<table>
<thead>
<tr>
<th><strong>Inspection Number:</strong></th>
<th><strong>Inspection Status:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>30547</td>
<td>FINAL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>EP System:</strong></th>
<th><strong>EP System Number:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS</td>
<td>105809</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Inspection Date:</strong></th>
<th><strong>EP System Status:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-10-12</td>
<td>Active</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Region:</strong></th>
<th><strong>Office:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>West Coast</td>
<td>Nanaimo</td>
</tr>
</tbody>
</table>

**Trigger:** Incident

**Incidents of Non-Compliance Observed:** Yes

<table>
<thead>
<tr>
<th><strong>Non-Compliance Decision Matrix</strong></th>
<th><strong>Non-Compliance Decision Matrix Category:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Category C</td>
</tr>
<tr>
<td>Level 2</td>
<td></td>
</tr>
</tbody>
</table>

**Inspector Name(s):** Laura Hunse

**Audit:**

**Total Non-Compliance(s):** 4

**Regulated Party:**

**COBBLE HILL HOLDINGS LTD. (BC0754588)**

**Regulated Party Contact(s):**

Marty Block (CHH director), Todd Mizuik (SIRM)

**Legal Address:**

South Island Aggregates Ltd.

PO Box 282

Malahat BC V0R 2L0

**Phone No:** (250) 743-0811

**Fax No:** (250) 743-3338

**Contact Email:** marty.sia@shaw.ca

**Location Description or Site Address:**

460 Stebbings Road, Shawnigan Lake

**Latitude:** 48.5505194 N

**Longitude:** 123.6074055 W

**Receiving Environment(s):** Groundwater, Land & Surfacewater
Summary

MONITORING AND REPORTING REQUIREMENTS

Inspection Period:
From: 2016-10-08 To: 2016-10-12

Requirement Source:
Permit

Activity: Office Review Waste Type: Effluent

Inspection Summary:
The purpose of this inspection report is to assess compliance with waste discharge permit 105809 (Permit) in the name of Cobble Hill Holdings Ltd. (BC0754588) (CHH) following a reported spill of contact water on October 8, 2016.

Information used to evaluate compliance for this report includes verbal and written correspondence between SIRM and MOE staff between October 8 and 12, 2016, verbal and written correspondence between MOE staff and Sergeant Scott Norris of the Conservation Officer Service for the same dates, and Dangerous Goods Incident Report (DGIR) 161899. In addition to this, MOE staff analysed and considered sample data provided by SIRM; MOE results had not yet been received at the time of writing this inspection report.

Site operators South Island Resource Management (SIRM) had placed a layer of sand on top of the landfill which would act as a geomembrane underlayer with the intention of permanently capping the landfill; the geomembrane layer itself was to be installed over the next few days. Heavy rains on October 8, 2016 caused the uncovered sand to erode and flow down the landfill slope, interfering with the contact water collection system and exposing bare areas of the landfill surface. The contact water conveyance system for the landfill filled with sand, causing the untreated contact water to escape the containment system and flow with non-contact stormwater into the settling pond and to ultimately discharge to the environment.

CHH is found to be out of compliance with sections 1.5.3 and 2.16 of the permit for exceedances of BC Approved and Working Water Quality Guidelines (BCAWQG and BCWWQG) at the discharge point and unauthorized bypass, respectively.

Environment Canada has issued a special weather alert Inland Vancouver Island predicting multiple storms, heavy rainfall, and strong winds beginning today (October 12) and through Saturday (October 15). Given the non-preparedness of CHH to adequately meet permit requirements and prevent untreated contact water from entering the environment, and the expected weather over the next few days, the appropriate response to the non-compliance is an Order that confirms additional measures to ensure that the site is secure to prevent further discharge which does not meet permit requirements.

