

Industry: Oil and gas

Duration: 2004 - ongoing

Location: Newfoundland and Labrador

Case study type: Species rehabilitation

Oiled seabird rehabilitation program



Suncor Energy Inc. is Canada's largest integrated energy company, with its head office in Calgary, Alberta. Suncor combines a leading position in oil sands with complementary operations in refining and marketing, natural gas production and conventional oil production internationally and offshore East Coast Canada. The company's oil sands business, located near Fort McMurray, Alberta, produces bitumen recovered from oil sands through mining and in-situ technology and upgrades it into refinery feedstock, diesel fuel and by-products. Suncor operates four refineries with a capacity of approximately 433,000 barrels-per-day and one specialty lubricants plant producing more than 350 automotive, industrial and food grade lubricants and greases. Its retail and wholesale network includes more than 1,500 Petro-Canada outlets in Canada, and 165 Phillips 66 outlets in Colorado, United States. In addition to its petroleum business, Suncor has invested in four wind power projects and operates Canada's largest ethanol production facility. The company has a market capitalization of \$58 billion Canadian (as of October 30, 2009).

Suncor's perspective on biodiversity

Suncor completed its merger with Petro Canada on August 1, 2009, resulting in Suncor becoming Canada's largest energy company by market capitalization. Suncor continues to pursue a vision of responsible energy development through environmental stewardship, sustainable development and environmental excellence. Suncor has taken a proactive approach to reduce its environmental footprint by adopting a series of strategic environmental performance goals in the areas of water use, land disturbance, energy efficiency and air emissions.

Suncor has worked on a number of fronts to minimize our impact in the regions that we operate:

- **Advanced reclamation techniques at its oil sands mining operations:** these include contouring the land for a natural appearance, providing suitable drainage and minimizing erosion by planting native trees, grasses and bushes.
- **Conservation of environmentally sensitive habitats:** Suncor has worked with different agencies to voluntarily conserve sensitive areas near our operations.
- **Advanced technology to minimize its footprint:** examples include the use of in-situ bitumen extraction method which has a smaller land footprint and use of low-impact seismic lines and horizontal drilling in its natural gas business to help reduce their environmental footprint in sensitive areas.
- **Monitoring wildlife activity:** Suncor invests in research, monitoring and conservation activities. This includes habitat restoration for caribou along its North Cabin natural gas pipeline,

and post-construction avian monitoring projects and bat mortality studies at its wind farms.

- **Working with others:** Suncor proactively consults with stakeholders to continually improve on the work it is doing to preserve biodiversity.

The exploration and production of oil sands, natural gas and onshore and offshore conventional oil requires the development of infrastructure such as seismic lines, roads, pipelines, well pads, storage and processing facilities. As such, ecosystem and biodiversity issues and stressors are apparent throughout the regions where Suncor operates. Suncor's activities, facilities and operations inherently depend on and influence ecosystems and biodiversity. Suncor's business units deal with ecosystems and biodiversity-related issues including:

- Land use: greenfield developments and protected areas;
- Fresh water: acquisition, use, and discharge;
- Endangered, protected, or flagship species;
- Cultural value: traditional areas and cultural land use; and
- Recreational value: protected areas and recreational land use.

Environmental Excellence Plan

Environmental performance and sustainability is one of the key drivers of the Suncor's operational excellence strategy. In concert with establishing environmental goals, Suncor is implementing a new business process – the Environmental Excellence Plan (EEP) – to support its environmental performance goals. The main objective of the EEP is to accelerate improvements in Suncor's environmental performance and to go "beyond compliance".

The EEP will assess and analyze environmental initiatives identified by business units across Suncor. Those environmental initiatives that provide the largest benefits for the costs incurred ensure that progress towards environmental goals is accelerated over time.

This business process will promote collaboration between a corporate Environmental Excellence team and the business units to improve visibility of environmental initiatives across the company. The methodology will provide for improved resource allocation and the identification of synergies and best practice sharing opportunities. The EEP will be an integral part of the business planning process, reinforcing the principle of integrated environmental progress and business performance, which underpins Suncor's sustainability strategy.

Offshore policies and procedures

Suncor's vision is to be a sustainable energy company. That means operating its business in a way that enhances social and economic benefits to society while minimizing the environmental impacts of resource development. As such, the Environment, Health and Safety section of Suncor's International and Offshore East Coast Management system includes environmental policies, plans and procedures such as:

- Environmental protection plans for drilling and production operations;
- Compliance monitoring plans for drilling and production operations;
- Seabird monitoring, cleaning, sampling and rehabilitation procedures;
- Environmental effects monitoring program;
- Offshore chemical management system;
- Fisheries liaison and compensation program;
- Fish habitat compensation plan;
- Waste management plans and procedures.

Case Study: Suncor oiled seabird rehabilitation program

Rationale

Suncor is a participant in every major oil development project on the Grand Banks of Newfoundland and Labrador, off Canada's east coast, and has been producing oil from the Terra Nova Field since 2002. The Seabird Rehabilitation Centre was established in 2004 by Petro-Canada.



