



**SUMMARY OF
CONSULTATION AND ENGAGEMENT
RESULTS**

January 2018

**GEOPHYSICAL REPORTING GUIDELINES AND INTERPRETATION
NOTES**

OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS

TABLE OF CONTENTS

Executive Summary	1
Introduction	2
Comments Received and Response	3
General Comments.....	4
Privilege Period Comments	6
Section 1: Introduction	8
Section 2: Weekly Status Reports	9
Section 3: Final Report – Geophysical Operation (Exclusive and Non-Exclusive)....	10
Section 4: Final Report – Purchased and Reprocessed Data for Credit.....	12
Section 5: Administration and Release of Data	13
Appendix 1: Digital Document Submission	14
Appendix 2: Map and GIS Data Submission.....	14
Conclusion	15

EXECUTIVE SUMMARY

The Office of the Regulator of Oil and Gas Operations (OROGO) made the draft *Geophysical Reporting Guidelines and Interpretation Notes* (Guidelines) available for consultation and public engagement on October 18, 2017. Nine responses were received from various organizations, including Government Organizations, regulatory co-management bodies and industry.

The draft Guidelines received mixed responses with many positive reviews from most responders; however, two industry-affiliated responses appeared to have concerns regarding the legislative reporting requirements and the intent of the data collection as a whole.

The comments received ranged from broad policy questions to specific questions and suggestions about technical aspects regarding geophysical reporting. All comments received are summarized in this document, organized according to the sections of the draft Guidelines.

The Guidelines have been revised to reflect the comments received where they resulted in improvement while maintaining the integrity of the Guidelines with respect to their objectives.

The Regulator thanks all of the organizations and individuals who took time to review and comment on the Guidelines.

INTRODUCTION

The Office of the Regulator of Oil and Gas Operations (OROGO) made the draft *Geophysical Reporting Guidelines and Interpretation Notes* (Guidelines) available for consultation and public engagement on October 18, 2017.

Information on the Guidelines was made available to the public on the OROGO website and advertisements were placed in *NewsNorth* and *L'Aquilon* inviting comments. A media release was also issued.

Specific invitations to review the Guidelines and provide comments were issued to:

- Aboriginal governments holding or asserting section 35 rights;
- All companies holding Operating Licences in OROGO's jurisdiction (20) and the Canadian Association of Petroleum Producers, a body representing industry;
- Other regulators with whom OROGO interacts as a result of existing Land Claim Agreements and Memoranda of Understanding;
- Federal and territorial government departments and agencies; and
- Selected environmental non-government organizations with an NWT presence.

The deadline for comments was December 18, 2017. Nine organizations provided comments and feedback including:

- Doug Iverson - Professional Geophysicist
- Explor
- Geophysical Services Inc.
- GNWT – Department of Lands
- GNWT – Department of Industry, Tourism and Investment
- GNWT – Environment and Natural Resources
- Inuvialuit Regional Corporation
- Mackenzie Valley Land and Water Board
 - Gwich'in Land and Water Board
 - Sahtu Land and Water Board
 - Wek'eezhii Land and Water Board
- Workers' Safety and Compensation Commission
- Yukon Territory Government

This document summarizes the comments received during the consultation and public engagement period and OROGO's response to these comments.

COMMENTS RECEIVED AND RESPONSE

The comments received on the draft Guidelines ranged from very broad discussions of the objectives of the Guidelines to specific technical feedback and direct edits.

Where possible, comments and most proposed edits received are summarized here, organized according to the sections of the draft Guidelines. General comments and comments that applied to more than one section of the Guidelines have been summarized first. Edits without background explanations for the change were responded to using the information available.

The responses to comments are provided immediately after the comments themselves.

Typographical errors in the consultation draft that were identified by reviewers are corrected in the Guidelines but are not addressed in this document.

GENERAL COMMENTS

Overall, the draft Guidelines were well received. General comments that apply to more than one section of the document are captured in the following table.

