



Ministry of Environment
Inspection Record

Environmental
Protection
Division

EP System: <u>AMS</u>	Inspection Status: <u>FINAL</u>
System Number: <u>105809</u>	Inspection No: <u>29047</u>
EP System Status: <u>Active</u>	Inspection Date: <u>2016-08-12</u>
Region: <u>West Coast</u>	Office: <u>Nanaimo</u>
Trigger: <u>Planned</u>	Incidents of Non-Compliance Observed: <u>Yes</u>
Non-Compliance Decision Matrix Level: <u>Level 1</u>	Non-Compliance Decision Matrix Category: <u>Category A</u>
Inspector Name(s): <u>Laura Hunse</u>	CPIX: <u>Over 2 = High</u>
Audit: <u></u>	Total Non-Compliance(s): <u>1</u>
Regulated Party: <u>COBBLE HILL HOLDINGS LTD. (BC0754588)</u>	
Regulated Party Contact(s): <u>Marty Block (CHH director), Todd Mizuik (SIRM)</u>	
Mailing Address: <u>South Island Aggregates Ltd. PO Box 282 Malahat BC V0R 2L0</u>	
Phone No: <u>(250)743-0811</u>	Fax No: <u>(250) 743-3338</u>
Contact Email: <u>marty.sia@shaw.ca</u>	
Location Description or Site Address: <u>460 Stebbings Road, Shawnigan Lake</u>	
Latitude: <u>48.5511</u> N	Longitude: <u>123.6066</u> W
Receiving Environment(s): <u>Groundwater, Land & Surfacewater</u>	

Summary

MONITORING AND REPORTING REQUIREMENTS

Inspection Period:

From: 2016-01-01

To: 2016-08-12

Requirement Source:

Permit

Activity:

Office Review

Waste Type:

Effluent

Inspection Summary:

On August 3, 2016, Environmental Protection Officer Laura Hunse conducted an onsite inspection of Cobble Hill Holdings Ltd. (BC0754588) (CHH)'s operation near Shawnigan Lake, authorized under Environmental Management Act refuse permit 105809 (Permit). Also present during the inspection were site operations staff Todd Mizuik and Tom Good of South Island Resource Management (SIRM) as well as two ministry co-op students. Copies of records kept at the site were obtained at that time and are the subject of this records review. A record of the onsite inspection report is separate from this document and can be found under Inspection Report #27734, dated August 3, 2016.

Consideration for this records inspection includes records related to soils received at the site from January 2016 to the date of onsite inspection; analysis prior to and following arrival at the site; general soil management procedures around the Soil Management Area (SMA) and Permanent Encapsulation Area (PEA) (also commonly referred to as the landfill); and related Waste Approval Applications (WAAs) and Soil Arrival Forms (SAFs). Also considered and consulted for this review was related documentation such as the Environmental Procedures Manual (SIRM, March 31, 2016) (EPM Revision 1.1) as well as other associated data, correspondence, onsite and follow-up discussions with SIRM staff.

CHH was found to be in compliance with the following sections of the permit: 1.3.2, 1.3.3, 2.2, 2.4, 3.1, and 5.1(4-7).

Non-compliance was determined with regards to section 3.1 related to one missed sampling event citing safety concerns.

Compliance with the following sections of the Permit were not determined or were not applicable to this inspection: 1.2.3, 3.2, 5.1(1-3, 8-13).

The appropriate response for this inspection is a non-compliance Advisory.

Response:

Advisory

ACTIONS REQUIRED BY REGULATED PARTY:

In order to properly determine compliance in the future, please include documentation with the records describing the rationale for any variation from the guidance for procedures listed in the EPM.

ADDITIONAL COMMENTS:

Section 2.13 of the permit states that the EPM must be used as a guide at all times for the facility. Section 6.3 of the SAP includes the following: "Only soil quantities approved under a WAA will be accepted. If soil quantities above the initially approved WAA are expected, a Waste Approval Change Order (WACO or _change order_) must be completed by the Generator (or the QEP representative of the Generator)_._ Each WACO must include a letter with waste characterization information from the Generator, or their QEP. The WACO will be

reviewed by the Site Qualified Environmental Professional prior to acceptance of any additional soil. If soil is deemed acceptable under the original WAA, the change order will be accepted and the maximum approved quantity will be adjusted accordingly. If the soil is not deemed acceptable under the original WAA, no new soil will be accepted and the generator must submit a new WAA." Files reviewed show examples of this procedure followed with the exception of the file 20160506_, in which soil quantities above the initially approved WAA were expected but a WACO was not created; however, sampling and analysis frequencies and other standard procedures were followed for this soil which showed consistent characteristics with the original WAA. This was discussed with SIRM staff and the usefulness of documenting rationale for any variation from the EPM guidance was agreed upon.

