Report Date: October 05, 2023

File:8124

Report Number:209906

Brown's Bay Packing Company Ltd.

15007 Browns Bay Road
Campbell River, BC V9H 1N9

Dear Brown's Bay Packing Company Ltd.,

Re: Warning Letter, Permit, 8124

On October 05, 2023, Ministry of Environment, Environmental Protection Division staff conducted an inspection under *Environmental Management Act (EMA)*, 8124. The inspection determined that Brown's Bay Packing Company Ltd. is out of compliance with its Permit 8124, and the section(s) listed below. This Warning Letter lists the compliance verification information contained below.

Failure to comply with the requirements set out in sections 1.1.3 and 1.1.4 of your Permit is an offence under the *Environmental Management Act (EMA)*. Section 120(6) of *EMA* states as follows:

> *120(6) A person who, holding a permit or approval issued to the person under this Act to introduce waste into the environment, introduces waste into the environment without having complied with the requirements of the permit or approval commits an offence and is liable on conviction to a fine not exceeding $1 000 000 or imprisonment for not more than 6 months, or both.*

Failure to comply with the requirements set out in sections 3.1, 3.2, 3.3.3, 3.4, 3.6.1, 3.11, 3.15, 3.16, 5.2, 5.5(a), 5.5(m), 5.5(o), 5.6(a), 5.7, and 5.8 of your Permit is an offence under the Environmental Management Act (EMA). Section 120(7) of EMA states as follows:

> *120(7) A person who, holding a permit or approval issued under this Act to introduce waste into the environment, fails to comply with the requirements of the permit or approval commits an offence and is liable to a penalty not exceeding $300 000 or imprisonment for not more than 6 months, or both.*

It should also be noted that, as an alternative to prosecution of the offence referenced above, the Ministry may initiate action to impose an administrative penalty against Brown's Bay Packing Company Ltd. *The Administrative Penalties Regulation (EMA)* (B.C. Reg. 133/2014) (APR) was brought into force in 2014. The APR describes the prescribed provisions of the EMA as well as that of specified regulations under which administrative penalties can be assigned. Section 12(5) of the APR states as follows:

> *12(5) A person who fails to comply with a requirement of a permit or approval issued or given under the Act is liable to an administrative penalty not exceeding $40 000, unless the requirement the person failed to comply with is also a prescribed provision of the EMA or the regulations that is subject to a different maximum administrative penalty.*

I request that Brown's Bay Packing Company Ltd. immediately implement the necessary changes or modifications to correct the non-compliance(s) listed above with the *Environmental Management Act*. Further, I request that Brown's Bay Packing Company Ltd. notify this office in writing, by email or letter within 30 days of this letter, advising what corrective measures have been taken, and what else is being done, to prevent similar non-compliances in the future.

Please submit your response to the Ministry's Compliance Mailbox at:EnvironmentalCompliance@gov.bc.ca.

As a result of this Warning, this authorization will be prioritized for follow-up inspection. The corrective measures will be reviewed by an Officer as part of the next inspection.

Ministry of Environment and Climate Change Strategy

Compliance and Environmental Enforcement Branch

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Finally, if you fail to take the necessary actions to restore compliance, you may be subject to escalating enforcement action. This Warning Letter and the alleged violations and circumstances to which it refers, will form part of the compliance history of Brown's Bay Packing Company Ltd. and will be taken into account in the event of future violations.

Inspection Details:

On October 5, 2023, Ministry of Environment and Climate Change Strategy (Ministry) Environmental Protection Officer Travis Kurinka (Officer Kurinka) conducted a planned office-based inspection of Brown's Bay Packing Company Ltd. (Brown's Bay) fish processing plant (Facility), which is located on the northwest shore of Brown Bay (Lot 1150 at Brown Bay, Sayward District), near Campbell River, BC. The inspection was conducted to verify compliance with *Environmental Management Act* (EMA) permit number 8124 (Permit). The Permit authorizes the discharge of effluent to Brown Bay from a fish processing plant and domestic sewage treatment system. The Permit was issued on February 16, 1989, and was last amended on September 15, 2022. Officer Kurinka received information and assistance from Lorne Sandberg (Operator, H2OPS Water Services Inc.) [H2OPS Staff] to complete this inspection.

The inspection period for this report is from December 20, 2019, to October 5, 2023 (Inspection Period), and the following documents were reviewed as part of this inspection.

- Brown's Bay Packing Company 2019 Annual Report Permit Authorization #8124 December 2020, dated March 15, 2021, prepared by Ben Wells and Monica Stewardson of Mainstream Biological Consulting, and Lorne Sandberg of H2OPS Water Services Inc. (2019 Annual Report),
- Brown's Bay Packing Company 2020 Annual Report Permit Authorization #8124 July 2021, dated July 24, 2021, prepared by Ben Wells and Monica Stewardson of Mainstream Biological Consulting, and Lorne Sandberg of H2OPS Water Services Inc. (2020 Annual Report),
- Brown's Bay Packing Company 2021 Annual Report Permit Authorization #8124 December 2022, dated March 30, 2023, prepared by Ben Wells of Mainstream Biological Consulting, and Lorne Sandberg of H2OPS Water Services Inc. (2021 Annual Report),
- Brown's Bay Packing Company 2022 Annual Report Permit Authorization #8124 March 2022, dated March 30, 2023, prepared by Thomas Karjala and Ben Wells of Mainstream Biological Consulting, and Lorne Sandberg of H2OPS Water Services Inc. (2022 Annual Report),

Below are the authorization clauses that were assessed for compliance during this inspection, as well as the associated findings and any actions that may be required.

Requirement Description:	**Authorized Source - Fish Processing Effluent** 1.1.1: This Section applies to the discharge of effluent from a fish processing plant. The site reference number for this discharge is E212103. 1.1.1 - The maximum authorized rate of discharge is 600 m3 per day.
Details/Findings:	Officer Kurinka reviewed the 2019, 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay did not exceed the maximum authorized rate of discharge of 600 m3 per day during the Inspection Period.
Compliance:	In

Requirement Description:	**Authorized Source - Fish Processing Effluent** 1.1.3: This Section applies to the discharge of effluent from a fish processing plant. The site reference number for this discharge is E212103. 1.1.3 - The characteristics of the discharge must be equivalent to or better than the following parameters (See Attachment #1):

