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|  | Indian Oil and Gas Canada (IOGC)  Pétrole et gaz des Indiens du Canada | **ENVIRONMENTAL REVIEW FORM**   * The accurate completion of this form is required to conduct oil and gas activity on Indian Reserve land in Canada. * This Form is designed to be completed with the *Guide to Preparing an Environmental Review Form for Indian Oil and Gas Canada, May 2014* (Guide). * The Applicant shall ensure that the environmental information contained herein is prepared by an **Independent Qualified Environmental Professional** as per the aforementioned Guide. * Use additional space in Appendix 14 if required. |

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| **Section A. PROJECT IDENTIFICATION** | |
| 1. Applicant name: |  |
| 2. Project name: |  |
| 3. New project or  amendment or change to an existing agreement? | 🞏New project  🞏Amendment (additional well/pipeline, change of use and/or expiry of Environmental Protection Terms) |
| If amendment, provide IOGC surface agreement # and go to Section F: |
| 4. Project location | 1. Legal land description: |
| 1. Latitude and Longitude: |
| 1. Reserve name and number: |
| 5. Anticipated start date or quarter: |  |
| 6. Date(s) of site visit(s): |  |
| 7. Type of application (See Section C): | 🞏Standard application 🞏Non-standard application |

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| **Section B. PROJECT DESCRIPTION** | | | | | | | |
| 1. Project Type: | | | | | | | |
| a) Surface lease | 🞏Developmental well 🞏Exploratory well 🞏Multi-well pad ( # of wells: )  🞏Access road 🞏Single well battery 🞏Battery  🞏Disposal well 🞏Remote sump 🞏Pipeline riser  🞏Compressor 🞏Borrow pit 🞏Enhanced Oil Recovery (EOR)\*  🞏Steam Assisted Gravity Drainage (SAG-D)\*  🞏Coalbed methane\* 🞏Other (describe)\*:  \*Contact a Representative from the Environment Unit to discuss how to proceed. | | | | | | |
| Total size (ha): | | | | Lease width and length (m): | | |
| Access road length (m): | | | Access road width (m): | | | |
| Camp (ha): | | | Temporary work space size and use (ha):  Describe purpose: | | | |
| 🞏Single well program 🞏Multi-well program  If “Multi-well program”, how many wells are expected to be drilled on reserve by the Applicant within the next year? | | | | | | |
| Approximately how many wells have been drilled by the Applicant in the last 2 years? | | | | | | |
| b) Right of way | 🞏Pipeline | | | | | | |
| Total size (ha): | | Length (m) x width (m): | | | | |
| Outside diameter (mm): | | | | | | |
| c) Exploratory | 🞏2D Seismic 🞏3D Seismic 🞏Other: | | | | | | |
| Energy source: | | | | | Energy size: | |
| Line widths (source and receiver if 3D) (m): | | | | | Spacing, if 3D (m): | |
| Total length (km): | | | | | Total program area: | |
| d) Other | Describe: | | | | | | |
| e) Have actions been taken to integrate the project with other existing or planned activities and resources to minimize impacts (i.e. common corridors, parallel or use of existing clearings or rights-of-way)? | | | | | | | 🞏Yes 🞏No  Describe: |
| f) Provide rationale for the project including how it was located to avoid surrounding environmental constraints. | | Describe: | | | | | |

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| 2. Product: | 🞏Oil 🞏Gas 🞏Sweet 🞏Sour ( % H2S) |
|  | 🞏Produced water 🞏Other (describe): |

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| 3.Describe all proposed project activities including duration (surveying to final reclamation): | Attach as Appendix 1 as per format described in Guide. |

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| 4.Describe all potential impacts, mitigation, and related residual effects: | Attach as Appendix 2 as per format described in Guide. |