Compliance History:

2016-08-08 Office Review -- Non-compliance related to the Director's requirements pursuant to sections 2.20, 4.1 and 4.2. 2B Warning

2016-08-03 Onsite -- No non-compliances noted.

2016-06-14 Office Review -- Non-compliance related to WTS flow (1.4.2) settling pond TSS, turbidity, dissolved iron (1.5.3) and dustfall (2.10) exceedances; EPM and new works revision not QP signed (2.12, 2.15, 2.18); non-compliance reporting incomplete (6.1). 2B Warning

2015-12-17 Office Review -- update on previous undetermined non-compliance reporting clause (6.1) from 2015-11-14 inspection; No non-compliances noted.

2015-12-02 Onsite -- No non-compliances noted.

2015-11-14 Onsite -- Non-compliance as a result of water crossing the perimeter boundary instead of channelling to the settling pond as required (1.5.4, 1.5.5, 2.12). In addition, the permittee did not immediately contact the director upon discovering the discharge (2.12). 2A Warning

2015-09-15 Office Review -- Follow-up on 2015-05-13 non-compliances, now in compliance. No non-compliances noted.

2015-05-13 Onsite -- Non-compliances noted: monitoring well MW-4 no longer operational (3.3), sampling and reporting not conducted during appeal period (3.4, 3.6, 5.2), tracking process practice not matched to Environmental Procedures Manual (5.1(5)). 1A Advisory

2014-05-29 Onsite -- Non-compliances noted: permanent flow-measurement device not yet installed (1.5.4, 1.5.5), tracking process practice not matched to Environmental Procedures Manual (5.1(5)). 1A Advisory

Please contact me with any questions at laura.hunse@gov.bc.ca or 250.751.3224.

Compliance Summary	In	Out	N/A	N/D
Discharge	2	0	0	0
Operations	7	1	3	2
Reporting	1	0	0	0

Inspection Details

Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
Operations	1.2 AUTHORIZED DISCHARGE -- TREATMENT FACILITY: This section applies to the discharge of refuse from a	Soil is not bio-remediated at the site at this time.	Not Applicable

soil treatment facility. The site reference number for this discharge is E292169.

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1.2.3 The types of soil that can be bio-remediated at the treatment facility are soils contaminated with hydrocarbons, specifically soils contaminated with Benzene, Toluene, Ethylbenzene, Xylene (BTEX), Styrene, Methyl Tertiary Butyl Ether (MTBE), Volatile Petroleum Hydrocarbons (VPHs), Light and Heavy Extractable Petroleum Hydrocarbons (LEPHs/HEPHs), Polycyclic Aromatic Hydrocarbons (PAHs), Chlorinated Hydrocarbons, Phenolic Substances, Chloride, Sodium and Glycols as defined in Schedules 4 and 5 of the CSR. Soils co-contaminated with hydrocarbons as described in this section and metals or other contaminants not suitable for bioremediation meeting industrial land use standards as defined in Schedules 4 and 5 of the CSR may also be accepted for treatment at the biocell.

Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Discharge</u>	<p>1.3 AUTHORIZED DISCHARGE -- LANDFILL FACILITY:</p> <p>This section applies to the discharge of refuse from a soil treatment facility and from relocated contaminated soil and associated ash. The site reference number for this discharge is E292889.</p> <p>--</p> <p>1.3.2 The characteristics of the discharge must be better</p>	<p>The soils received were better than hazardous waste as described in the Schedule 1, 1.1, 3 and 4 (Part 3, table 1 - Leachate Quality Standards) and were limited to contaminated soils.</p>	<u>In</u>

	<p>than:</p> <p>Hazardous waste, as described in the Schedule 1, 1.1, 3 and 4 (Part 3, table 1 - Leachate Quality Standards) of the Hazardous Waste Regulation (HWR) and must be limited to contaminated soils and associated ash. Hazardous waste (as defined in the Environmental Management Act and the HWR), liquids, putrescible and other wastes must not be discharged.</p>		
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
Discharge	<p>1.3 AUTHORIZED DISCHARGE -- LANDFILL FACILITY:</p> <p>This section applies to the discharge of refuse from a soil treatment facility and from relocated contaminated soil and associated ash. The site reference number for this discharge is E292889.</p> <p>--</p> <p>1.3.3 The types of soil that can be discharged at the landfill facility are soils and associated ash contaminated with metals, Dioxins, Furans, BTEX, MTBE, VPHs, LEPHs/HEPHs, PAHs, Styrene, Chlorinated Hydrocarbons, Phenolic Substances, Chloride, Sodium and Glycols as defined in Schedules 4 and 5 of the CSR.</p>	<p>The types of soils discharged were limited to those listed as allowable in section 1.3.3.</p>	In
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
Operations	<p>2.2 SCREENING AND ACCEPTANCE OF SOIL:</p> <p>Those soils suspected to be unacceptable must be either rejected immediately or placed in a holding area (as defined in Subsection 2.3) within the soil management area waiting further re-</p>	<p>Records obtained for this inspection show, and SIRM staff confirm, that soil from one contract (file 20160506_) needed to be delineated off and separated in the SMA while awaiting further characterization. Further sampling and analysis</p>	In