Details/Findings:	Officer Kurinka reviewed the 2019, 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay exceeded the discharge characteristics on the following dates: Total Suspended Solids (TSS) (Permit Limit 200 mg/L) - April 27, 2020 - 240 mg/L - May 25, 2020 - 231 mg/L - July 29, 2020 - 570 mg/L - August 20, 2020 - 290 mg/L - September 28, 2020 - 300 mg/L - January 28, 2021 - 370 mg/L - March 11, 2021 - 250 mg/L - April 29, 2021 - 490 mg/L - August 10, 2021 - 320 mg/L - December 14, 2021 - 490 mg/L - Mary 30, 2022 - 310 mg/L - June 22, 2022 - 260 mg/L - July 5, 2022 - 420 mg/L - August 3, 2022 - 950 mg/L 5-day Biochemical Oxygen Demand (BOD5) (Permit Limit 200 mg/L) - December 19, 2019 - 270 mg/L - January 24, 2020 - 250 mg/L - March 30, 2020 - 470 mg/L - April 27, 2020 - 570 mg/L - May 25, 2020 - 556 mg/L - June 23, 2020 - 304 mg/L - July 29, 2020 - 620 mg/L - August 20, 2020 - 700 mg/L - September 28, 2020 - 420 mg/L - January 28, 2021 - 920 mg/L - February 24, 2021 - 820 mg/L - March 11, 2021 - 750 mg/L - April 29, 2021 - 780 mg/L - May 5, 2021 - 400 mg/L - June 1, 2021 - 490 mg/L - June 28, 2021 - 760 mg/L - July 28, 2021 - 560 mg/L - August 10, 2021 - 540 mg/L - September 27, 2021 - 750 mg/L - October 21, 2021 - 680 mg/L - October 24, 2021 - 670 mg/L - November 2, 2021 - 580 mg/L - December 14, 2021 - 1,000 mg/L - January 30, 2022 - 310 mg/L - February 21, 2022 - 250 mg/L - March 15, 2022 - 380 mg/L - April 11, 2022 - 540 mg/L - May 30, 2022 - 440 mg/L - June 22, 2022 - 580 mg/L - July 5, 2022 - 490 mg/L - August 3, 2022 - 740 mg/L - August 24, 2022 - 210 mg/L Total Ammonia (NH3) as N (Permit Limit 10 mg/L) - August 20, 2020 - 25 mg/L - September 28, 2020 - 14 mg/L - May 5, 2021 - 20 mg/L - June 28, 2021 - 17 mg/L - October 21, 2021 - 16 mg/L

	- August 24, 2022 - 15 mg/L - September 26, 2022 - 15 mg/L - November 22, 2022 - 30 mg/L Entercocci (Permit Limit 100 CFU/100 mL) - February 14, 2020 - 210 CFU/100 mL - March 30, 2020 - 135,000 CFU/100 mL - April 27, 2020 - >600,000 CFU/100 mL - May 25, 2020 - 150,000 CFU/100 mL - June 23, 2020 - 5,000,000 CFU/100 mL - July 29, 2020 - 400 CFU/100 mL - August 20, 2020 - 1,500 CFU/100 mL - April 29, 2021 - 400 CFU/100 mL - May 5, 2021 - 700 CFU/100 mL - June 1, 2021 - 700 CFU/100 mL - August 3, 2022 - 35,000 CFU/100 mL Hydrogen Peroxide (Permit Limit: 34 mg/L Average, 100 mg/L Maximum) - March 22, 2020 - 200 mg/L - March 23, 2020 - 200 mg/L - March 24, 2020 - 200 mg/L - March 25, 2020 - 200 mg/L - April 5, 2020 - 200 mg/L - April 6, 2020 - 200 mg/L - April 11, 2020 - 200 mg/L - April 12, 2020 - 200 mg/L - April 13, 2020 - 200 mg/L - April 14, 2020 - 200 mg/L - April 15, 2020 - 200 mg/L - April 16, 2020 - 200 mg/L - April 17, 2020 - 200 mg/L - April 18, 2020 - 200 mg/L - April 19, 2020 - 200 mg/L - April 20, 2020 - 200 mg/L - April 23, 2020 - 200 mg/L - April 24, 2020 - 200 mg/L - May 3, 2020 - 200 mg/L
Compliance:	Out
Actions to be taken:	Ensure that the discharge meets all discharge characteristics as required by the Permit.

Requirement Description:	**Authorized Source - Fish Processing Effluent** 1.1.4: This Section applies to the discharge of effluent from a fish processing plant. The site reference number for this discharge is E212103. 1.1.4 - The authorized works include a processing and wash water collection system comprised of coarse screen floor drains, sumps, a Rotostrainer (0.5 millimeters apertures or finer), equalization tank, advanced oxidation system (including disinfection with hydrogen peroxide), a dissolved air flotation system (DAF), a single outfall (common with the domestic sewage discharge) extending at least 100m from and 25m below mean low water, and all related appurtenances, located approximately as shown on Site Plan.
Details/Findings:	In an email dated July 26, 2023, H2OPS Staff informed Officer Kurinka that the following works were added to the Facility during the Inspection Period. - A defoamer system - Effluent PH sensor - pH, ORP, and conductivity sensors relocation to the outfall - Caustic chemical pump for effluent pH adjustment/control - Acid pump - Polymer pump - Buffer tank and pump to redirect flow through the process - Centrifuge - PLC and HMI upgrades to accommodate above Officer Kurinka conducted a search of the Ministry's Authorization Management System (AMS) and Electronic Filing System (EFS) and confirmed Brown's Bay did not submit a permit amendment for the added works. Therefore, Brown's Bay has been found to be out of compliance with this section of the Permit. It should be noted that H2OPS Staff acknowledged that Brown's Bay was aware that a permit amendment was required and that discussions with Ministry authorization staff have already begun.
Compliance:	Out
Actions to be taken:	Submit a permit amendment to have the new unauthorized works added to the Permit. To do this please visit the following Ministry website. https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/change
Requirement Description:	**Authorized Source - Sewage Effluent** 1.2.1: This Section applies to the discharge of effluent from a domestic sewage treatment system. The site reference number for this discharge is E212103. 1.2.1 - The maximum authorized rate of discharge is 3.75 m3/d.

Details/Findings:	In an email dated August 1, 2023, H2OPS Staff informed Officer Kurinka that no domestic sewage flows were recorded during the Inspection Period. H2OPS Staff stated that in 2020 and 2021 when Brown's Bay Staff attempted to download the flow data, it was discovered that the files were corrupt. In addition, the 2022 Annual Report states that: "No domestic effluent flow data is available for 2022 due to a malfunction of the installed data recording system. Manufacturer technicians attempted to resolve the data recording issues with the existing domestic flow meter, both on-site and at their repair facility. All attempts to repair the unit failed. Instead of replacing the unit like-for-like, BBPC opted to replace the unit with a higher quality, higher accuracy Endress & Hauser (E&H) magnetic flow meter. The E&H flow meter is scheduled for installation during the process shutdown in the first quarter of 2023." Therefore, compliance could not be determined for this section of the Permit.
Compliance:	Not Determined
Requirement Description:	**Operational Requirements; 2.3 Maintenance of Works** 2.3.1: The permittee must regularly inspect the authorized works and maintain them in good working order. If components of the authorized works have a manufacturers recommended maintenance schedule, then those components must, at a minimum, be maintained in accordance with that schedule.
Details/Findings:	In an email dated July 26, 2023, Brown's Bay provided the following summary of maintenance activities carried out at the Facility during the Inspection Period. - Infeed Pump repairs - Centrifuge repairs - Hose/pipe repairs - Sump pump repairs - Sump tank repairs - Replacement of faulty sensors - DAF Baffle maintenance and repairs - DAF recirc pump repair and replacement - Fractionator recirc pump replacement - Hose replacements on all chemical pumps - Chemical pump replacements - Sludge pump repairs
Compliance:	In