Comments	OROGO Response
A responder stated that greater industry and stakeholder consultation was required.	OROGO's chosen stakeholder consultation process is described above in the Introduction. Industry and other stakeholders were specifically targeted, and the process afforded prospective commenters two full months to respond. There is no evidence to suggest that providing additional time would have increased the response rate or quality of responses. The consultation was carried out in accordance with OROGO best practices, and is viewed as adequate for its purpose.
A responder suggested including hyperlinks to source documents and definitions.	OROGO agrees on the importance of clearly linking the legislative requirements with the Guideline obligations recognizing that the intent of these Guidelines is to provide clarity on the reporting expectations and treatment of these documents. OROGO has included hyperlink references, where appropriate, within its electronic version of the guidelines in addition to the existing references currently provided.
A responder indicated that reporting requirements can create an unnecessary burden and questioned the use and relevance of the information.	The reporting guidelines are based directly on the requirements of the <i>Oil and Gas Geophysical Operations Regulations</i> (OGGOR). OROGO has no ability to change the legislated requirements. Legislative interpretation best practices indicated in the Guidelines are similar to guidelines in other jurisdictions within Canada, and in particular, those of the Nova Scotia and Newfoundland and Labrador Offshore Petroleum Boards, both of which were issued under similar legislation. Section 1.01 of the guidelines provides an overview of the overarching purpose. Operators can request alternative reporting approaches. Sections 36 and 37(9) of the OGGOR provide the Chief Conservation Officer (CCO) with the flexibility to approve alternate forms and manners of reporting provided that they meet the requirements of the regulations.
A responder requested that SEG-Y data be added to the reporting requirements. Another responder expressed concerns about providing SEG-Y data.	SEG-Y data is generally not required to determine regulatory reporting compliance. The Guideline has not been revised to require the filing of SEG-Y data.

Comments	OROGO Response
Some responders appreciated how the guidelines enhanced the transparency of oil and gas regulation.	Promoting transparency is one of OROGO's strategic objectives, as is enhancing certainty and predictability in our actions. OROGO sees this Guidance as promoting both objectives.
A responder requested that operators be required to report on mitigation of environmental impacts during operations.	The scope of the current Guidelines is limited to the reporting requirements and treatment of the Geophysical Reports. Environmental impacts are considered during the application process and assessed and monitored by other regulatory processes.
Some responders requested the replacement of "DVD or USB media formats" with "electronic format".	Guidelines can be modified to keep up-to-date with the appropriate media formats more easily than legislation. DVD is a stable format that is easy to label and file. USB media is the current industry standard.
A responder suggested the removal of the requirements for printed maps and paper copies of other reports.	The Guidelines have been revised to remove the requirements for paper copies.
A responder requested that microseismic reports be required for wells.	The scope of the current Guidelines is limited to the reporting requirements and treatment of the Geophysical Reports under sections 36 and 37 of the OGGOR and does not include well reporting.
A responder suggested the removal of the requirement for topographic and bathymetric maps.	Topographic and bathymetric maps are both expressly required in OGGOR 37(1)(n). Topographic and bathymetric data is often out of date or inaccurate in the north. Local, accurate measurements are valuable data.
A responder changed the terms shotpoint and station to source and receiver in several locations.	The physical locations in the field are commonly referred to as shotpoint and station locations. This terminology is consistent with that use by other regulators.

PRIVILEGE PERIOD COMMENTS

Multiple responders had inquiries regarding section 91 of the *Petroleum Resources Act* (PRA) which addresses the privilege period applicable to geophysical reports. Comments and responses are as follows.

Comments	OROGO Response
A responder suggested that the PRA does not require public release of data and that the data can remain confidential subject to the discretion of the CCO.	<p>The CCO does not have the discretion to impose a confidentiality period outside of the privilege period as established in section 91 of the PRA, nor would this be consistent with the purpose of the legislation as interpreted by the courts.</p> <p>In <i>Geophysical Service Incorporated v. Encana Corporation</i>, the Court of Queen's Bench of Alberta commented on federal Parliament's purpose and intention in enacting the legislation that was mirrored and became the territorial PRA:</p> <p><i>"Parliament's purpose and intention when it enacted the CPRA was to allow for public disclosure of seismic data after a period of time to allow for necessary oil and gas exploration of the Canadian offshore and frontier lands."</i></p> <p>That decision was upheld by the Court of Appeal of Alberta, and the Supreme Court of Canada declined leave to appeal the Court of Appeal decision on November 30, 2017, while consultation on these Guidelines was underway.</p>
Some responders said that no privilege period should be required; while other responders noted that a longer privilege period is required to allow operators to recoup the costs of investment.	OROGO must follow the legislative privilege period as set out in section 91 of the PRA. OROGO does not have the ability to amend the privilege period in the PRA.
A responder implied that the PRA does not apply to previous reports submitted to the National Energy Board.	The <i>Oil and Gas Operations Act</i> (OGOA) and the PRA each contain transitional provisions that make it clear that they now apply to matters that were previously governed by the federal legislation. The Guidelines do not purport to apply retroactively to reports submitted before the Guidelines come into effect.
Two responders inquired about the application of the privilege period defined in the PRA to information, such as environmental data, submitted to other agencies.	The privilege period applies to information provided to OROGO for the purposes of the PRA, OGOA and any regulation made under either Act. Information provided to other agencies not governed by the PRA is not subject to the privilege conferred by the PRA, even if an operator provides them with the same information it provides to OROGO.