	<p>characterization by a Qualified Professional in accordance with Technical Guidance Document #1 (Site Characterization and Confirmation Testing). If further characterization confirms soils as unacceptable for treatment or landfilling (as defined in Subsections 1.2 and 1.3) the soil must not be mixed with any other soil and must be removed from the facility in accordance with the requirements of the Environmental Management Act and of the CSR.</p>	<p>concluded that the soil was acceptable, and it was then moved to the PEA.</p>	
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
Reporting	<p>2.4 BEDROCK INTEGRITY AND INSPECTION AND RISK ASSESSMENT</p> <p>A bedrock integrity inspection and risk assessment report must be submitted to the Director prior to the construction of any landfill cells. For any abnormalities (open fractures, presence of water, percolation, etc) identified during the inspection, the Permittee must notify the Director immediately and issue a structural report within 30 days following the inspection. The report must be submitted to the satisfaction of the Director and prepared by a suitably Qualified Professional and must include, but is not limited to:</p> <ul style="list-style-type: none"> a) all relevant information collected during the inspection and detailing the abnormality; b) an explanation and/or interpretation of the abnormality; c) a risk assessment in regards to the risk to human health and the receiving environment; and 	<p>An Bedrock Integrity Inspection Report confirmation was submitted prior to expansion of the PEA to Cell 1C (SIRM Bedrock Report, Brimmell Engineering, May 5, 2016).</p>	In

	d) remedial action planned and/or taken to control the risks.		
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>3.1 INCOMING SOIL AND ASSOCIATED ASH SAMPLING AND ANALYSIS</p> <p>The Permittee must follow sampling procedures and frequency specified in the approved Soil Acceptance Plan described under Subsection 2.2 to verify soil and associated ash quality.</p>	<p>Sampling procedures and frequencies described in the Soil Acceptance Plan (SAP) are generally met.</p> <p>Of the files reviewed, one sample (file 20151109_ sample 6 of 6 for 4000-5000 tonnes) was noted as not obtained citing safety concerns.</p>	Out
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>3.1 INCOMING SOIL AND ASSOCIATED ASH SAMPLING AND ANALYSIS</p> <p>The contaminants must include, but not be limited to, the parameters of concern listed in Subsection 1.3.3, as determined by a Qualified Professional.</p>	Soil samples were analyzed for parameters in accordance with those determined by a QP.	In
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>3.2 TREATED SOIL SAMPLING AND ANALYSIS</p> <p>The Permittee must sample and characterize each batch of treated soil in accordance with Technical Guidance #1 Site Characterization and Confirmation Testing or an equivalent sampling protocol approved by the Director. Each batch must be considered to be of suspect waste soil quality. Soil must be analysed prior to disposal as authorized in Subsection 1.2 and 1.3 of this permit. The samples must be analysed for the parameters relevant to the type of contamination for which the soil is undergoing treatment as determined by a Qualified Professional. The appropriate parameters must include, but must not</p>	No soil treatment has taken place at this site therefor this section is not applicable.	Not Applicable

	<p>be limited to, the parameters of concern listed in Subsection 1.3.3 as determined by a Qualified Professional. Confirmation of completion of soil treatment must be obtained in writing from a Qualified Professional prior to discharge, for each stockpile of treated soil.</p>		
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
Operations	<p>5.1 RECORDS</p> <p>Maintain for inspection by Environmental Protection Division staff, a record of the following logs, suitably tabulated:</p> <p>1) Landfill cells construction QA/QC results; 2) Maintenance records of pollution control equipment listed as authorized works; 3) Facility inspection log with a record of observations of the soil management and treatment and landfill areas (including but not limited to bedrock integrity, liner, cover, stormwater and effluent collection and treatment works inspections), and preventative and corrective actions identified and implemented;</p>	<p>Records related to the above three subsections were not requested for this inspection.</p>	Not Determined
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
Operations	<p>5.1 RECORDS</p> <p>Maintain for inspection by Environmental Protection Division staff, a record of the following logs, suitably tabulated:</p> <p>4) Current soil and associated ash inventory, including volumes and characteristics of soils and associated ash in the soil management and treatment area and landfill area;</p>	<p>WAA forms contain estimated tonnes of soil, source of contamination, reason for soil removal, soil characterization (grain size, debris in waste, moisture content) and type (s) of contamination (hydrocarbons/metals/salt/other). WAA forms are signed by a QP and submitted along with a report by the QP and lab results. SAFs provide further breakdown of the mass of soil brought in by each truck, along with</p>	In

