1 INTRODUCTION

1.1 THE LUNSKOYE SEISMIC SURVEY ENVIRONMENTAL STATEMENT

This document is the Environmental Statement (ES) for the proposed Lunskoye Seismic Survey. It has been prepared by Environmental Resources Management (ERM) on behalf of Sakhalin Energy Investment Company Ltd (SEIC). It reports the findings of an Environmental Impact Assessment (EIA) for the Lunskoye Seismic Survey.

The seismic survey is planned for 2003 and is to provide additional geological information to aid the development of the Lunskoye offshore oil and gas field on the north-east coast of Sakhalin Island, far-east Russia (see *Figure 1*). The field will be developed as part of the SEIC Sakhalin II Project (see *Chapter 3* for further details).

1.2 PURPOSE AND SCOPE OF THE EIA

There is currently no requirement under Russian Federation (RF) environmental legislation to carry out an EIA for offshore seismic surveys. SEIC's own environmental policy, however, does require an EIA to be carried out for all operations in potentially sensitive areas, or areas where there are potentially sensitive receptors. The scope of the EIA has followed best practice guidelines produced by the World Bank (WB) and the International Finance Cooperation (IFC) as well as those produced by Shell International and the International Association of Geophysical Contractors (IAGC). Details of the legislative framework and further information on best practice guidelines are presented in *Chapter 2*.

The use of the waters off the east coast of Sakhalin Island as migration routes and feeding areas for protected species, including the critically endangered (1) western gray whale is a key environmental issue with regard to offshore developments in this area. The specialist environmental consultancy LGL was commissioned to provide expert input into the assessment of impacts on the western gray whale and other marine mammals found in the area.

The aim of the Lunskoye seismic survey EIA is to:

- describe the physical, biological and human components of the environment in the project area and to assess their sensitivities;
- identify environmental risks associated with the proposed seismic survey;
- assess the character and probability of impacts on the environment;

(1) A species is Critically Endangered according to the 2000 IUCN *Red List* when it is facing an extremely high risk of extinction in the wild, as defined by IUCN criteria (IUCN, 2000) see *Chapter 2*.

- develop appropriate mitigation measures, environmental monitoring plans and management procedures that will reduce potential environmental impacts to 'as low as reasonably practicable' (ALARP) levels.

1.3 CONSULTATIONS

Public consultations on the proposed seismic survey will be carried out by SEIC as part of their wider consultation process for the Sakhalin II project. The process is presented in a separate Public Consultation and Disclosure Plan (PCDP), which is currently unavailable. The consultations will take place in the first quarter (Q1) of 2003.

1.4 REPORT STRUCTURE

The structure of the remainder of this report is outlined below.

- *Chapter 2* provides a review of the policy, legal and administrative framework covering the proposed seismic survey;
- *Chapter 3* describes the project, including the need for the survey and the nature of the proposed operations;
- *Chapter 4* presents baseline environmental information on the Lunskoye field and surrounding area;
- *Chapter 5* presents an assessment of the likely environmental impacts of the proposals;
- *Chapter 6* provides an analysis of project alternatives;
- *Chapter 7* describes mitigation measures, monitoring plans and environmental management procedures;
- *Chapter 8* presents the Environmental Management Plan;
- *Chapter 9* provides a summary and presents the conclusions of the report;
- *Chapter 10* presents the list of references cited in the text.

Figures referred to in the text are included in *Annex A*.