Comments	OROGO Response
A responder inquired about the ability to share information with Government prior to the expiry of the privilege period.	Section 91(9) allows OROGO to share privileged materials with governments for the purpose of laws that deal primarily with petroleum-related works or activities. This sharing is limited by certain restrictions set out in the PRA.
A responder stated that non-geophysical information such as environmental information, community concerns, operational details etc. should be released to the public immediately upon submission to OROGO.	The privilege period in section 91(2) applies to any information provided to OROGO for the purposes of the PRA, OGOA and any regulation made under either Act. Accordingly, OROGO does not have discretion to release such information to the public unless it is subject to an exception in the legislation.
Some responders appreciated the greater clarity with respect to the privilege period and disclosure of information.	Clarifying the privilege period and disclosure of information are objectives of the guidelines.

SECTION 1: INTRODUCTION

Comments	OROGO Response
A responder requested edits to remove reference to the PRA and the privilege period.	<p>The intent of these Guidelines is to provide clarity on the reporting expectations and administration of these reports, including the applicable privilege period under the PRA. Section 1.01 has been updated to reflect the November 30, 2017 decision of the Supreme Court of Canada declining leave to appeal <i>Geophysical Service Incorporated v. Encana Corporation</i>, 2017 ABCA 125.</p> <p>Providing clarity on how OROGO will administer the privilege period supports OROGO's strategic objective of providing transparency in our work.</p>
1.03 and 1.04 – A responder noted that the minimum reporting requirements are established in the Regulations not in the Guidelines.	1.03 and 1.04 have been revised to refer to the Regulations and their relationship to the Guidelines.
1.07 – A responder requested the inclusion of a purpose to “Streamline the regulatory process to encourage greater activity levels in the NWT.”	OROGO and the Regulator do not have a mandate to promote oil and gas activity in the NWT – their role is to regulate oil and gas activity as set out in the legislation. OROGO has no ability to change the legislation. The Guidelines are based on the reporting requirements in legislation. OROGO has sought to ensure that the Guidelines serve to clarify the requirements of sections 36 and 37 where necessary, without creating an unreasonable burden on operators.
1.08 – A responder suggested adding section 91 of the PRA under legislative authority.	1.08 captures the Regulator’s authority to issue Guidelines under section 18 of OGOA. OROGO has taken the opportunity to set out its policy on administration of the privilege period applicable to geophysical reports under section 91 of the PRA in the Guidelines. Section 91 itself provides no separate authority for this statement of policy.

SECTION 2: WEEKLY STATUS REPORTS

Comments	OROGO Response
A responder suggested including an explicit objective to minimize the administrative burden for proponents in section 2.04.	The purpose of the Guidelines is to provide additional clarity and bring consistency to reporting under sections 36 and 37 of the OGGOR. This clarity itself should serve to minimize the likelihood of reports being rejected by the CCO as non-compliant, requiring further time and effort on the part of operators. Care was taken during drafting of the Guideline to avoid introducing any additional burden for operators.
Two responders suggested that description of weekly reports in sections 2.05-2.08 should be exactly as stated in the Regulations.	Guidelines are established to provide further clarity and details on reporting required by the CCO and on the legislative requirements. The Regulator is empowered under section 18 of OGOA to establish “guidelines and interpretation notes” with respect to any regulations made under section 51 or 52 of the Act. The OGGOR are one such regulation. A restatement of the regulation does not serve the objective that the Guidelines seek to meet.
A responder questioned if OROGO has the authority to request items outside of OGGOR section 36, including 2.05.5 and 2.05.7.	OROGO considers the requested elements to be consistent with a “report on progress of the operation” to which section 36 relates. The Guidelines include these environmental elements to assist in meeting the purpose in section (2) of OGOA to promote human safety and the protection of the environment, and may also fall within the specific subsection requirements such as “other incidents that cause downtime”.
A responder suggested that OGGOR sections 36(c) and (d) are missing from the Guidelines.	OROGO considers the Guidelines to sufficiently capture the requirements of 36(c) in 2.05.2 and 36(d) in 2.05.3 respectively. Should any disputes occur with respect to the information requested, the regulations are paramount over the Guidelines.
A responder raised concerns over the requirement to report on future work areas.	The Guidelines have been revised to ensure that section 2.05.6 only refers to upcoming work <i>in the current operation</i> .