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| 5. Drilling and Completion Fluids | |
| a) Drilling fluid: | 🞏Not applicable (N/A) 🞏Gel chem 🞏Invert 🞏KCl 🞏Other: |
| b) Drilling waste disposal (check all that apply): | 🞏Not applicable 🞏Off-reserve 🞏On-reserve  🞏Tanks 🞏Land spray while drilling 🞏Landspray  🞏Land spreading 🞏Pump-off 🞏Approved disposal facility  🞏Mix-bury-cover (on-site) 🞏Mix-bury-cover (remote sump) location:  🞏Other (describe): |
| c) Hydraulic fracturing | 🞏N/A 🞏Applicable |
| i) Number of stages: |
| ii) Estimated total fluid/sand volume of each stage: |
| iii) Describe how the frac fluid will be handled and stored to prevent contamination: |
| iv) What is vertical distance between the deepest water well and the depth of the fractured zone? |

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| 6.Water source (wells and pipelines): | 🞏Not applicable  🞏Off-reserve  🞏On-reserve. If on-reserve, provide location, water type (surface or groundwater), and confirm appropriate authorizations have been secured: |
| Estimated water volume required: |
| Describe water disposal methods: |

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| 7. Distance to nearest improvements (m): | Improvement Type: Direction: Distance:  Improvement Type: Direction: Distance:  Improvement Type: Direction: Distance: |

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| **Section C. STANDARD vs. NON-STANDARD APPLICATION**  *Notes:*   * *If “Yes” is checked off in any of the following questions, this application will be processed as* ***non-standard.*** * *For* ***non-standard*** *applications, Appendix 6 additional mitigation measures are required to be included as per format described in Guide.* | |
| 🞏Yes 🞏No | Are any variances for setback, timing, or environmental requirements as per Section 7 of the Guide required? |
| 🞏Yes 🞏No | 1. Will the proposed Project require crossing of any water body? |
| If “Yes”, check off the type of structure(s) or method(s) that will be used and identify on site diagram:  🞏Snow (SF) and/or ice fills (IF) 🞏Strapped or cabled log fills (LF)  🞏Ford type crossings (F) 🞏Log crossing (LC)  🞏Portable free-span bridge (PB) 🞏Existing bridge  🞏Non-mechanical crossing (NM) 🞏Other (describe): |
| 🞏Yes 🞏No | Is the project within a 1 in 100 year floodplain? |
| 🞏Yes 🞏No | Is the project located on native grassland? |
| 🞏Yes 🞏No | Are there problem soils? |
| 🞏Yes 🞏No | 1. Is there a requirement to apply for and secure other federal permits and/or authorizations (e.g. *Migratory Bird Convention Act, Species at Risk Act, Fisheries Act)*?  If “Yes”, provide additional details and attach Appendix 12. |
| 🞏Yes 🞏No | Were any critical wildlife habitat features (dens, mineral licks, snags, etc.) identified? |
| 🞏Yes 🞏No | 1. Is the project located on lands where there are known or suspected archaeological resources? |
| If “Yes”, was a determination of archaeological potential completed by a qualified Archaeologist? 🞏Yes 🞏No |
| 🞏Yes 🞏No | 1. Was a culturally significant site or archaeological/historical resource identified during the site visit or is likely to be affected by the project activities? |
| 🞏Yes 🞏No | 1. Does the project overlap with lands with any other special designations? |
| 🞏Yes 🞏No | 1. Is the project considered a non-standard size? |
| 🞏Yes 🞏No | 1. Were any non-standard mitigation measures discussed with a representative from the IOGC environment unit prior to this application? |
| If “Yes,” provide details: |

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| |  | | --- | | **Section D. FIRST NATION CONTACT INFORMATION, TRADITIONAL ECOLOGICAL KNOWLEDGE, RESIDENT CONSULTATION AND COMMUNICATION WITH COMMUNITY** |  Detail on how any concerns were addressed must be included in Appendix 3. | |
| **1. First Nation Contact Information** | |
| Contact Name: |  |
| Job Title: |  |
| Phone #: |  |
| Email: |  |

