

2.0 SHE, SECURITY, AND REGULATORY PLAN

2.1 SAFETY, HEALTH, AND ENVIRONMENTAL OBJECTIVES AND INTEGRITY MANAGEMENT

The overall SHE objective of the Point Thomson Gas Cycling Project is to deliver exemplary safety, health, and environmental performance. The vision held for the project and operations is a workplace free of accident and illness, with a commitment to deliver outstanding environmental performance. The Point Thomson Unit will conduct business in a manner that is compatible with the environmental and economic needs of the local communities.

The Point Thomson gas cycling facilities will be designed, constructed, and operated under and in accordance with all applicable laws and regulations. It will also be operated in compliance with the requirements of ExxonMobil's Operations Integrity Management System (OIMS), which is similar in structure and requirements to the Occupational Safety and Health Administration's Process Safety Management regulations. Key elements of OIMS are:

- *Management Leadership, Commitment, and Accountability*: Specific roles and accountabilities;
- *Risk Assessment and Management*: Ongoing risk management;
- *Facilities Design and Construction*: Standards and practices;
- *Information / Documentation*: Drawings and other required documentation;
- *Personnel and Training*: Skill maintenance, and safety and health management;
- *Operations and Maintenance*: Procedures, programs including regulatory compliance;
- *Management of Change*: Permanent and temporary changes;
- *Third-Party Services*: Contractor management;
- *Incident Investigation and Analysis*: Root cause identification and global sharing;
- *Community Awareness and Emergency Preparedness*: Response planning/drills; and
- *Operations Integrity Assessment and Improvement*: Ongoing audit and findings resolution.

2.2 SAFETY, HEALTH, AND ENVIRONMENTAL PROGRAM

2.2.1 SHE Plan

SHE requirements for the project will be specified in overall and site-specific SHE plans covering the design, construction and operations phases. SHE requirements differ for each project phase and these requirements are described herein.

2.2.2 SHE Site-Specific Plan

Overall project and site-specific SHE plans will be developed and used throughout the life of the project to ensure that development and operational activities are carried out with maximum safety, health, and environmental protection. ExxonMobil's standard management systems and practices will be used, along with existing practices developed by Alaskan North Slope operators and industry, to develop plans specific to Point Thomson. The *North Slope Operations Alaska Safety Handbook* and *North Slope Environmental Field Handbook* will be used for reference to address SHE issues associated with working in the Arctic.

Standard systems have been established and will be adapted for Point Thomson to provide a systematic approach to the management, monitoring and influencing of SHE concerns. These systems, including constructability and process safety reviews, will apply to all phases of the project from design to decommissioning. These systems will be communicated to contractors to ensure their understanding of ExxonMobil's expectations and philosophy.

Design Phase

SHE requirements will be incorporated into the design phase of the project by implementing certain design requirements, reviews, audits, and plans:

- *Hazard and Operability (HAZOP) for Process Hazard Analysis:* This technique will identify inadequacies with respect to safety and operability in design of process flow sequences to be addressed in the project design phase.
- *Facility Site Reviews:* The conceptual layout and the detailed design layout will be subject to a facility site review. This review will ensure that the location, layout, and orientation of process plant, utility modules, control rooms, camps, wells, and drill rigs are such that hazards from gas release(s), fire(s), and explosion(s) are all minimized. These reviews are conducted with the plot plan, three-dimensional computer-assisted-drafting model and consequence analysis.
- *Independent Project Review:* Audits assess the readiness of the project to proceed to the next phase (Design ⇌ Construction ⇌ Operation).
- *Constructability Review:* These reviews are done to incorporate construction knowledge into the design. Construction-related hazards found during these reviews could be addressed in the design phase, allowing for engineered solutions to safety versus procedural safety.

Construction Phase

SHE provisions will be very important during the construction phase of the facility and pipeline. Established safe construction practices, together with a strong quality control/quality assurance program, will be used to ensure the health and safety of project personnel and the public, and protection of the environment during the construction and commissioning of the facility and pipeline. All personnel will observe and comply with all applicable federal, state, and local laws and regulations related to public health and safety, and the environment.

Construction techniques, plans, and personnel training will be implemented during construction to maximize health and safety protection and minimize environmental impacts. These include:

- Oil Discharge Prevention and Contingency Plan (ODPCP);
- Ice roads to prevent tundra damage;
- Most civil gravel work to be conducted during the winter to minimize impact on tundra;
- Polar bear interaction plan;
- Project personnel training on environmental awareness;
- Permit compliance training;
- Quality control/assurance (e.g., welding inspection, hydrotesting, etc.);
- Evacuation plans (medical and emergency);
- Safety and environmental risk analysis;
- Safety procedures, training, and meetings;
- Job Safety Analysis; and
- Waste management plan

Operations Phase

All necessary systems (e.g., procedures and documentation) required to conduct the affairs of the Point Thomson Unit operating organization in a safe and efficient manner will be developed and implemented through the ExxonMobil Production Company's Operations Development and Support Group (OD&S).