SECTION 3: FINAL REPORT – GEOPHYSICAL OPERATION (EXCLUSIVE AND NON-EXCLUSIVE)

Comments	OROGO Response
A responder suggested the inclusion of information on how the operation has impacted sea, ice or topographic conditions.	<p>The scope of the current Guidelines is limited to providing guidance on reporting requirements in the OGGOR, and how OROGO will administer those reports. Environmental impacts are considered during the application process and other regulatory processes.</p> <p>Geophysical operations taking place on or under ice are not anticipated within OROGO's jurisdiction at this time. If an application for on or under ice geophysical operations is received, additional regulatory requirements regarding offshore operations would apply.</p>
A responder questioned if the guidelines fully address OGGOR section 37.	OROGO considers Section 3.06 to 3.09 to sufficiently capture the requirements of OGGOR section 37. Should any disputes occur with respect to the information requested, the regulations are paramount over the Guidelines.
A responder suggested the inclusion of detailed geospatial data (shapefiles) for seismic lines cut.	The Guidelines require spatial data for all mapped information. The list of required attributes has been revised to include more details such as line widths.
A responder provided wording indicating that the requirements of 37(1)(e) are met by the weekly reports and not required in the final report.	The regulations require that the information requested in 37(1)(e) be provided in the final report. OROGO has no ability to change this regulatory requirement.
A responder provided wording indicating that 37(1)(f) is satisfied by public availability of data through Environment Canada.	The regulations require that the information requested in 37(1)(f) be provided in the final report. OROGO has no ability to change this regulatory requirement. In addition, given the isolated locations of many NWT operations, Environment Canada weather information is not localized enough to provide information on the effects of weather on the operation.
A responder deleted items 3.07 a,b,c,e, and f from the list of information to be included in the operations report.	The items listed in 3.07 come directly from 37(1)(g) of the OGGOR. OROGO has no ability to change this regulatory requirement.
Two responders requested the addition of line widths to the operations report.	The Guidelines have been revised to include the requirement for line widths. Line width information will assist in meeting the purpose in section (2) of OGOA to promote the protection of the environment.

Comments	OROGO Response
A responder replaced the list of information required with a requirement for completed side labels on TIFF images.	A side label on a TIFF image does not provide the detail required by OGGOR 37(1)(h). A side label lists the algorithms and final parameters used. The processing report should describe in some detail the algorithms used during the processing in order to justify their use and to show the effect of a range of selected parameters.
A responder indicated that the requirements for fully processed data under 3.09.1(f) is highly destructive to the value of non-exclusive data.	The requirements under 3.09.1 (f) come directly from 37(1)(j) of OGGOR. OROGO has no ability to change this regulatory requirement.
The Guidelines were missing a definition of the sub-set of images required for 3D surveys in Section 3.09.1.	OROGO clarified the requirements for sub-sets of 3D survey data sets by specifying every tenth inline and crossline and 200 ms/200m spacing for time/depth slices.
A responder deleted depth structure and isochron from the list of interpretive maps in 3.09.2	Depth structure and isochron maps are typically produced by operators. Operators who do not produce them may provide a justification to the CCO for an exception.
A responder deleted interpreted seismic horizons, examples of correlated and uncorrelated seismic sections, and the associated details from the contents of the interpretation report listed in 3.09.3.	The existing wording clarifies what enclosures are required and what they are meant to illustrate.

SECTION 4: FINAL REPORT – PURCHASED AND REPROCESSED DATA FOR CREDIT

The comments received about section 4 of the Guidelines and the responses are captured below and in the General Comments section above.