Requirement Description:	**Operational Requirements; 2.4 Facility Classification and Operator Certification** 2.4: The permittee, in a manner and on timelines specified by the director, must have the authorized works classified (and the classification must be maintained) by the Environmental Operators Certification Program Society (Society). The permittee must cause the authorized works to be operated and maintained by: a) persons certified within and according to the program provided by the Society to the satisfaction of the director, or b) persons who are qualified in the safe and proper operation of the facility for the protection of the environment, as demonstrated to the satisfaction of the director. The permittee must notify the director of the classification level of the facility and certification levels of the operators, and changes of operators and/or operator certification levels within 30 days of any change
Details/Findings:	On July 25, 2023, Officer Kurinka conducted a search of the EOCP database and confirmed that the Facility has been classified as a wastewater treatment plant (WWT) level III under certificate number 2579. Lorne Sandberg is the listed operator for the Facility. Lorne Sandberg is certified as a WWT level IV under certificate number 4357, which expires on December 31, 2023. At the time of the inspection, Lorne Sandberg was listed as certified with the EOCP.
Compliance:	In
Requirement Description:	**Operational Requirements; 2.5 Treatment Plant Offal Disposal and Sludge Wasting** 2.5.1: The permittee must dispose of offal and sludge wasted from the fish processing works authorized in Section 1.1.4 in a manner approved by the director, or as otherwise authorized under the Environmental Management Act.
Details/Findings:	Brown's Bay sends all offal and sludge wasted in the fish processing process to West Coast Reductions facility for processing, which is authorized under EMA permit 15789.
Compliance:	In
Requirement Description:	**Operational Requirements; 2.5 Treatment Plan Offal Disposal and Sludge Wasting** 2.5.2: The permittee must remove sludge and scum from the sewage treatment works authorized in Section 1.2.3 annually or at other frequencies specified by the director. The permittee must dispose of the sewage sludge and scum at a site approved by the director, or as otherwise authorized under the Environmental Management Act.

Details/Findings:	In an email dated August 1, 2023, Brown's Bay provided Officer Kurinka with sludge disposal records. Based on the provided records, Brown's Bay had the sludge removed a total of 10times in 2020, 10 times in 2021, 11 times in 2022, and 4 times in 2023. The sludge is then taken to the Campbell River Pollution Control Centre, which is authorized under EMA permit 14625.
Compliance:	In
Requirement Description:	**Operational Requirements; 2.5 Treatment Plant Offal Disposal and Sludge Wasting** 2.5.3: The permittee must retain records of quantities, disposal location and dates of all offal, sludge and scum and keep such records available at the facility for inspection.
Details/Findings:	Upon request, Brown's Bay provided Officer Kurinka with records which showed the quantities, disposal location and dates of all offal, sludge, and scum.
Compliance:	In
Requirement Description:	**Operational Requirements; 2.6 Pathogen Control** 2.6: Based on all available information the director may require testing for pathogens in the effluent, which may include but is not limited to types of bacteria, yeast, mould, and viruses, and/or, may require the permittee to take action to minimize the discharge of pathogens.
Details/Findings:	Officer Kurinka searched the Ministry's Authorization Management System (AMS) and Electronic Filing System (EFS) and confirmed that a Director did not require Brown's Bay to test for pathogens in the effluent or to take action to minimize the discharge of pathogens. Therefore, this section of the Permit was not applicable during the Inspection Period.
Compliance:	Not Applicable

Requirement Description:	**Monitoring Requirements; 3.1 Discharge Flow Measurement** 3.1: Prior to discharge, the permittee must install and maintain a flow measuring device suitable to the director and record once per day the effluent volumes discharged over a 24-hour period for each of the two waste streams (process wastewater and sewage effluent stream) prior to the streams combining and discharging. The permittee must retain the records for inspection by Ministry staff.
Details/Findings:	As per the annual reports, Browns Bay measures the flow of the effluent from the Facility using two Greyline DMF Doppler Flow meters. However, as of 2021 the flow meter measuring the sewage flow has been malfunctioning and no flows were measured in 2021, 2022, and 2023. In the 2022 Annual Report, Brown's Bay reported that a new higher quality, higher accuracy Endress & Hauser (E&H) magnetic flow meter was going to be purchased for replacement. The E&H flow meter was scheduled for installation during the process shutdown in the first quarter of 2023. Officer Kurinka reviewed the submitted flow data and confirmed that Brown's Bay failed to measure the flow of the process wastewater on the following days: - January 11, 2020 - March 8, 2020 - March 9, 2020 - March 12, 2020 - March 15, 2020 - March 16, 2020 - May 24, 2020 - May 31, 2020 - June 14, 2020 - December 22, 2020 - December 23, 2020 - December 27, 2020 - December 28, 2020 - December 29, 2020 - December 30, 2020 - January 1, 2021 - January 2, 2021 - January 3, 2021 - February 2, 2021 - January 3, 2022 - January 5, 2022 - May 29, 2022 - May 30, 2022 - May 31, 2022 - June 1 to 6, 2022
Compliance:	Out

Requirement Description:	**Monitoring Requirements; 3.2 Continous Monitoring Requirements** 3.2: The permittee must install and maintain suitable measuring devices to monitor and record continuously the temperature (o C), salinity (ppt) or conductivity (S/cm) and hydrogen peroxide (mg/L) concentration of the fish processing effluent. The permittee must retain the records for inspection by Ministry staff.
Details/Findings:	Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay did not continuously monitor temperature, conductivity, and hydrogen peroxide on the following dates: - January 3 and 4, 2022, - May 29-31, 2022, and - June 1-6, 2022. In addition, Officer Kurinka determined that Brown's Bay was not measuring or recording the salinity in parts per trillion as required by the Permit.
Compliance:	Out
Actions to be taken:	Ensure samples are analyzed for all parameters specified in this section of the Permit.
Requirement Description:	**Monitoring Requirements; 3.3 Composite Sampling of Fish Processing Effluent** 3.3.1: Prior to discharge, the permittee must install and maintain a sampling facility acceptable to the director to collect samples of the fish processing effluent authorized by Section 1.1 at Site 11 as per Table 1 and in accordance with Section 3.1.
Details/Findings:	During an on-site inspection conducted on December 12, 2019 (IR143644) Ministry staff observed an effluent composite sampler which was located near the wastewater treatment plant sample port. The 2020, 2021, and 2022 Annual Reports confirmed that the composite sampler was still being used to obtain the required samples.
Compliance:	In

Requirement Description:	**Monitoring Requirements; 3.3 Composite Sampling of Fish Processing Effluent** 3.3.2: The permittee must ensure that composite samples consist of a minimum of eight discrete samples collected hourly, over a period of 24 hours, and are mixed to form a single sample. Alternatively, the permittee may use a flow proportional continuous sampler that is acceptable to the director.
Details/Findings:	The 2020, 2021, and 2022 Annual Reports stated that effluent samples are extracted from the discharge of the DAF in 200mL samples every half hour via a composite sampler. The composite sampler is equipped with a refrigerator and four 10L sample containers.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.3 Composite Sampling of Fish Processing Effluent** 3.3.3: Prior to discharge, the permittee must collect effluent as defined in Section 1.1 as follows: a) Composite samples of the effluent must be collected monthly at the location defined in Section 3.3.1. Monthly sample collection must be separated by a minimum of 21 days. b) To track the dilution and verify modelling predictions, a composite sample must be collected concurrently with quarterly receiving environment sampling; and, c) For the sampling which occurs in Quarter 3 (as defined in Section 3.7.8), a composite effluent sample must be collected concurrently with the receiving environment samples as per Table 1 and Table 3.

