

Best Practice

Newfoundland and Labrador –
Offshore Adverse Weather
Communications Protocol
May, 2021

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1 Introduction

This Industry Best Practice entitled Offshore Newfoundland and Labrador – Adverse Weather Communication Protocols, is a result of a joint effort among offshore east coast Canada Petroleum Industry Operators and Workplace Representatives, and the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB).

CAPP has created the following document to ensure that roles, responsibilities and needs are clearly identified prior to any events that may affect the integrity of offshore operations.

This document provides guidance for Operators and applies to the actions that may be required by one or more Marine Installations or Structures due to adverse weather. This Industry Best Practice is intended to describe how Operators will communicate with each another and the C-NLOPB pertaining to weather information, plans, precautions and resource availability, such as vessels or helicopter transport.

In the case of an unplanned event on any of the individual facilities, the Marine Installation or Structure's specific Emergency Response Plan will be utilized.

The principles upon which this Best Practice has been prepared include:

- Each Marine Installation or Structure has been designed to shelter in place where it is safe to stay onboard, up to the facility design limits, and maintains its own adverse weather protocols.
- Each Marine Installation or Structure has different design criteria and as such, will not necessarily take the same precautions at the same time.
- While some Marine Installations or Structures are located in a relatively close geographic area, actual environmental conditions may vary between facilities.
- Each Operator will have independent precautionary demobilization protocols based on their dedicated support resources. An Operator may avail of other Operators' resources under mutual aid if available.
- Operators continuously assess risk and have pre-established execution plans in place that take into account dynamic weather conditions.

This Industry Best Practice will be posted on the C-NLOPB website as a recognized Code of Practice (COP). Operators and Employers will be directed by the C-NLOPB to adopt it as such.

This requirement is in accordance with 205.016 (1) of the *Atlantic Accord which stipulates that the "Chief Safety Officer may, in writing, require an operator to establish a code of practice in respect of occupational health and safety, or to adopt a code of practice in respect of occupational health and safety that is specified by the Chief Safety Officer, in respect of*

- (a) any of its workplaces or any work or activity carried out at any of its workplaces; or
- (b) the transportation of employees to or from any of its workplaces.

1.1 Purpose and Scope

Each Newfoundland and Labrador offshore Operator is required to have policies and procedures in place for weather sensitive operation procedures. This Best Practice has been developed to enhance planning, communication and collaboration among Operators with a primary focus on best practice for operating procedures in adverse weather environments to further reduce risks and harm to offshore workers, the environment and facilities in the Canada-Newfoundland and Labrador Offshore Petroleum Area.

This document does not include all regulatory requirements and measures identified as a result of hazard identification and risk assessment processes. Operators, Employers and Service Providers are expected to identify and implement appropriate control measures to ensure risks have been reduced to As Low As Reasonably Practicable (ALARP).

Information contained in this Best Practice should not be read in isolation. This document is intended to complement an individual Operator and/or Service Provider's procedures, as well as legislative and regulatory requirements. Operators and other parties are responsible to be aware of, and to abide by, all applicable requirements in transit and working offshore. C-NLOPB issued Guidance may also contain additional information to assist in complying with the *Accord Act(s)* and regulations related to an application for Authorization in the case of drilling or production activities.

This Industry Best Practice will be updated from time to time to consider lessons learned, new technology and regulatory developments.

2 Terms and Definitions

For the purpose of this document, the following terms and definitions apply.

Accord Act	Refers to the <i>Canada-Newfoundland and Labrador Atlantic Accord Implementation Act</i> and, the <i>Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act</i> . ¹
Adverse Weather	Any forecasted weather event that encroaches on the Marine Installation or Structure's design conditions or limits.
ALARP	Refers to reducing risk to a level that is As Low As Reasonably Practicable. In practice, this means that the Operator has to show through reasoned and supported arguments that there are no other practicable options that could reasonably be adopted to reduce risks further. ²
Authorization	As defined in Sub-Section 205.001 (1) of the <i>Accord Act</i> .
Asset Manager	Person responsible for establishing an operational plan for the development and operation of the asset.
Emergency Response Plan	Companies are required by law to have comprehensive emergency response plans and procedures in place before the C-NLOPB approves their activities.
Employee	As defined in section 205.001 (1) of the <i>Accord Act</i> .