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| **2. Site Visit and Traditional Ecological Knowledge (TEK)** | | |
| a) Site Visit | i) List names and titles of First Nation Representative present during the site visit: | |
| ii) Date(s) of site visit: | |
| b) TEK | i) List name(s) of other First Nation Elder or other First Nation Representative and date(s) contacted: | |
| ii) Describe how TEK has been and will be considered in project planning and the life of the project: | |
| c) Confirm all TEK setbacks will be met: | | 🞏Yes 🞏No  If “No”, describe mitigation: |

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| **3. Resident Consultation and Communication with Community** | |
| 🞏Yes 🞏No 🞏N/A | a) Have all on-Reserve residents within a 500 m radius (100 m for RW) been consulted and their concerns addressed?  If ‘No’, describe: |
| 🞏Yes 🞏N/A | b) If there are any residents within a 500 m radius (100 m for RW), confirm the ‘Resident Consultation Table’ is attached as Appendix 3. |
|  | c) Describe on-going community consultation and/or communication plans: |

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| **Section E. SITE-SPECIFIC ENVIRONMENTAL INFORMATION** | |
| **1. Topography** | |
| 1. Topography: | 🞏Level 🞏 Rolling 🞏Hummocky 🞏Inclined 🞏Ridged  🞏Other (describe): |
| 1. Predominant slope (direction, position, and percentage (%)/degree (0): |  |
| 1. Elevation change (high end to low end of lease): |  |
| 1. Potential stability issues: | 🞏Yes 🞏No If “Yes”, describe: |

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| **2. Soils** | |
| a) Site-specific soil evaluation completed | Confirm it is attached as Appendix 4: 🞏Yes  🞏Not applicable (For seismic/exploratory only) |
| b) Erosion potential: | 🞏Insignificant 🞏Slight 🞏Moderate 🞏High 🞏Extreme |
| c) Erosion control required? | 🞏Yes 🞏No If “Yes”, describe: |
| d) Soil stripping required? | 🞏Yes 🞏No  If “Yes”, what type of soil stripping?  🞏Two lift 🞏Single lift 🞏Other:  If “Single lift” or “Other”, describe in detail and provide rationale: |
| e) Soil Drainage: | 🞏Rapid 🞏Well 🞏Moderately well 🞏Imperfect 🞏Poor 🞏Very poor |

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| **3. Hydrology** | |
| 1. What is the distance to the closest waterbody from the edge of the surface agreement? |  |
| b) Is there a waterbody less than 100 m from the edge of the surface agreement? | 🞏Yes 🞏No  If “Yes”, fill out the information below:  Distance of high water mark:  Size/Dimensions (m):  Approximate depth:  If wetland, identify the class: 🞏N/A  Is the waterbody fish-bearing? 🞏Yes 🞏No  Is the project up- or down-slope from waterbody?  Confirm waterbody and riparian zone photographs are included in Appendix 10: 🞏Yes |
| c) Is there any evidence of any natural springs in the project area? | 🞏Yes 🞏No  If “Yes”, what is the distance from the edge of the surface agreement? |

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| **4. Hydrogeology** | |
| 🞏Yes 🞏No | a) Are there any water wells with 500 m of well centre or seismic/exploratory program?  If “Yes”,  i) list distance(s) in m:  ii) Below Ground Level (BGL) depth of each water well:  iii) Confirm pre-drilling water well testing results are attached as Appendix 11. 🞏Yes |

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| **5. Vegetation and Surrounding Land Use** | |
| a) Vegetation type (check all that apply): | Native grassland🞏 Peatland/muskeg🞏  Sparsely- or non-vegetated🞏  Cultivated (choose one): Hayland🞏 Tame Pasture🞏 Cropland🞏  Cut block🞏 Forest🞏  Other🞏 Describe: |
| b) If cultivated (includes crops, hayland, tame pasture): | % native species and % cultivated/forage species % and %  Date last seeded:  Location and quantity of native prairie/parkland within 1 km:  List dominant species and percent cover: |
| c) If forested: | Merchantable timber present 🞏Yes 🞏No  If “Yes”, provide a volume inventory as follows:  Coniferous approx. volume: m³ or no. loads Spruce % Pine %  Coniferous Average DBH (diameter at breast height):  Deciduous approx. volume: m³ or no. loads Aspen % Other %  Deciduous DBH:  Describe salvageable timber handling:  Describe non-salvageable timber handling:  List dominant species and percent cover: |
| d) If native grassland: | % native species: % tame species (if applicable) % : %  List dominant species and percent cover: |
| e) If Peatland: | List dominant species and percent cover: |