Details/Findings:	a) Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that composite samples of the effluent were obtained. However, Brown's Bay failed to ensure that at least 21 days separated each monthly sample collection during the following months: - between February 24, 2021, and March 11, 2021, samples were collected 15 days apart, - between April 29, 2021, and May 5, 2021, samples were collected 6 days apart, - between July 28, 2021, and August 10, 2021, samples were collected 13 days apart, - between October 24, 2021, and November 2, 2021, samples were collected 9 days apart, - between June 22, 2022, and July 5, 2022, samples were collected 13 days apart, and - between November 22, 2022, and December 7, 2022, samples were collected 15 days apart. Therefore, Brown's Bay has been found to be out of compliance with section a) of this Permit clause. b) Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that an effluent composite sample was collected concurrently with each quarterly receiving environment sampling as required. c) Table 1 of Permit section 3.5 states that a fish process effluent sample must be concurrently collected with Week 1 and Week 4 or 5 of the receiving environment monitoring program sampling. Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed Brown's Bay failed to carry out the monitoring of process effluent in accordance with part c of this section of the Permit. - 2020 - No sample of process effluent was collected during Week 1 (July 21, 2020), and process effluent was sampled on August 20, 2020, during Week 4, while the receiving environment was sampled on August 19, 2020, which is not concurrent sampling. - 2021 - No sample of process effluent was collected for either Week 4 or 5 as required. - 2022 - No sample of process effluent was collected for Week 1 as required. Therefore, Brown's Bay has also been found to be out of compliance with section c) of this Permit Clause.
Compliance:	Out
Actions to be taken:	Ensure that monitoring is carried out in accordance with the Permit.
Requirement Description:	**Monitoring Requirements; 3.4 Analysis of Fish Processing Influent** 3.4.1: The permittee must collect a composite influent sample and obtain analyses of the sample for the following parameter: a) Enterococci, MPN/100mL (or CFU/100mL)

Details/Findings:	Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay collected a composite sample of the influent and obtained analysis for enterococci.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.4 Analysis of Fish Processing Influent** 3.4.2: The permittee must ensure that composite sample consist of a minimum of eight discrete samples collected hourly, over a period of 24 hours, and are mixed to form a single sample. Alternatively, the permittee may use a flow proportional continuous sampler that is acceptable to the director.
Details/Findings:	Brown's Bay reported in the 2020, 2021, and 2022 Annual Reports that facility staff obtain ten - one litre influent grab samples hourly from the post screen storage tank, prior to the chemical treatment process. The grab samples are mixed to form a single ten litre composite sample.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.4 Analysis of Fish Processing Influent** 3.4.3: Composite sample of the influent must be collected following screening and in advance of cleaning procedures (i.e. application of cleaning agents).
Details/Findings:	The 2020, 2021, and 2022 Annual Reports stated that the influent composite sample was collected following screening and in advance of the cleaning procedures as required by this section of the Permit.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.4 Analysis of Fish Processing Influent** 3.4.4: Composite samples of the influent must be collected monthly and concurrently with effluent sampling.

Details/Findings:	Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay failed to collect a monthly influent sample concurrently with the required monthly process effluent sample. - July 5, 2022
Compliance:	Out
Requirement Description:	**Monitoring Requirements; 3.5 Analysis of Fish Processing Effluent** 3.5: The permittee must collect samples as required in Section 3.3, and obtain analyses of the samples for the following parameters (See Attachment 2): a) pH b) BOD5, mg/L c) TSS, mg/L d) Enterococci, MPN/100mL (or CFU/100mL) e) Oil & Grease, mg/L f) Ammonia (NH3) as (N), mg/L g) Nitrate (NO3) as (N), mg/L
Details/Findings:	Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay obtained analyses of the samples as required by this section of the Permit.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.6 Toxicity Testing** 3.6.1: The permittee must ensure that within 30 days of the commencement of the discharge and thereafter, once per quarter, a composite sample of the fish processing effluent is collected and analyzed for salinity and effluent toxicity to fish using a dilution series toxicity test to determine the 96-h LC50.
Details/Findings:	Officer Kurinka reviewed the submitted toxicity monitoring data contained within the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay failed to conduct toxicity sampling and analysis during Q3 of 2022 as required.
Compliance:	Out

Requirement Description:	**Monitoring Requirements; 3.6 Toxicity Testing** 3.6.2: The permittee must collect the composite sample in accordance with Section 3.3.1 and Section 3.3.2.
Details/Findings:	Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay collected the composite sample for toxicity analysis in accordance with Sections 3.3.1 and 3.3.2.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.7 Receiving Environment Monitoring Program** 3.7.1: The Permittee must implement a Receiving Environment Monitoring Plan (REMP) as defined in Table 3. Sampling must take place at the site locations defined in Table 2. Any updates or changes to the REMP must be approved by the Director in writing prior to implementation. The director may amend any requirements under this Section, based on data submitted by the permittee and any other data gathered in connection with this authorization. 3.7.1 - The permittee must collect discrete grab samples and conduct profile monitoring of ambient seawater at site locations, profile depths, and sampling frequencies as specified in Table 2 and Table 3.
Details/Findings:	Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay implemented a receiving environment monitoring plan (REMP) during the Inspection Period. Officer Kurinka confirmed that the sampling took place at the locations defined in Table 2. In addition, Brown's Bay did not report any changes to the REMP during the Inspection Period. Officer Kurinka reviewed the REMP sampling methods described in the Annual Reports and confirmed that Brown's Bay collected discrete grab samples and conducted profile monitoring of ambient seawater at site locations, profile depths, and sampling frequencies as specified in Table 2 and 3 of the Permit.
Compliance:	In

Requirement Description:	**Monitoring Requirements; 3.7 Receiving Environment Monitoring Program** 3.7.2: The permittee must ensure that at least one cycle of monitoring occurs per quarter. For the purpose of this Section, quarterly periods are defined as follows: Quarter 1 (Q1) - January 1-March 31 Quarter 2 (Q2) - April 1-Jun 30 Quarter 3 (Q3) - July 15 - August 31* Quarter 4 (Q4) - October 1-December 31 *The permittee must conduct the Q3 monitoring as per Section 3.7.8.
Details/Findings:	Brown's Bay carried out the REMP in each quarter as required by this section of the Permit.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.7 Receiving Environment Monitoring Program** 3.7.3: The permittee must collect a minimum of one quarterly cycle of grab samples during a period when the plant is routinely discharging and operating at greater than eighty percent (>80%) of peak annual production.
Details/Findings:	The 2020, 2021, and 2022 Annual Reports stated that during the Q3 sample events, the plant was operating at greater than eighty percent (>80%) of peak annual production as required by this section of the Permit.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.7 Receiving Environment Monitoring Program** 3.7.4: The permittee must ensure that there are a minimum of 30 days between quarterly receiving environment sampling cycles.
Details/Findings:	Brown's Bay ensured that there was a minimum of 30 days between quarterly receiving environment sampling cycles.
Compliance:	In