¹ All references made to the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Act* and, the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act* reflect the *federal version*

² NOPSEMA Guidance Note N-04300-GN0166-ALARP (Rev 6, June 2015)

Employer	As defined in section 205.001 (1) of the <i>Accord Act</i> .
Industry Best Practice	Means the good and prudent practices of the petroleum industry including in matters of, but is not limited to, preservation of the environment, of engineering, of well conservation and exploitation principles; of hygiene, of health, and of general safety used in the international petroleum industry.
Marine Installation or Structure	<p>As defined in Section 205.001 of the <i>Accord Act</i> a Marine Installation or Structure (a) includes</p> <ul style="list-style-type: none"> • (i) any ship, including any ship used for construction, production or diving or for geotechnical or seismic work, • (ii) any offshore drilling unit, including a mobile offshore drilling unit, • (iii) any production platform, subsea installation, pipeline as defined in section 135, pumping station, living accommodation, storage structure or loading or landing platform, and • (iv) any other work, or work within a class of works, prescribed under paragraph (4)(a); but <p>(b) does not include</p> <ul style="list-style-type: none"> • (i) any vessel, including any supply vessel, standby vessel, shuttle tanker or seismic chase vessel, that provides any supply or support services to a ship, installation, structure, work or anything else described in paragraph (a), unless the vessel is within a class of vessels that is prescribed under paragraph (4)(b), of the <i>Accord Act</i> or

	<ul style="list-style-type: none"> • (ii) any ship or vessel within a class of ships or vessels prescribed under paragraph (4)(c).
Canada - Newfoundland and Labrador Offshore Petroleum Area	Refers to the Canada-Newfoundland and Labrador Offshore Petroleum Area(s) as defined by the <i>Accord Act</i> .
Non-Essential Personnel	The designation of non-essential personnel are those who are not involved or required to support and maintain safe and environmentally responsible operations of offshore oil and gas facilities.
Offshore Installation Manager (OIM)	As defined/referenced in section 193.2 of the <i>Accord Act</i> .
Operator	As defined in section 205.001 (1) of the <i>Accord Act</i> .
Provider of Services	As defined in section 205.001(1) of the <i>Accord Act</i> . A <i>Provider of Services</i> means a person who, for commercial gain, <ul style="list-style-type: none"> (a) provides services related to the placement with an operator or employer of individuals who, in return for monetary compensation, perform work or services for the operator or employer at a workplace; or (b) provides services that affect or could affect the health or safety of employees or other individuals at a workplace or on a passenger craft, including engineering services, architectural services, the services of a certifying authority referred to in subsection, or the services of any person who provides information or advice, issues a certificate or affixes a professional seal or stamp.
Workplace	As defined in section 205.001 (1) of the <i>Accord Act</i> .

3 Legislative Regime and References

Any references in this document to the *Accord Act(s)* are to the federal versions of the *Accord Act(s)*. Responsible parties are required to follow both federal and provincial legislation in the jurisdiction they are operating in.

Legislative references include but are not limited to the following:

- *Canada-Newfoundland and Labrador Atlantic Accord Implementation Act, S.C.1987, C.3*
- *Newfoundland Offshore Area Petroleum Geophysical Operations Regulations S.O.R./95-334*
- *Newfoundland Offshore Petroleum Drilling and Production Regulations, S.O.R./2009-316*
- *Newfoundland Offshore Petroleum Installations Regulations, S.O.R./1995-104*
- *Canada-Newfoundland and Labrador Offshore Marine Installations and Structures Occupational Health and Safety Transitional Regulations*
- *Canadian Aviation Regulations, S.O.R./1996-433*
- *Aeronautics Act, R.S.C., 1985, c. A-2*

4 Weather and Environmental Considerations – Flight Operations

Flight operations are regulated by Transport Canada, and managed under Helicopter Service Providers' approved Company Operations Manual (COM).

Operators' and Helicopter Service Providers' management systems must comply with Transport Canada Regulations and C-NLOPB requirements, and take into consideration the actual physical environmental conditions and those forecasted for the planned trip duration route to or from destinations in flight planning as part of flight dispatch protocols. Factors to consider include, but are not limited to:

- Consistency and variability associated with various weather and marine forecasts;
- Visibility;
- Wind speed and direction;
- Sea state, (including swell height and direction, current or tide speed and direction);
- Weather conditions (including rain, snow or ice, lightning induced phenomena);
- Time of day, including Civil Twilight; and
- Any additional criteria or restrictions as deemed appropriate by Transport Canada, the Helicopter Service Provider, Operator or other agencies, including the C-NLOPB and Canadian Transportation Safety Board.

5 Action Timeframe

Each Marine Installation or Structure has been designed to shelter in place up to the facility design limits and maintains its own adverse weather protocols. Operators recognize that the purpose of having adverse weather protocols is to prepare for and prevent emergencies, and to mitigate any potential harm to the extent possible.

Operator-specific safety management systems contain detailed plans and procedures for mitigating the effects of adverse weather conditions which are developed based upon the specific Marine Installation or Structure and operating conditions. The intent of this document is to provide high-level guidance. This document is not intended to duplicate or supersede Operator-specific requirements.