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| **6. Weeds, Invasive, and Problem Species** | |
| 🞏Yes 🞏No | 1. Were any weeds, invasive, and problem species identified on or near the proposed surface agreement?   If “Yes”, list species of concern, provincial *Weed Act* classification, percent cover, and describe species-specific weed monitoring and management in Appendix 6. |

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| **7. Wildlife and Wildlife Sign** |
| Describe wildlife and wildlife sign observed during the site visit in the table below. Use Appendix 13 if additional space is required. |

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| **Common Name** | **Scientific Name** | **Location and distance to project** | **Observation Type** | **Comments** |
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| **8. Species at Risk (Vegetation, Wildlife, and Fish)** | |
| 🞏Yes 🞏No | 1. Do any species at risk have potential habitat or ranges within the proposed project area?   If “Yes”, attach as Appendix 5. |

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| **9. Fish and Fish Habitat** | |
| 🞏Yes 🞏No | 1. Will the project impact fish habitat?   If “Yes”, provide details and attach Appendix 12. |

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| **Section F. AMENDMENT, ADDITIONAL WELL/PIPELINE, CHANGE OF USE, AND EXPIRY OF ENVIRONMENTAL PROTECTION TERMS** *Do* ***NOT*** *complete for* ***new*** *projects.* |

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| 1. Type of amendment, additional well/pipeline or change of use: | 🞏 New well(s) | | 1. # of new wells: | | |
| 🞏 New pipeline within existing right of way | | | | 1. Size of pipeline: 2. Product: |
| 🞏New lands | 1. Provide New ha: 2. Provide Total ha: 3. Will all setback, timing, and environmental requirements as per Section 7 in the Guide be met? 🞏Yes 🞏No   If “No”, include non-standard mitigation measures as Appendix 5.   1. Is the size of addition >10 % of the original surface agreement? 🞏Yes 🞏No   If “No”, continue completing remainder of this section.  **If “Yes”, STOP HERE** and complete the full Environmental Review Form (sections A-H) including **new** site visit information. | | | |
| 🞏Change of use | | | 1. Describe change of use: | |
| 🞏Horizontal multi-stage fracture | | | | |
| 🞏Environmental Protection Terms Letter has expired (project not undertaken within 1.5 years of date of letter) | | | | |
| 🞏Yes | 1. Confirm First Nation Oil and Gas Representative has been notified. | | | | |
| 🞏Yes 🞏No | 1. Are there any residents living within the consultation radii (100 m for pipelines, 500 m for surface leases or seismic/exploratory)?   If “Yes”, attach Appendix 3. | | | | |
| 🞏Yes  🞏 N/A | 1. For a seismic or well program, have water wells within 500 m of the project been tested (as per section E.4.a)?   If “Yes”, attach as Appendix 11. | | | | |
| 🞏Yes 🞏No | 1. Have any new species with ranges within the regional area been added to the *Species at Risk Act* list subsequent to the original approval?   If “Yes”, attach Appendix 5. | | | | |
| 🞏Yes 🞏No | 1. Is there any aspect of the project that has changed from the original application?   If “Yes”, describe: | | | | |
| 🞏Yes 🞏No | 1. Is there any other information relevant to the project, that IOGC should be aware of?   If “Yes”, describe: | | | | |

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| **Section G. APPENDICES***See Guide for all Appendices requirements.* |