Requirement Description:	**Monitoring Requirements; 3.7 Receiving Environment Monitoring Program** 3.7.5: The permittee must ensure quarterly sampling done in Q1, Q2, Q3 and Q4 is timed to occur at different tide cycles such that flood, ebb and slack tides are each sampled over the course of the year.
Details/Findings:	The 2020, 2021, and 2022 Annual Reports stated that quarterly sampling was carried out at different tide cycles throughout the Inspection Period.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.7 Receiving Environment Monitoring Program** 3.7.7: If exceedances of applicable Water Quality Guidelines are detected for any parameters analysed in the grab samples at receiving environment sites 2, 4, 6, or 8, the permittee must initiate a second cycle of sampling within 30 days of obtaining the results of analyses from the first cycle of monitoring. In addition to sites 1, 2, 4, 6, or 8 and 10, the second cycle must include sampling at sites 3, 5, 7, 9 as specified in Table 2 and Table 3.
Details/Findings:	Brown's Bay reported that no water quality guidelines were exceeded. Therefore, this section of the Permit was not applicable during the Inspection Period.
Compliance:	Not Applicable
Requirement Description:	**Monitoring Requirements; 3.7 Receiving Environment Monitoring Program** 3.7.8: Each summer (Q3) cycle of receiving environment monitoring must include five rounds of weekly sampling. The permittee must ensure that samples are collected within 30 consecutive days at each of the sites as specified in Table 2 and Table 3. The first cycle of summer (Q3) quarterly sampling must be conducted between July 15 and August 31.
Details/Findings:	Officer Kurinka reviewed the submitted Q3 REMP data and confirmed that five rounds of weekly sampling were carried out within 30 consecutive days at each of the required sites specified in Tables 2 and 3. In addition, all Q3 sampling was carried out between July 15th and August 31st of each year.

Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.8 Profile Monitoring Sampling Depths** 3.8: The permittee must collect water column profile data at the sites specified in Table 2 at the following depths: a) 1 m below surface, and b) 2 m intervals from the surface to 1 m from the bottom.
Details/Findings:	Officer Kurinka reviewed the submitted REMP data contained within the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay carried out water column profile sampling as specified in Table 2 and at the required depths specified in this section of the Permit.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.9 Profile Monitoring** 3.9: The permittee must ensure that profile measurements required under Section 3.8 are obtained prior to grab sampling for the following parameters: a) Temperature (0C), b) Dissolved Oxygen (mg/L), c) pH, and d) Specific Conductivity (S/cm) or Salinity (ppt)
Details/Findings:	Officer Kurinka reviewed the submitted REMP data contained within the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay measured the temperature, dissolved oxygen, pH, and specific conductivity as required.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.10 Receiving Environment Grab Sampling** 3.10: The permittee must collect receiving environment grab samples at the sites specified in Table 2 at the following depths: a) 1 m below surface, and b) 1 m above bottom, and c) at a mid-depth in the plume In situ water column profile measurements must be used to determine plume depth for the mid-depth sample. If the plume is located, the mid-depth sample must be collected within the plume and the sample depth recorded. If after making every reasonable effort to locate the plume, it cannot be located, the mid-depth sample must be collected at 6 m below the surface. Efforts to locate the plume must be documented.

Details/Findings:	Officer Kurinka reviewed the submitted REMP data and confirmed that Brown's Bay obtained a grab sample at 1 m below the surface, 1 m above the bottom, and at mid-depth as required. Brown's Bay reported in their 2020, 2021, and 2022 Annual Reports that a plume was not located at any time during monitoring.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.11 Analyses for Receiving Environment Grab Samples** 3.11: The permittee must collect grab samples as required under Section 3.8 and obtain analyses of the samples for the following parameters (See Attachment 3 and 4): a) Total Ammonia (as N), mg/L b) Nitrate (as N), mg/L c) Enterococci, MPN/100mL (or CFU/100mL), and d) Hydrogen peroxide, mg/L* *Hydrogen peroxide, mg/L (using field sampling and analytical methods and equipment acceptable to the director).
Details/Findings:	Officer Kurinka reviewed the submitted monitoring data and confirmed that Brown's Bay obtained analyses for each sample for total ammonia, nitrate, enterococci, and hydrogen peroxide, except for Q3 2022 when testing reagents were not available and hydrogen peroxide could not be measured. Therefore, Brown's Bay has been found to be out of compliance with this section of the Permit.
Compliance:	Out
Requirement Description:	**Monitoring Requirements; 3.15 Outfall Inspection** 3.15: Once every five years, the permittee must conduct a dye test on the outfall pipe or inspect the outfall pipe by another method acceptable to the director. The director may, in writing, vary the frequency of testing or inspection.

Details/Findings:	As previously identified in inspection report #143644, the last outfall inspection occurred at the Facility on December 16, 2015. In an email dated October 4, 2023, Brown's Bay provided Officer Kurinka with the results of the most recent outfall inspection, which occurred on March 24, 2023, seven years after the 2015 outfall inspection. The inspection was conducted on March 24, 2023 by Diveco Marine (2007) Ltd. and consisted of a video and dive inspection of the outfall. The inspection determined that the concrete anchoring of the outfall was not adequate, and Diveco Marine returned on April 20, 2023, to add additional anchorage to ensure that the outfall was secure. Therefore, Brown's Bay has been found to be out of compliance with this section of the Permit for failing to carry out an outfall inspection once every five years.
Compliance:	Out
Requirement Description:	**Monitoring Requirements; 3.16 Records of Fish Processing Plant Production** 3.16: The permittee must maintain fish processing plant production records. Total production (in tonnes), species (type and quantity in tonnes) and duration of fish processing production must be recorded each day. The permittee must retain the records for inspection by Ministry staff.
Details/Findings:	Brown's Bay provided Officer Kurinka with production records on August 1, 2023. The product records included the total tonnes of fish processed, but did not include the species, and the duration of fish processing production was not recorded for each day.
Compliance:	Out
Actions to be taken:	Ensure that all required information specified in this section of the Permit is included in the required production records. I
Requirement Description:	**Monitoring Requirements; 3.17 Quality Assurance** 3.17.1: The permittee must obtain from the analytical laboratory(ies) their precision, accuracy and blank data for each sample set submitted by the permittee and an evaluation of the data acceptability, based on criteria set by such laboratory.