Comments	OROGO Response
A responder reworded the timing of the process described in Section 4.02.	While this section does not directly relate to the regulations, it provides some details on the process for approval of eligible costs and the related reporting requirements. This clarification reduces the burden for both operators and OROGO by reducing the extent of reporting that needs to be submitted and approved by OROGO. The process was developed in consultation with Petroleum Resources Division, Department of Industry, Tourism and Investment.
A responder deleted depth structure and isochron from the list of interpretive maps in 4.06.1 and 4.07.3	Depth structure and isochron maps are typically produced by operators. Operators who do not produce them may provide justification to the CCO for an exception.
The Guidelines were missing a definition of the sub-set of images required for 3D surveys in Section 4.07.3.	OROGO clarified the requirements for sub-sets of 3D survey data sets by specifying every tenth inline and crossline and 200 ms/200m spacing for time/depth slices.
A responder deleted interpreted seismic horizons, examples of correlated and uncorrelated seismic sections, and the associated details from the contents of the interpretation report listed in 4.06.2 and 4.07.4.	The existing wording clarifies what enclosures are required and what they are meant to illustrate.

SECTION 5: ADMINISTRATION AND RELEASE OF DATA

The comments received about section 5 of the Guidelines and the responses are captured below and in the privilege period comments section.

Comments	OROGO Response
A responder suggested the inclusion of a description of how OROGO anticipates making Geophysical Reports public.	The Guidelines have now been clarified to include details on how OROGO will administer the reports after the expiry of the privilege period and state that reports are available upon request to OROGO's Information Office.
Some responders had concerns over the inclusion of the liability statement within the Guidelines.	Court cases in Canada have created a need for OROGO to establish the Guidelines and the liability statement to clarify intent and ensure that the administration of future filings will be clearly understood. OROGO sees the need for a liability statement in its Guidelines as a method to ensure all prospective operators are aware of the Regulator's approach. The liability statement is intended as notice that OROGO will not accept liability for its lawful public disclosure of geophysical reports after the expiry of the applicable privilege period under the PRA. The liability statement has been revised to refer to "lawful disclosure" to provide additional clarity.

APPENDIX 1: DIGITAL DOCUMENT SUBMISSION

Comments	OROGO Response
Some respondents wanted to see the 2-D and 3-D seismic reporting requirements combined rather than listed separately to reduce duplication.	The requirements have been separated in an attempt to make it easier for operators to see the complete list of requirements for specific operations.
A responder requested the removal of footnotes indicating that other versions of information may be requested.	Sections 36 and 37 of the OGGOR give the CCO the discretion to request other forms of information. The Guidelines have been revised to match the wording in the OGGOR.
A responder deleted 'with time stamp' throughout the appendix.	Time stamps are required to verify the location data history and are generally provided with the data.
A responder changed 'final processing output' to 'processing output' in sections B.1 and C.2	This wording clarifies that final and not intermediate products are required.
A responder deleted pre-stack time migration and pre-stack depth migration images from the list of required images in sections B.1 and C.2.	Pre-stack migration images are common final products. Operators who do not produce them may provide a justification to the CCO for an exception.
A responder edited section B.2 to include SEG-P1 format.	The requirement to provide data in SEG-P1 format is already included in Table 1. Operators may propose alternate formats to the CCO for an exception.
A responder removed the requirement for velocity data in section B.3 and C.4.	The requirement for velocity information comes directly from 37(1)(q) of OGGOR. OROGO has no ability to change this regulatory requirement.

APPENDIX 2: MAP AND GIS DATA SUBMISSION

Comments	OROGO Response
A responder suggested several changes to the description of the required GIS formats.	The guidelines have been revised to incorporate changes to the technical specifications for software versions, spatial data formats, metadata formats, projections, and coordinate precision.

CONCLUSION

The consultation and public engagement process resulted in a number of comments on the Guidelines. Significant among these were:

- Comments, questions and recommendations on technical requirements;
- Questions on the treatment of environmental data and impacts;
- Concerns about the five-year privilege period for reports;

The Guidelines have been revised to reflect the comments received where they resulted in improvement while maintaining the integrity of the Guidelines with respect to their objectives.

OROGO thanks all of the organizations and individuals who took time to review and comment on the Guidelines.