The following timeframes noted are reference points that may vary depending on current weather conditions and as forecast conditions change, and reflect minimum actions to be taken.

Table 1 – Operator Action Timeframe		
Timeframe (T = day of forecasted Adverse Weather event	Forecasted Conditions	Actions
T – 7 days	Forecasted conditions are approaching design conditions or limits of one or more Marine Installation or Structure.	<ul style="list-style-type: none"> • Commence Operator Coordination Meeting. • Each Operator will independently provide daily updates to C-NLOPB for their respective Marine Installation or Structure. • In addition to the Operator’s established protocols for adverse weather all Marine Installation or Structure Operators to assess the risk of continuing normal operations and Marine Installation or Structures to also consider transit to shelter. • Determine mobilization of essential resources and demobilization of Non-Essential Personnel.

<p>T – 5 days</p>	<p>Forecasted conditions are approaching design conditions or limits of one or more Marine Installation or Structure.</p>	<ul style="list-style-type: none"> • Continue daily Operator Coordination Meeting (increase frequency from daily to twice daily if one or more Operators commence precautionary demobilization of personnel). • In addition to the Operator’s established protocols for adverse weather all Marine Installation or Structure operators to assess the risk of continuing normal operations and Marine Installation or Structures to also consider transit to shelter. • Determine mobilization of essential resources and demobilization of Non-Essential Personnel. • Each Operator will continue to independently provide daily updates to the C-NLOPB for their respective Marine Installation or Structure.
<p>T – 3 days</p>	<p>Forecasted conditions are approaching design conditions or limits of one or more Marine Installation or Structure.</p>	<ul style="list-style-type: none"> • Increase Operator coordination- • In addition to the Operator’s established protocols for adverse weather all Marine Installation or Structure Operators to assess the risk of continuing normal operations and Marine Installation or Structures to also consider transit to shelter. • Determine mobilization of essential resources and demobilization of Non-Essential Personnel. • Each Operator will continue to independently provide daily updates to the C-NLOPB for their respective Marine Installation or Structure.

<p>T – 2 days</p>	<p>Forecasted conditions are approaching design conditions or limits of one or more Marine Installation or Structure.</p>	<ul style="list-style-type: none"> • In addition to the Operator’s established protocols for adverse weather all Marine Installation or Structure operators to assess the risk of continuing normal operations and Marine Installation or Structures to also consider transit to shelter. • Determine mobilization of essential resources and demobilization of Non-Essential Personnel. • Each Operator will continue to independently provide daily updates to the C-NLOPB for their respective Marine Installation or Structure.
<p>T – 1 days</p>		<ul style="list-style-type: none"> • Ensure all environmental and safety critical equipment is not affected or compromised by environmental conditions and will continue to operate as per design. • In addition to the Operator’s established protocols for adverse weather all Marine Installation or Structure operators to assess the risk of continuing normal operations and Marine Installation or Structures to also consider transit to shelter. • Conduct Marine Installation or Structure final walkthrough and secure all loose articles on deck. • Check all telecommunication devices and ensure they are available. • Each Operator will continue to independently provide daily updates to the C-NLOPB for their respective Marine Installation or Structure.

<p>T – 12 hours</p>		<ul style="list-style-type: none"> • Public Address announcement will be made prior to start of conditions and at a minimum the beginning of every 12 hour shift until conditions subside. • Announcement will also be communicated through pre-tour and planning meetings. • Announcement will address if a stoppage of work has been issued for affected area(s). • Each Operator will continue to independently provide daily updates to the C-NLOPB for their respective Marine Installation or Structure.
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Note: all steps are considered sequential and should be reviewed at each stage as required.

6 Down-staffing Assets

Marine Installations or Structures that share support craft, such as helicopters and vessels, need to coordinate shared assets for down-staffing purposes, which will be considered in the T-time calculations as discussed above.

Personnel transfers generally have Marine Installation or Structure safe operating limits. Forecasting and planning for T-times must include adequate lead-time to ensure that any necessary transfers to vessels take place before safe operating limits are exceeded. Refer to Section 10 for Additional reference material pertaining to the transfer and transport of employees.

7 Post Adverse Weather Actions

Following the adverse weather event, Operators will convene and conduct a post adverse weather review. The intent of the post adverse weather review is to discuss current operational status including the need for resources post-adverse weather, as well as to review actions, facilitate sharing of information and lessons learned, and identify continuous improvement opportunities.

8 Operational Restart

The intent of this Industry Best Practice is not to address operational restart given that is a complex process with well-defined stages and procedures identified in individual Operator operational restart plans.

9 Responsibilities of Workplace Parties

The following are the overarching responsibilities of Operators, Employers, Service Providers, and Employees. This is not an exhaustive list and is intended to complement the specific responsibilities contained in the Operator's and/or Employer's management system, requirements and the *Accord Acts* and associated regulations.