Details/Findings:	As part of the annual report submission, Brown's Bay provided the Ministry with the analytical laboratory reports which included the precision, accuracy and blank data for each sample submitted by Brown's Bay.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.17 Quality Assurance** 3.17.2: The permittee must submit samples to analytical laboratory(ies) that meet the definition of a qualified laboratory under the Environmental Data Quality Assurance Regulation.
Details/Findings:	Brown's Bay submits samples to Bureau Veritas, which is a listed certified laboratory on the Ministry's Directory of Qualified Laboratories; and therefore, meets the definition of a qualified laboratory under the Environmental Data Quality Assurance Regulation.
Compliance:	In
Requirement Description:	**Monitoring Requirements; 3.17 Quality Assurance** 3.17.3: The permittee must collect, prepare and submit for analysis by the analytical laboratory(ies) quality control (QC) duplicates as follows: a) for a minimum of 10% of the samples collected for receiving environment program required under Sections 3.6 to 3.11. b) at a minimum of twice per year for the effluent composite sample required under Section 3.3.
Details/Findings:	Brown's Bay reported that 11% of all samples collected during the REMP in 2020, 2021, and 2022 were duplicates.
Compliance:	In

Requirement Description:	**Site Performance Objective** 4.2: In the event that the SPO (i.e. 0.4 mg/L) is exceeded at 15 m IDZ, the permittee must conduct sampling at 5m increments extending out from the IDZ in order to delineate the SPO boundary. Additionally, the permittee must implement preventative and/or corrective measures to reduce hydrogen peroxide levels in the discharge such that the SPO will not be exceeded.
Details/Findings:	Brown's Bay reported no site performance objectives exceedances during the Inspection Period. Therefore, this section of the Permit was not applicable during the Inspection Period.
Compliance:	Not Applicable
Requirement Description:	**Site Performance Objective** 4.3: The permittee must use the site performance objective for data interpretation purposes, for all reports required in Section 5.
Details/Findings:	Officer Kurinka reviewed the 2020, 2021, and 2022 Annual Reports and confirmed that Brown's Bay used the site performance objectives in their data interpretation.
Compliance:	In
Requirement Description:	**Reporting; 5.1 Spilling Reporting** 5.1: The permittee must immediately report all spills to the environment (as defined in the Spill Reporting Regulation) in accordance with the Spill Reporting Regulation, which among other things, requires notification to the Provincial Emergency Program at 1-800-663-3456.
Details/Findings:	Officer Kurinka searched the Emergency Management BC (EMBC) web-based spill reporting database and confirmed that Brown's Bay did not report any spills to the Ministry during the Inspection Period. Therefore, this section of the Permit was not applicable.

Compliance:	Not Applicable
Requirement Description:	**Reporting; 5.2 Environmental Monitoring System Reporting** 5.2: The permittee must ensure that the results of the effluent and receiving environment monitoring required under Section 3 are uploaded into the Ministrys Environmental Management System (EMS) database using the appropriate EMS site identification numbers within one month of completion of analysis. The permittee must keep all original laboratory reports for submitted data on site and provide them to the Ministry, in an electronic format, upon written request by the director.
Details/Findings:	Officer Kurinka conducted a search of the Ministry's Environmental Management System (EMS) and confirmed that Brown's Bay has not uploaded effluent and receiving environment monitoring results to EMS since December 12, 2019.
Compliance:	Out
Actions to be taken:	Ensure that all effluent and receiving environment monitoring data is uploaded to the Ministry's EMS as required by this section of the Permit.
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (a): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: a) A tabulated summary of the monitoring data collected as per Section 3 and Section 4, and an excel spreadsheet of the raw data, including profile data as per Section 3.9 along with the depths required as per Section 3.8;

Details/Findings:	Officer Kurinka searched the Ministry's EFS and confirmed that Brown's Bay submitted the 2019, 2020, 2021, and 2022 Annual Reports on the following dates: - The 2019 Annual Report was submitted on March 13, 2021, which was 346 days past the submission deadline. - The 2020 Annual Report was submitted on July 24, 2021, which was 114 days past the submission deadline. - The 2021 Annual Report was submitted on March 30, 2023, which was 363 days past the submission deadline. - The 2022 Annual Report was submitted on March 30, 2023. Officer Kurinka reviewed the Annual Reports and confirmed that they all included a tabulated summary of the monitoring data collected as per Sections 3 and 4, and an Excel spreadsheet of the raw data, including profile data as per Section 3.9 along with the depths required as per Section 3.8 of the Permit. In addition, the reports were signed by Monica Stewardson (R.P.Bio). However, because the 2019, 2020, and 2021 Annual Reports were not submitted to the Ministry by March 31st, Brown's Bay has been found to be out of compliance with this section of the Permit.
Compliance:	Out
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (b): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following b) A summary and graphical analysis, with suitable interpretation by a QP of any trends in the monitoring results for the influent sampling, effluent sampling and the receiving environment sampling;
Details/Findings:	Officer Kurinka reviewed the 2019, 2020, 2021, and 2022 Annual Reports and confirmed that each report included a summary and graphical analysis, with suitable interpretation by a Qualified Professional (QP) of any trends in the monitoring results for the influent, effluent, and receiving environment sampling.
Compliance:	In

Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (c): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: c) A summary of the 96h LC50 results including a determination, using the dilution model, of the location within the Initial Dilution Zone (IDZ) at which the 96-h LC50 is estimated to pass if LC50 is lower than 100% effluent concentration as determined by the toxicity tests required under Section 3.6;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included a summary of the 96-h LC50 results including a determination, using the dilution model, of the location within the Initial Dilution Zone (IDZ) at which the 96-h LC50 is estimated to pass if LC50 is lower than 100% effluent concentration as determined by the toxicity tests required under Section 3.6.
Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (d): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: d) Results of daily and monthly average and maximum flows tabulated and graphed for the fish processing effluent (m3/day) and compared to permit discharge limits;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included the results of daily and monthly average and maximum flows tabulated and graphed for the fish processing effluent (m3/day) and compared to permit discharge limits.
Compliance:	In

Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (e): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: e) Verification of the Technical Assessment Report (TAR) dilution model predicted parameter concentrations at the 15 m IDZ and 40 m mixing boundary using effluent monitoring data collected concurrently with the REMP; Using effluent monitoring data as model inputs, compare the predicted IDZ and 40 m mixing boundary parameter concentrations (model outputs) with those predicted in the TAR and to the concurrent REMP results (Q1, Q2, Q3-week1, Q3-week 4 or 5 and Q4). Provide the results of the model verification exercise and comment on the accuracy of model predictions;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included verification of the Technical Assessment Report (TAR) dilution model predicted parameter concentrations at the 15 m IDZ and 40 m mixing boundary using effluent monitoring data collected concurrently with the REMP. Officer Kurinka confirmed that Brown's Bay used effluent monitoring data as model inputs, compare the predicted IDZ and 40 m mixing boundary parameter concentrations (model outputs) with those predicted in the TAR and to the concurrent REMP results (Q1, Q2, Q3-week1, Q3-week 4 or 5 and Q4).
Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (f): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: f) Tabulated results showing parameter concentrations of effluent discharge (Section 1.1.3) and receiving environment water quality samples (Section 3.11) and results of model verification compared to predictions from the model; Provide a discussion of how the calculated dilution, based on monitoring data, compares to the predicted dilution model;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included tabulated results showing parameter concentrations of effluent discharge (Section 1.1.3) and receiving environment water quality samples (Section 3.11) and results of model verification compared to predictions from the model; Provide a discussion of how the calculated dilution, based on monitoring data, compares to the predicted dilution model.
Compliance:	In

Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (g): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: g) Summary of any exceedances of the SPO as required under Section 4;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included a summary of any exceedances of the SPO as required under Section 4.
Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (h): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: h) Summary of actions taken as a result of any exceedances of the SPO as required under Section 4;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included a summary of actions taken as a result of any exceedances of the SPO as required under Section 4.
Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (i): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: i) An assessment of potential effects in the receiving environment, including a verification of the predicted effluent and receiving environment limits as per the dilution model for the authorized discharge;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included an assessment of potential effects in the receiving environment, including a verification of the predicted effluent and receiving environment limits as per the dilution model for the authorized discharge.