Suncor's oiled seabird program is based on the recognition that changing environmental conditions, species endangerment and biodiversity loss coupled with increased stakeholder expectations have greatly influenced operating practices in the oil and gas sector. Sustainable development represents a critical driver for focusing increased corporate attention on ecosystems and biodiversity issues. The Suncor oiled seabird program supports the seabird ecosystem with three main initiatives:

1. **Leach's Storm Petrel Recovery & Release Program:** recovery and release of Leach's storm petrels to the wild.
2. **Seabird Monitoring Program:** monitoring seabird populations and their habits around oil drilling and production sites.
3. **Seabird Rehabilitation Centre:** cleaning and rehabilitation of oiled seabirds collected on offshore installations and vessels.

Description

As part of its commitment to mitigate ecosystem and biodiversity effects of its offshore oil exploration and production operations, Suncor has obtained a Level 1 emergency rehabilitation permit from the Canadian Wildlife Service under the *Migratory Bird Convention Act* and authorization from the Government of Newfoundland and Labrador under the *Wild Life Regulations* to operate the Seabird Rehabilitation Centre. The Centre, which is permitted to handle up to ten seabirds at a time, consists of:

- Admissions office;
- Laboratory;
- Animal washing and rinsing area;
- Treatment area;
- Isolation room;
- Husbandry room;
- Drying room;
- Necropsy area;
- Worker change room;
- Washroom and shower facilities.

The purpose of this state-of-the-art, 1,800-square foot Centre, located in St. John's, Newfoundland, is to provide timely attention to animals that have either been injured or oiled. The Centre is staffed, as needed, by a veterinarian and trained volunteer Suncor employees and contractors who clean and rehabilitate birds exposed to oil from offshore operations. Suncor has made the Centre available to other oil and gas companies on the East Coast to supplement their oil spill response programs. At the request of the Canadian Wildlife Service, Suncor has also made the Centre available to other parties to clean and rehabilitate birds that have become oiled through non oil and gas related activities. In addition, Suncor has partnered with the Newfoundland and Labrador Environment Association (NLEA), which operates a licensed rehabilitation facility in Ship Cove, Placentia Bay, NL, to provide longer term rehabilitation of seabirds, if required.

Procedure for Cleaning Oiled Seabirds Manual (PCOSM)

Detailed procedures and training for handling oiled seabirds from the initial sighting of an oiled bird to the final disposition of the animal have been developed to assist Suncor personnel. The procedures and protocols detail:

- Facility layout;
- Seabird rehabilitation personnel;
- Health and safety;
- Capture, handling and transport protocols;
- Medical evaluation of recovered seabirds;
- Cleaning protocol;
- Husbandry;
- Transportation issues;
- Seabird release criteria;
- Euthanasia guidelines;
- Post-mortem procedure;
- Record keeping.

The probability of survival of an oiled seabird is dependent on the bird being delivered to the Centre as quickly as possible. To ensure this takes place, designated offshore personal have been trained and are responsible for handling these activities. The offshore designated person plays an important role in arranging transport of the bird to the Centre. Logistics arrangements are coordinated with the onshore Environmental Team.

The Centre has been designed with engineering controls and staff is equipped with personal protective equipment to mitigate potential risks associated with seabird handling. The Centre response team is led by a specially trained veterinarian who is responsible for the assessment of incoming birds, medical examinations, treatment, monitoring, washing activities, husbandry and recuperation, euthanasia and authorization of release of birds to the wild or the NLEA rehabilitation facility. The Centre has a team of volunteer Suncor employees and contractors who have been trained as seabird cleaners and perform a critical role in the handling and care of any animal impacted by operations.

The design of the Centre and training of Suncor volunteers has been supported by Tri-State Bird Rescue & Research, an internationally recognized and qualified third party wildlife rescue and rehabilitation organization based in Newark, Delaware.

If a large oil spill occurred on a Suncor-operated facility, seabird cleaning and rehabilitation would be managed as part of Suncor's overall oil spill response. If necessary, cleaning operations would be supported by Tri-State, the NLEA and the Eastern Canada Response Corporation (ECRC), a certified marine oil spill response organization.



Communications

Communications activities surrounding the operation of the Suncor Seabird Rehabilitation Centre include:

- Publication of related stories in the 2004 publicly available Petro-Canada "Report to the Community";
- TV and print adds titled "Part of your Community" that highlighted local Suncor employees;
- Public, government and industry presentations by Suncor staff.

Stakeholders and roles

Suncor: Financing, running, maintenance and staffing of the Centre and associated responsibilities.

Newfoundland and Labrador Environment Association: Long term rehabilitation if required.

Tri-State Bird Rescue and Research: Training, advice and support.

Eastern Canada Response Corporation: Logistical support if required.

Environment Canada, Canadian Wildlife Service: Emergency Rehabilitation Permit.

Government of Newfoundland and Labrador, Department of Environment and Conservation: Wildlife Handling Permit.

Outcomes

Benefits

Economic

The establishment and operation of the Suncor Seabird Rehabilitation Centre is consistent with its corporate responsibility and sustainable development strategies. It has supported Suncor's license to operate.

Biodiversity

Since 2004, the Centre treated 53 seabirds. The success rate for treatment of oiled sea birds in the Centre is 70%, which is outstanding when compared to a survival rate of 25% which is typical in other areas.

Lessons learned

Voluntary participation in programs that benefit biodiversity impacted by its actions, has been a valuable lesson for Suncor. Through the establishment of the Centre, Suncor has gained improved relationships with:

- government regulators and agencies;
- ENGOs;
- local communities.

Impact on company

Positive public and government response to the development and operation of the Seabird Rehabilitation Centre has demonstrated the value of the facility and supports future Suncor involvement in environmental programs.

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