9.1 Responsibilities of Operator

Operators are responsible to ensure open communication in advance of adverse weather so that the available contracted and/or shared services or resources can be effectively coordinated, and tasked to complete appropriate mobilization or demobilization if required. Communication protocols have been created across Marine Installations or Structures during Adverse Weather events that have the potential to trigger precautionary demobilization of offshore personnel from one or more Marine Installations or Structures. Each Operator will

ensure that assets under their operations authorization are included in the scope of the protocols and responsibilities of the Operator.

The Operator is also responsible for ensuring that the offshore workforce at a minimum via the Workplace Committee is apprised of Adverse Weather and associated hazards on the affected Marine Installations or Structures.

9.2 Operator Coordination Meeting

If the weather forecast (including range of uncertainty) is approaching design conditions or limits of one or more Marine Installation or Structure, an Operator Representative will initiate communication to other Operators and will establish an initial Operator Coordination Meeting. The Operator Coordination Meeting will be hosted at one of the Operator's offices or via teleconference.

The meeting agenda will provide opportunity for each Operator to advise of:

- Current weather conditions observed at the Marine Installation or Structure
- Forecasted conditions and forecast activity
- Confirm forecast/ Adverse Weather track remains valid
- Current Personnel On Board (POB)
- Current operational status
- Priority and planning requirements
- Resources (vessels & helicopters) available to assist demobilization
- Timing of any potential demobilization activities
- Communication plans to offshore Marine Installations or Structures
- Communication plans and identified actions are to be provided to the Chief Safety Officer, C-NLOPB via email
- Actions for the next 24 hours (if applicable)

Each Operator will determine appropriate representation at the coordination meeting and will likely include:

- Offshore Installation Managers (OIM)
- Logistic representatives
- Asset Managers (or equivalent)
- Helicopter service provider representative (part time attendance)
- Forecast provider representative (part time attendance)

Operator Coordination Meetings will increase from daily to twice daily if one or more Operators commence precautionary demobilization of personnel.

Execution of demobilization plans may require travel outside normal helicopter and/or vessel operating parameters. A selected representative or individual Operators will seek acknowledgement from the C-NLOPB prior to implementing such measures based upon a risk based approach.

Each Operator will independently provide daily updates to C-NLOPB for their respective Marine Installations or Structures.

9.3 Responsibilities of Employers

Employers are required to meet all regulatory requirements. In accordance with the *Accord Acts*, every Employer is responsible for:

- The health and safety of its employees and other individuals at a Workplace under its control;
- The health and safety of its Employees at a Workplace that is not under its control, to the extent that it controls their activities at the Workplace; and
- The health and safety of its Employees while — and immediately before — they are transported on a helicopter or by supply vessel.

9.4 Responsibilities of Employees

Employees are required by the operator to meet all requirements in accordance with the Operator's Safety Management System, policies and programs, including:

- Identifying, assessing and reporting of hazards, and
- Regulatory requirements.

9.5 Responsibilities of Weather Service Providers

Weather Service Providers shall provide weather forecasts in accordance with Operator-specific requirements.

9.6 Responsibilities of Helicopter Service Providers

Helicopter Service Providers operate in full compliance with the requirements of Transport Canada regulations, the *Accord Act(s)* and associated regulations, and the management system that has been accepted by the Operators.

9.7 Responsibilities of Offshore Standby Vessels

Offshore Standby Vessel Providers operate in full compliance with the requirements of Transport Canada regulations, the *Accord Act(s)*, associated regulations and guidelines, and the management system that has been accepted by the Operators.

10 Additional Reference Material

- Atlantic Canada Offshore Petroleum Industry Safe Lifting Practice for the Training and Qualifications of Offshore Personnel, April 2020
- Atlantic Canada Standby Vessel Guidelines
- *Canada-Newfoundland and Labrador Atlantic Accord Implementation Act*
- CAP 437 Standards for Offshore Helicopter Landing Areas
- CAP 746 Meteorological Observations at Aerodromes
- Code of Practice for the Transportation of Employees by Helicopter To and From an Offshore Workplace Offshore East Coast Canada
- *Diving Operations Safety Transitional Regulations*
- Fatigue Management in the Canada-Newfoundland and Labrador Offshore Petroleum Industry, January, 2018
- Incident Reporting and Investigation Guidelines, April 2018
- *Marine Installation and Structures Transitional Regulations*
- *Newfoundland Offshore Petroleum Drilling and Production Regulations*
- *Newfoundland Offshore Petroleum Installations Regulations*
- *Occupational Health and Safety Transitional Regulations*
- Offshore Physical Environmental Guidelines, 2008