Compliance:	In
Requirement Description:	**5. Reporting; 5.5 Annual Report and Evaluation** 5.5 (j): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: j) A QP assessment of the effectiveness of the effluent and receiving environment monitoring program (REMP) required under Section 3, and if necessary, recommendations for update, including parameters, locations, period, frequency, sampling type and detection limit;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included a QP assessment of the effectiveness of the effluent and receiving environment monitoring program (REMP) required under Section 3, and if necessary, recommendations for update, including parameters, locations, period, frequency, sampling type and detection limit.
Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (k): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: k) An evaluation of the quality assurance program required under Section 3.17;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included an evaluation of the quality assurance program required under Section 3.17.
Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (l): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: l) An evaluation of the performance of the treatment works and identification of any necessary changes, including efficacy of the disinfection treatment works and the necessity for additional disinfection;

Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included an evaluation of the performance of the treatment works and identification of any necessary changes, including the efficacy of the disinfection treatment works and the necessity for additional disinfection.
Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (m): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: m) Monthly fish processing plant production records, attached in a table, as per Section 3.16;
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports did not include the monthly fish processing plant production records.
Compliance:	Out
Actions to be taken:	Brown's Bay must ensure that the monthly fish processing plant production records are included in each annual report in a table format as required by this section of the Permit.
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (n): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: n) A statement outlining the number and dates of non-compliance instances that occurred during the reporting period, with an explanation as to the cause of the non-compliance, and a description of the corrective actions taken. If no non-compliance instances occurred, the statement to that effect must be included; and,
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports included a statement outlining the number and dates of non-compliance instances that occurred during the reporting period, with an explanation as to the cause of the non-compliance, and a description of the corrective actions taken. If no non-compliance instances occurred, the statement to that effect must be included.

Compliance:	In
Requirement Description:	**Reporting; 5.5 Annual Report and Evaluation** 5.5 (o): The permittee must, by March 31 of each year, submit to the director for the preceding calendar year, an annual report prepared and signed by a Qualified Professional (QP). The annual report must include, but not be limited to, the following: o) The Annual Report must be signed and sealed by a QP and include a signed Declaration of Competency form. The annual report should be prepared in accordance with the applicable Sections of the most recent edition of "Technical Guidance 4, Environmental Management Act Authorizations, Annual Reporting Under the Environmental Management Act, A Guide for Mines in British Columbia" or by suitable alternative procedures as approved by the director. A copy of the above manual is available on the Ministry website at https://www2.gov.bc.ca/assets/gov/environment/waste-management/industrial-waste/industrial-waste/mining-smelt- energy/annual_reporting_guidance_for_mines.pdf
Details/Findings:	Officer Kurinka confirmed that the 2019, 2020, 2021, and 2022 Annual Reports were signed and sealed by Monica Stewardson who is a registered professional biologist. However, none of the Annual Reports included the required Declaration of Competency form.
Compliance:	Out
Requirement Description:	**Reporting; 5.6 Adaptive Management** 5.6 (a): The permittee must submit a hydrogen peroxide (H2O2) adaptive management report prepared by a Qualified Professional to the director within 13 months of the date of commencement of the discharge. The report must contain: a) A summary of the H2O2 discharge and receiving environment data, and discharge toxicity results, including the main conclusions and an integrated interpretation of the findings. This must include comparison of the discharge data to the permit limits specified in Section 1.1.3 and a comparison of the receiving environment data to the site performance objective specified in Section 4;
Details/Findings:	Officer Kurinka searched the Ministry's EFS and determined that the required hydrogen peroxide adaptive management report was not submitted to the Ministry. On August 1, 2023, H2OPS Staff informed Officer Kurinka that the report was overlooked, but Brown's Bay was already engaging with a qualified professional to complete the report.

Compliance:	Out
Requirement Description:	**Reporting; 5.7 Non-Compliance Notification** 5.7: The permittee must immediately notify the director or designate by email at EnvironmentalCompliance@gov.bc.ca, or as otherwise instructed by the director of any non-compliance with the requirements of this authorization by the permittee and take remedial action to remedy any effects of such non-compliance. The permittee must provide the director with written confirmation of all such non- compliance events, including available test results within 24 hours of the original notification by email at EnvironmentalCompliance@gov.bc.ca, or as otherwise instructed by the director.
Details/Findings:	Officer Kurinka searched the Ministry's EFS and determined that Brown's Bay submitted the following non-compliance reports: - 2022-10-02 8124 NCR 20220130 BOD Exceedance, Date of Occurrence: January 30, 2022, Date Reported: October 2, 2022, 245 days after non-compliance, - 2022-10-02 8124 NCR 20220221 BOD Exceedance, Date of Occurrence: February 21, 2022, Date Reported: October 2, 2022, 223 days after non-compliance, - 2022-10-02 8124 NCR 20220315 BOD Exceedance, Date of Occurrence: March 15, 2022, Date Reported: October 2, 2022, 201 days after non-compliance, - 2023-03-30 8124 NCR 20220411 BOD Exceedance, Date of Occurrence: April 11, 2022, Date Reported: March 30, 2023, 353 days after non-compliance, - 2023-03-30 8124 NCR 20220530 TSS and BOD Exceedance, Date of Occurrence: May 30, 2022, Date Reported: March 30, 2023, 304 days after non-compliance, - 2023-03-30 8124 NCR 20220622 TSS and BOD Exceedance, Date of Occurrence: June 22, 2022, Date Reported: March 30, 2023, 281 days after non-compliance, - 2023-03-30 8124 NCR 20220705 TSS and BOD Exceedance, Date of Occurrence: July 05, 2022, Date Reported: March 30, 2023, 268 days after non-compliance, - 2023-03-30 8124 NCR 20220803 TSS, BOD, and Enterococci Exceedance, Date of Occurrence: August 03, 2022, Date Reported: March 30, 2023, 239 days after non-compliance, - 2023-03-30 8124 NCR 20220824 TSS and Ammonia Exceedance, Date of Occurrence: August 24, 2022, Date Reported: March 30, 2023, 218 days after non-compliance, - 2023-03-30 8124 NCR 20220926 Ammonia Exceedance, Date of Occurrence: September 26, 2022, Date Reported: March 30, 2023, 185 days after non-compliance, and - 2023-03-30 8124 NCR 20221122 Ammonia Exceedance, Date of Occurrence: November 22, 2022, Date Reported: March 30, 2023, 128 days after non-compliance. In addition, none of the late report submissions were reported to the Ministry. Therefore, Brown's Bay has been found to be out of compliance with this section of the Permit for failing to report the non-compliance's immediately to the Ministry.
Compliance:	Out