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| 🞏Yes 🞏N/A | Appendix 1 - Project Activities and Duration Table |
| 🞏Yes 🞏N/A | Appendix 2 - Potential Impacts, Mitigation, and Related Residual Effects Table |
| 🞏Yes 🞏N/A | Appendix 3 - Resident Consultation Summary Table |
| 🞏Yes 🞏N/A | Appendix 4 - Soil Evaluation |
| 🞏Yes 🞏N/A | Appendix 5 - Potential Species at Risk within the Proposed Project Area Table |
| 🞏Yes 🞏N/A | Appendix 6 - Additional Mitigation Measures |
| 🞏Yes 🞏N/A | Appendix 7 - Survey Plan |
| 🞏Yes 🞏N/A | Appendix 8 - Aerial Photographs and Maps |
| 🞏Yes 🞏N/A | Appendix 9 - Site Diagram(s) |
| 🞏Yes 🞏N/A | Appendix 10 - Site Photographs |
| 🞏Yes 🞏N/A | Appendix 11 - Pre-construction Water Well Test Results |
| 🞏Yes 🞏N/A | Appendix 12 - Correspondence/Permits from Other Federal Departments |
| 🞏Yes 🞏N/A | Appendix 13 - Pre-Development Surveys or Third-Party Reports |
| 🞏Yes 🞏N/A | Appendix 14 - Additional Information |

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| **Section H. PRESENTATION OF THE ENVIRONMENTAL REVIEW** IOGC and the First Nation must be informed of **any changes** to the project after the signature date. | | | |
| To be completed by the Applicant: | | | |
| **I hereby certify that the information provided is accurate and complete.** **I hereby certify on behalf of the Applicant, all mitigation measures described in Appendices 2 and 6 will be implemented and will not cause any significant adverse environmental impacts.** | | | |
| Signature: |  | Date: |  |
| Name: |  | | |
| Title: |  | | |
| Organization:  address: |  | | |
| Phone number:  Email: |  | | |
| To be completed by the Qualified Environmental Professional[[1]](#footnote-1): | | | |
| **I hereby certify that the information provided in this application is accurate, complete, and corresponds to my interpretation of the project.** **I hereby certify that the proposed project will not cause any significant adverse environmental impacts.** | | | |
| Signature and professional association # or stamp: |  | Date: |  |
| Name: |  | | |
| Title: |  | | |
| Organization:  address: |  | | |
| Phone number:  Email: |  | | |

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| 🞏Yes 🞏No | Has a copy of the Environmental Review Form been forwarded to the First Nation Chief and Council care of the Oil and Gas Representative? | |
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| **Section I. DECISION** TO BE COMPLETED BY INDIAN OIL AND GAS CANADA | | | |
| **I have analysed the project and its potential environmental effects and/recommend that:** **The project is not likely to cause significant adverse environmental impacts and can be implemented as described with the application of the proposed mitigation measures \_\_\_\_\_.****The project should undergo a detailed environmental review, based on the information below \_\_\_\_\_.****The project is likely to cause significant adverse environmental impacts which are unable to be mitigated \_\_\_\_\_.****This application is incomplete due to:** | | | |
| Signature: |  | Date: |  |
| Name: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| Title: | Environmental Analyst | | |
| Phone number: | 403.292. | | |
| Contact with First Nation Oil and Gas Representative | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| To be completed by the Manager, Environment | | | |  |
| **I recommend that:** **1. The project is not likely to cause significant adverse environmental impacts and can be undertaken with the implementation of the proposed mitigation measures \_\_\_\_.****2. The project should undergo a detailed environmental review, as recommended \_\_\_\_.****3. The project is likely to cause significant adverse environmental impacts which are unable to be mitigated and is not approved as proposed \_\_\_\_.** | | | |
| Signature: |  | Date: |  |
| Additional Information/Rationale/Notes/Documents: | | | |
| *EX* 🞏 *OS*🞏 *RW*🞏 *#:\_\_\_\_\_\_\_\_\_\_\_ Reserve name and number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Project Location:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Company: ­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *File #: E5010-6-0\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_UNC. CIDM#:\_\_\_\_\_\_\_\_\_\_\_\_\_ PA’d:* 🞏 | | | |

1. IOGC’s Environmental Professional requirements are described on page 3 of the Guide. [↑](#footnote-ref-1)