		license plate and a description of soil characteristics (eg IL+/HW-).	
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>5.1 RECORDS</p> <p>Maintain for inspection by Environmental Protection Division staff, a record of the following logs, suitably tabulated:</p> <p>5) Tracking ID number linked to soil and associated ash analysis results and the signature of a Qualified Professional who certifies completion of remediation in accordance with the requirements of the CSR and compliance with this permit;</p>	Records obtained include the required tracking procedures for soils, associated laboratory reports, and certification by a QP.	<u>In</u>
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>5.1 RECORDS</p> <p>Maintain for inspection by Environmental Protection Division staff, a record of the following logs, suitably tabulated:</p> <p>6) Location of each batch of soil and associated ash in the soil management and treatment and landfill area on a map</p>	Daily records with associated photos and sketches document soil movement within the SMA and PEA and include details such as lift height, soil mass, cell location, etc. A copy of a summary map of the contents in the PEA was also viewed.	<u>In</u>
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>5.1 RECORDS</p> <p>Maintain for inspection by Environmental Protection Division staff, a record of the following logs, suitably tabulated:</p> <p>7) Analyses of screening of incoming soils and associated ash, and associated QA/QC results, as described in Subsection 2.1 and 2.2 of this permit</p>	Records of analyses of screening and associated QA/QC results were obtained and reviewed.	<u>In</u>
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:

<u>Operations</u>	<p>5.1 RECORDS</p> <p>The above records of analyses for the re-characterization or characterization of incoming soil or treated soil, respectively, must include batch sizes, number of samples collected and analysed per volume. Records must be kept on site or at another location acceptable to the Director for at least three years and made available upon request.</p>	<p>The records obtained include the above required information.</p>	<u>In</u>
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>5.1 RECORDS</p> <p>Maintain for inspection by Environmental Protection Division staff, a record of the following logs, suitably tabulated:</p> <p>8) Soil treatment activities including turning records and quantities of nutrients, bacteria seed or amendments added by date;</p> <p>9) Weather conditions during turning events as described in Subsection 2.5 of this permit;</p> <p>10) Results of the vapour and dust monitoring activities as required;</p> <p>11) Analyses of treated soil, and associated QA/QC results, as described in Subsection 1.2 of this permit;</p>	<p>There are no records related to soil treatment as CHH is not treating soil at the site.</p>	<u>Not Applicable</u>
Requirement Type:	Requirement Description:	Details/Findings:	Compliance:
<u>Operations</u>	<p>5.1 RECORDS</p> <p>Maintain for inspection by Environmental Protection Division staff, a record of the following logs, suitably tabulated:</p> <p>12) Quarterly volumes of soil stored in the holding area, awaiting final disposal as described in Subsection</p>	<p>Records related to the above two subsections were not requested for this inspection.</p>	<u>Not Determined</u>

2.3 of this permit;
13) A summary of
Emergency Response Plan
exercises, and incidents,
including effluent/soil spills,
requiring the Emergency
Response Plan
implementation.

Were the following collected during inspection:

Samples? Photos?

EMS No.

Other (please specify)

copy of 2016 records obtained at the site

Is the Inspection related to an EA Project?

EA Project Certificate Number:

INSPECTION CONDUCTED BY:

Signature

Laura Hunse

Date Signed

2016-08-12

ENCLOSURE(S) TO REGULATED PARTY & DESCRIPTION:

CVIS Archives

REGULATORY CONSIDERATIONS:

DISCLAIMER:

Please note that sections of the permit, regulation or code of practice referenced in this inspection record are for guidance and are not the official version. Please refer to the original permit, regulation or code of practice.

To see the most up to date version of regulations and codes of practices please visit:

<http://www.bclaws.ca/>

If you require a copy of the original permit, please contact the inspector noted on this inspection record or visit: <http://www2.gov.bc.ca/gov/topic.page?id=DF89089126D042FD96DF5D8C1D8B1E41&title=Publicly%20Viewable%20Authorizations>

It is also important to note that this inspection record does not necessarily reflect each requirement or condition of the authorization therefore compliance is noted only for the requirements or conditions listed in the inspection record.

**Ministry of
Environment**

West Coast

Region

Environmental Protection
Division

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