)(n)

5.14 ACCIDENTAL RELEASE CONTINGENCY PLANS

Grizzly will develop a corporate emergency response plan that sets out procedures and identifies responsible personnel to deal with emergency situations. This plan is discussed in [Section 2.9.2](#).

AR 113/93 reference: 3(1)(o)

5.15 CONSERVATION AND RECLAMATION

Reclamation activities are referred to in [Section 4.2](#) and [Consultants Report 2](#).

AR 113/93 reference: 3(1)(p)

5.16 PUBLIC CONSULTATION

The public consultation program is described in [Section 3](#).

AR 113/93 reference: 3(1)(q)

5.17 SUPPLEMENTARY SUBMISSIONS

No other submissions are being made under EPEA in respect of the Algar Lake SAGD Project.

AR 113/93 reference: 3(1)(r)

5.18 ADDITIONAL INFORMATION

There is no other information required by the Director with respect to the Algar Lake SAGD Project.

Grizzly is also applying for approvals in accordance with the *Oil Sands Conservation Act* (Sections 1 to 4) and *Water Act* (Section 6).

AR 113/93 reference: 3(1)(s)