

Project Name	Orca Sand and Gravel Project	Inspection Status	Final
EA Certificate #	M05-01	Inspection No.	IR2020-016
Project Status	Certified	Inspection Start	2020-04-01
Sector	Mines	UTM	9N 631270 5608405
Trigger	Planned Inspection	Inspection Type	Field and Administrative
Project Description	The Orca Sand and Gravel Project (Project) is an approximately 350 hectare sand and gravel quarry, including a conveyor transport system and a dedicated marine loading facility for bulk carrier shipping.		
Location Description	The Project is located on Johnstone Strait, approximately 4 kilometres west of Port McNeill, on Northern Vancouver Island.		
Inspection Summary	<p>On April 1, 2020, Environmental Assessment Office Compliance and Enforcement (EAO C&E) Officer Shayla Frechette conducted an administrative inspection against the requirements of EAC# M05-01 (Appendix 1).</p> <p>On April 30, 2020, EAO C&E conducted a field inspection of the ship loader.</p> <p>The Project was in Operations at the time of inspection.</p> <p>After review of observations and information obtained during the inspection, the following compliance determinations have been made:</p> <ol style="list-style-type: none"> 1. COMPLIANT with Condition 5.3 with respect to groundwater testing. 2. NON-COMPLIANT with Condition 6.3 with respect to annual Cluxewe Channel inspections. 3. NON-COMPLIANT with Condition 6.4 with respect to air photos. 4. COMPLIANT with Condition 8.4 with respect to spill tray over marine waters under conveyor. 5. NON-COMPLIANT with Condition 9.4 with respect to Orca sighting documentation from first three years of operations. <p>Additional detail regarding these findings may be found in the sections below.</p> <p>The compliance determinations in this report reflect the findings from the inspection dates noted above. These determinations can change at any time upon information gathered through future inspections or if new information is obtained by EAO C&E.</p>		
In Attendance	Tyson MACKAY- Mine Manger		
Certificate Holder	Orca Sand and Gravel Limited		
Mailing Address	Port McNeill, BC V0N 2R0		
Contact	Tyson MACKAY		
Phone No.	604-628-3353 ext.100		
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INSPECTION DETAILS

Requirement 1	Condition 5.3 Monitoring- Groundwater levels in the existing wells on site will continue on a monthly basis until removed during extraction.
Findings	<p>On April 1, 2020, EAO C&E requested results from groundwater samples for January, February and March 2020.</p> <p>On April 10, 2020, MACKAY provided EAO C&E with groundwater Inspection reports for January, February and March 2020 (Appendix 2, 3 and 4). The reports included location, measured depth, elevation of top of pipe and well bottom elevation.</p> <p>The information provided during the inspection appeared to provide evidence of compliance with respect to Condition 5.3, monthly groundwater levels.</p>
Compliance Determination	In

Requirement 2	Condition 6.3 Monitoring- The Cluxewe Channel will be inspected annually adjacent to the operating area to document any changes. Inspection information will be provided to the Ministry of Water Land and Air Protection (WLAP) and Department of Fisheries and Oceans (DFO).
Findings	<p>On April 1, 2020, EAO C&E requested evidence of annual inspection of the Cluxewe Channel for 2019 and a copy of the email sent to WLAP and DFO with the results.</p> <p>On April 10, 2020, MACKAY provided EAO C&E with the Orca Sand & Gravel Cluxewe River Buffer assessment (Appendix 5). The report included photographs, information on buffer integrity and recommendations provided by Recourse Management Ltd.</p> <p>MACKAY stated that the report has not yet been provided to WLAP and DFO at this time as Orca Sand and Gravel is in communication with both to determine the most appropriate contact.</p> <p>On April 14, 2020, EAO C&E requested evidence of any previous reports sent to WLAP and DFO.</p> <p>On April 16, 2020, MACKAY stated that Orca Sand and Gravel have no records of reports being sent to WLAP and DFO in the past.</p> <p>The information provided during the inspection appeared to provide evidence of non-compliance with respect to Condition 6.3, monitoring of the Cluxewe Channel.</p>
Compliance Determination	Out - Warning - Refer to Enforcement Summary

Requirement 3	<p>Condition 6.4</p> <p>A review and comparison of available air photos for the Cluxewe Channel between West Main and Highway 19 bridges will be undertaken approximately every 5 years or as air photos are available. The focus will be on identifying any changes to the east bank location and stability. Observations will be provided to WLAP and DFO.</p>
Findings	<p>On April 1, 2020, EAO C&E requested the most recent comparison photos and a copy of the email with observations sent to WLAP and DFO.</p> <p>On April 10, 2020, MACKAY stated <i>“A purchase order was issued for this on February 27, 2020 (Appendix 6). Work is currently underway, and it is expected to be complete by the end of April. It will be provided to WLAP and DFO at that point.”</i></p> <p>On April 14, 2020, EAO C&E requested a copy of the most recent air photo prior to 2020.</p> <p>On April 16, 2020, MACKAY stated that Orca Sand and Gravel have no records of air from the past or records of photos being sent to WLAP and DFO in the past.</p> <p>The information provided during the inspection appeared to provide evidence of non-compliance with respect to Condition 6.4, comparison in air photos.</p>
Compliance Determination	Out - Warning - Refer to Enforcement Summary