ExxonMobil's Production Reference Manual (PRM) for New Operations establishes operations system requirements to be in place at start-up. Implementation of the PRM requirements will ensure that all necessary systems are in place and that the new operating organization benefits from best practices derived from global operating experience. The requirements for management processes, operating procedures, and documentation for new organizations are established by worldwide ExxonMobil standardized best practices and operating experiences. They incorporate ExxonMobil management systems modified for specific local requirements. Line management is accountable for ensuring that all necessary procedures and documents are implemented before start-up.

2.2.3 Environmental Goals

Environmental goals are defined as a set of criteria or objectives to be incorporated in project design and during planning for construction and operations. The principal environmental goals are to:

- Develop an environmentally sound project,
- Assure compliance with regulatory requirements and internal company expectations, and
- Address concerns of local residents.

The goals selected for the Point Thomson Unit development are based on applicability to the Unit area and reservoir characteristics, technical feasibility, economic feasibility, and effectiveness in reducing environmental impacts. These environmental goals are one component of the set of project mitigation measures including baseline studies, agency consultation, and public outreach.

The Point Thomson Project Management Team (PMT) understands that there are many environmental considerations and issues that must be addressed effectively throughout the project. Specific project environmental mitigation measures are delineated in the *Point Thomson*

Gas Cycling Project Environmental Report (July 2001)¹ and its Amendment (July 2002)². The following list identifies potential issues:

- Caribou herd migration, insect relief, calving;
- Polar bears, grizzly bears, and other carnivores;
- Birds (including threatened and endangered species);
- Marine mammals (including threatened and endangered species);
- Fish and fish habitat;
- Air quality;
- Water quality and quantity;
- Spill prevention and response planning;
- Placement of gravel fill;
- Waste management;
- Archaeological sites; and
- Subsistence use and other local community issues.

These and other environmental issues have been addressed during conceptual engineering or will be addressed during subsequent engineering phases. Accordingly, they will be reviewed and updated on a regular basis. This will allow environmental mitigation measures to reflect more detailed design information and to be based on a more complete understanding of agency and public concerns.

2.3 SECURITY

Point Thomson is remotely located in a sparsely populated area and is not connected to other North Slope communities by permanent road. Customary security plans for similar operations in the area include coordination with local and state police agencies when some unusual security concern or event is experienced.

As with other North Slope industrial facilities, public access will be regulated to ensure facility security and safety. There is minimal documented use of the onshore area for significant subsistence use; however, local residents may occasionally pass through the Point Thomson Unit. ExxonMobil understands the need for public access and pass-through, and will provide access as necessary without compromising site control and safety issues. Hunting will be prohibited in the immediate vicinity of pipeline and other production facilities to prevent accidental damage, and reasonable precautions will be taken (locking critical valves, equipment buildings, etc.) to discourage or prevent vandalism or sabotage.

During the construction/drilling phase of the project, the local workforce at Point Thomson will be larger and traffic will be substantially higher than later during operations. Temporary ice roads will link Point Thomson to Prudhoe Bay infrastructure during construction and perhaps occasionally during operations, depending on logistics needs. Therefore, it will be necessary to

¹ URS Corporation (2001). *Point Thomson Gas Cycling Project Environment Report*. Prepared for ExxonMobil Production Company on behalf of the Point Thomson Unit owners by URS Corporation (Anchorage, Alaska). July 30, 2001.

² URS Corporation (2002). *Point Thomson Gas Cycling Project Environmental Report Addendum*. Prepared for ExxonMobil Production Company on behalf of the Point Thomson Unit owners by URS Corporation (Anchorage, Alaska). July 31, 2002.

provide additional security resources when ice road access is available. Security plans for both construction/drilling and operating phases will be developed as part of the project execution plan.

2.4 REGULATORY REQUIREMENTS

Federal, state and local (NSB) approvals will be required for construction and operation of this project. The National Environmental Policy Act (NEPA) process is required for review of all federal permits, and for this project it has been determined that an EIS has to be prepared to comply with NEPA. The State of Alaska is landowner and oil and gas lessor of the Point Thomson Unit and along the proposed export pipeline corridor, and therefore has a major role in project land use and resource development approvals. These include approval of a Unit Plan of Development for surface facilities construction and issuance of a Right-of-Way Lease for the export pipeline. An ACMP consistency review is required for nearly all state and federal permits to ensure conformance with policies and standards of the ACMP and the NSB's Coastal Management Program. The Point Thomson Unit is located within the NSB, and the project requires approval from the NSB under the provisions of its Title 19 Land Management Regulations.