Actions to be taken:	Brown's Bay must immediately report to the Ministry any non-compliance's detected at the Facility. To do this Brown's Bay can submit an email to environmentalcompliance@gov.bc.ca.
Requirement Description:	**Reporting; 5.8 Non-Compliance Reporting** 5.8: If the permittee fails to comply with any of the requirements of this authorization, the permittee must, within 30 days of such non-compliance, submit to the director a written report that is satisfactory to the director and includes, but is not necessarily limited to, the following: a) all relevant test results obtained by the permittee related to the non-compliance; b) an explanation of the most probable cause(s) of the non-compliance; and, c) a description of remedial action planned and/or taken by the permittee to prevent similar non-compliance(s) in the future. The permittee must submit all non-compliance reporting required to be submitted under this Section by email to the Ministrys Compliance Reporting Submission Mailbox (CRSM) at EnvironmentalCompliance@gov.bc.ca. For guidelines on how to report a non-compliance or for more information visit the Ministry website at https://www2.gov.bc.ca/gov/content?id=076C5CA3ABD342A784CC49EC78CBAE12
Details/Findings:	Officer Kurinka searched the Ministry's EFS and determined that Brown's Bay submitted the required 30-day non-compliance report which included all of the required information. However, the reports were not submitted to the Ministry within 30-days of the non-compliance. - 2022-10-02 8124 NCR 20220130 BOD Exceedance, Date of Occurrence: January 30, 2022, Date Reported: October 2, 2022, 245 days after non-compliance, - 2022-10-02 8124 NCR 20220221 BOD Exceedance, Date of Occurrence: February 21, 2022, Date Reported: October 2, 2022, 223 days after non-compliance, - 2022-10-02 8124 NCR 20220315 BOD Exceedance, Date of Occurrence: March 15, 2022, Date Reported: October 2, 2022, 201 days after non-compliance, - 2023-03-30 8124 NCR 20220411 BOD Exceedance, Date of Occurrence: April 11, 2022, Date Reported: March 30, 2023, 353 days after non-compliance, - 2023-03-30 8124 NCR 20220530 TSS and BOD Exceedance, Date of Occurrence: May 30, 2022, Date Reported: March 30, 2023, 304 days after non-compliance, - 2023-03-30 8124 NCR 20220622 TSS and BOD Exceedance, Date of Occurrence: June 22, 2022, Date Reported: March 30, 2023, 281 days after non-compliance, - 2023-03-30 8124 NCR 20220705 TSS and BOD Exceedance, Date of Occurrence: July 05, 2022, Date Reported: March 30, 2023, 268 days after non-compliance, - 2023-03-30 8124 NCR 20220803 TSS, BOD, and Enterococci Exceedance, Date of Occurrence: August 03, 2022, Date Reported: March 30, 2023, 239 days after non-compliance, - 2023-03-30 8124 NCR 20220824 TSS and Ammonia Exceedance, Date of Occurrence: August 24, 2022, Date Reported: March 30, 2023, 218 days after non-compliance, - 2023-03-30 8124 NCR 20220926 Ammonia Exceedance, Date of Occurrence: September 26, 2022, Date Reported: March 30, 2023, 185 days after non-compliance, and - 2023-03-30 8124 NCR 20221122 Ammonia Exceedance, Date of Occurrence: November 22, 2022, Date Reported: March 30, 2023, 128 days after non-compliance. Therefore, Brown's Bay has been found to be out of compliance with this section of the Permit.

Compliance:	Out
Actions to be taken:	Within 30 days of a non-compliance being detected, Brown's Bay must submit a non-compliance report to the Ministry which contains all of the required information specified in this section of the Permit.

Compliance History:

- 2019-12-12 IR 143644 Advisory: Analaysis of Fish Processing Effluent 3.5, Analysis of Fish Processing Influent 3.4.1, Authorized Source - Fish Processing Effluent 1.1.1; 1.1.3, Composite Sampling of Fish Processing Effluent 3.3.3, Continous Monitoring Requirements 3.2, Discharge Flow Measurement 3.1, Environmental Monitoring System Reporting 5.2, Non-Compliance Notification 5.7, Non-Compliance Reporting 5.8, Operational Reports 5.4.1; 5.4.2, Quality Assurance 3.17.3, Toxicity Testing 3.6.1
- 2017-12-04 IR 74000 Advisory: APPENDIX 01 - EFFLUENT 1 (b); 1 (d), APPENDIX B-1 - Posting of Outfall B-1 (D)

The Ministry of Environment Compliance and Enforcement Policy and Procedure (C&E Policy) prescribes common requirements and procedures for all Ministry staff to ensure consistent and risk-based assessment and response to non-compliance. Using the Non-Compliance Decision Matrix, the compliance determination for this inspection has been assessed as **Level 1, Category C, Warning 120(6)**.

More information about Environmental Compliance, the Non-Compliance Decision Matrix, and reporting and data submission requirements can be found at the links below:

General compliance information:

www.gov.bc.ca/environmentalcompliance

Non-Compliance Decision Matrix information:

www.gov.bc.ca/environment/how-compliance-is-assessed

Reporting and data submission requirements (to be sent to EnvAuthorizationsReporting@gov.bc.ca):

https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/comply

Please be advised that this inspection report may be published on the provincial government website within 7 days.

Below are attachments related to this inspection.

If you have any questions about this warning, please contact the undersigned.

Yours truly,

Travis Kurinka
Environmental Protection Officer

cc: COS North Vancouver Island

Attachments:
1) 2019-12-16 Section 1.1.3 Table.jpg Attachment #1 - Section 1.1.3 Permit Table

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Ministry of Environment and Climate Change Strategy

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Parameter	Maximum Daily Concentration*
pH	6.0 – 9.0
Total Ammonia (NH_3) as N	10 mg/L
5-day Biochemical Oxygen Demand (BOD_5)	200 mg/ L
Oil & Grease (O&G)	30 mg/L
Total Suspended Solids (TSS)	200 mg/L
Nitrate (NO_3) as N	5 mg/L
Hydrogen Peroxide (H_2O_2)	100 mg/L [34 mg/L average]
Enterococci	100 MPN/100mL or 100 CFU/100 mL

*Maximum daily concentrations of all parameters, except for hydrogen peroxide, are measured in composite samples required under Section 3.3. Maximum daily concentrations of hydrogen peroxide are calculated based on instantaneous results of continuous monitoring required under Section 3.2 averaged over 24-hour period.

Attachment #1 - Section 1.1.3 Permit Table