Requirement 4	<p>Condition 8.4</p> <p>Marine and Fish Habitat- A spill tray will be installed under the conveyor and dust covers over the conveyor, where it is located over marine waters.</p>
Findings	<p>During an inspection conducted on May 2, 2018, EAO C&E noted this requirement as non-compliant as a full-span spill tray was absent from the conveyor over marine waters as required by condition 8.4 (Appendix 7).</p> <p>On August 28, 2019, EAO C&E re-inspected for a spill tray and dust covers on the conveyor which is located over marine waters. A dust cover was noted along the entire length on the marine portion of the conveyor; however, a spill tray was not. Approximately 100 meters of spill tray was installed at the end of the conveyor near the ship loader and the remaining distance was not contained. Sediment was noted on trusses under the portion lacking the spill tray (Appendix 8).</p> <p>On September 1, 2019, MACKAY provided EAO C&E with a purchase order for the spill tray and expected the spill tray to be operations by end of October (Appendix 9). The observations during the inspection appeared to provide evidence of non-compliance with this requirement; however, the Holder appears to have taken steps to resolve this issue.</p> <p>On April 1, 2020, EAO C&E requested evidence of newly installed spill tray under the conveyor over marine waters.</p>

On April 10, 2020, MACKAY provided EAO C&E Orca Ship Loader Conveyor Tray document (Appendix 10). The report included photographs of the tray installed under the main conveyor.

On April 16, 2020, MACKAY stated the following: *"The Spill tray has been extended under conveyor sections located over marine water. The boom arm on the conveyor that loads to the ships is protected by the ships below."*

On April 30, 2020, EAO C&E conducted a field inspection of the conveyor spill tray and dust covers. EAO C&E observed the newly installed spill tray located under the conveyor belt from the shore to the boom arm (ship loader) which is approximately 537 meters long. The ship loader is a crane-like structure that slides along a semicircle rail which fills material into ship accordingly which is approximately 52 meters in length.

The information provided during the inspection appears to provide evidence of compliance with respect to Condition 8.4, spill tray and dust covering.



Photo 1: Newly constructed spill tray from shoreline to ship loader.



Photo 2: Ship loader with contracted extension.



Photo 3: Start of ship loader where spill tray ends.



Photo 4: Piled material on cross beams under convayor belt on shiploader.




Photo 5: Grated Flooring under ship loader.

Compliance Determination	In
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Requirement 5	Condition 9.12
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	Marine and Fish Habitat- Orca sightings from the ship loader will be documented year-round (when persons at ship loader during daylight hours) will include locations, number and activity for the first three years of operations.
Findings	<p>During EAO C&E's previous inspection On August 22, 2019, EAO C&E requested records of orca sighting documentation for the first three years of operations which would include 2007, 2008 and 2009 as required by condition 9.12 (Appendix 8).</p> <p>On August 28, 2019, MACKAY stated that he could not find the records regarding the orca sightings as the surveys were done so long ago. MACKAY stated that he will continue to search for these records; however, he was not part of construction or early operations of the project and all employees currently working at the project were also not (Appendix 8).</p> <p>On April 1, 2020, EAO C&E requested the Orca sighting documentation for the first three years of operations.</p> <p>On April 10, 2020, MACKAY stated the following <i>"Orca is unable to provide this documentation. Up to 2017, Orca utilized a web-based Environmental Management System and monitoring reports were stored online, hosted by a third-party. In 2017, the company lost access to the site and did not have a backup. A "Killer Whale Monitoring Form" was part of the original EMS but any records would have been lost in 2017. Orca currently utilizes a hard-copy wildlife log which would include any Orca sightings."</i></p> <p>The information provided during the inspection appeared to provide evidence of non-compliance with respect to Condition 9.12, Orca sightings.</p>
Compliance Determination	Out - Notice of Non-Compliance

Actions Required by Certificate Holder & Additional Comments
None at this time.
Enforcement Summary
<p>Orca Sand and Gravel Limited IS WARNED THAT THE PROJECT IS NOT COMPLIANT WITH CONDITION # 6.3 and 6.4 OF EAC# M05-01.</p> <p>EAO C&E MAY INSPECT TO DETERMINE IF THE ORCA SAND AND GRAVEL PROJECT HAS BEEN BROUGHT BACK INTO COMPLIANCE WITH THESE REQUIREMENTS. CONTINUED NON-COMPLIANCE WITH THESE REQUIREMENTS MAY RESULT IN ADDITIONAL ENFORCEMENT UNDER THE ENVIRONMENTAL ASSESSMENT ACT. SEE REGULATORY CONSIDERATIONS SECTION FOR ADDITIONAL INFORMATION.</p>
Regulatory Considerations
EAO C&E noted a lack of dust covering as well as an absent spill tray on the shiploader. EAO C&E observed piles of material along the shiploader and flooring which had accumulated from material falling off the conveyor. The crane was partially enclosed within the electrical component of the crane, however in many cases, the grate floor appeared to allow material to fall through into the water. The shiploader is not part of the conveyor and does not require a spill tray or dust cover as per Condition 8.4 and the Application.

Inspection Conducted by	
 Shayla Frechette Compliance & Enforcement Officer	Date Sent to Certificate Holder for Opportunity to Respond 2020-05-13
	Date Finalized 2020-05-26
Appendices	
Appendix 1- EA Certificate # M05-01 Appendix 2- Jan Groundwater Inspection Appendix 3- Feb Groundwater Inspection Appendix 4- Mar Groundwater Inspection Appendix 5- Cluxewe buffer report Appendix 6- Air photo PO Appendix 7- Inspection Record FY 18-19-04 Appendix 8- Inspection Record IR2019-034 Appendix 9- Spill Tray PO Appendix 10- Orca shiploader conveyor drip tray	
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