ACTIONS REQUIRED BY REGULATED PARTY:
Refer to Pollution Prevention Order for additional measures above permit requirements.
Contact me with any questions at 250.751.3224 or laura.hunse@gov.bc.ca.
A brief chronology of the October 8 - 11 events is as follows:

- Oct. 8, 2016 9:21 a.m. SIRM staff Rahim Gaidhar emailed MOE staff to report a spill of contact water directly to SIRM property. The report that the water included "clean sand that was placed on the permanent encapsulation area in preparation for liner placement and an approximate volume of 100 - 200 litres."

- Oct. 8, 2016 9:52 a.m. SIRM called in a spill of contaminated soil contact water of approximately 100 - 200 litres to the Environmental Emergencies Spill line (DGIR 161899). Due to a rainfall event, some of the sand had sloughed off into the ditches where it was in contact with the water. Crews were on site performing mitigation and all material was confined to property with no escape off site.

- Gaidhar took samples at the discharge point (E292898) and ephemeral stream (E305366) on Oct 8 at 11 a.m. and at the ephemeral stream only at Oct. 8 at 6 p.m. and Oct. 9 at 9 a.m. as outlet discharge had ended by 3:20 p.m. on Oct. 8.

- Oct. 8, 2016 Sergeant Scott Norris of the Conservation Officer Service attended the site at 1:49 p.m. and viewed the site with Gaidhar. Included in an email brief to MOE staff that evening was the following information:
  - as sand and water eroded down the contaminated soil slopes, it created berms which prevented this contact water from entering the runoff containment system properly
  - contact water then overflowed out of the containment area, flowed over the site and into the settling pond
  - when the settling pond reached a certain level, it began to discharge automatically through the outlet [site reference E292898]
  - rain picked up in the morning and caused further erosion and additional contact water to escape the containment system and flow to the settling pond
  - Gaidhar revised his initial estimate to 3000 - 6000 gallons of contact water that had escaped containment, flowed to the settling pond and was discharged at the outlet
  - Gaidhar took samples that morning from the discharge and estimated flow rate to be 46 000 gallons/day

- Oct 9, 2016 Sgt Norris returned to the site just before 2 p.m. with MOE biologist Deb Epps. The settling pond was no longer discharging. Epps took samples at the ephemeral stream (site reference E305366), as well as upstream (E305361) and downstream (E305364) of the site.

- Oct. 11, 2016 Gaidhar confirmed that in preparation for the expected inclement weather, 6 mil poly liner has been purchased to cover the entirety of the landfill area, additional ditching would be constructed, additional storage tanks are on site to increase storage capacity as necessary, and several vac trucks are on call should water need to be transported off site. He also reported that all water treatment system works including leachate detection tanks and pumps are fully functioning, and the treatment system will function on a 24 hr basis with staff oversite.

### Compliance Summary

<table>
<thead>
<tr>
<th>Requirement Type</th>
<th>In</th>
<th>Out</th>
<th>N/A</th>
<th>N/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Monitoring</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Inspection Details

#### Requirement Type: Monitoring

#### Requirement Description:

1.5 Ancillary Discharge -- Settling Pond

This section applies to the discharge of stormwater from the settling pond. The site reference number for the settling pond outlet is E292898.

1.5.3 The characteristics of the settling pond discharge effluent must be equivalent to or better than
### Details/Findings:
SIRM October 8 11 a.m. samples showed results that exceeded turbidity, total copper, iron and zinc BCWWQG limits. Turbidity exceeded guidelines by over 400 times. Discharge total copper levels exceeded the instantaneous maximum guideline by over 2 times and total iron was over 14 times the ambient guidelines.

- **Turbidity maximum:** 1 NTU above background; result: 416 NTU
- **Total Copper maximum instant:** 0.0113 mg/L; result: 0.307 mg/L
- **Iron maximum:** 1 mg/L; result: 14.8 mg/L
- **Zinc maximum:** 0.039 mg/L; 0.043 mg/L

### Compliance: **Out**

### Requirement Type: Monitoring

**Requirement Description:**

1.5 Ancillary Discharge -- Settling Pond

This section applies to the discharge of stormwater from the settling pond. The site reference number for the settling pond outlet is E292898.

1.5.3 The characteristics of the settling pond discharge effluent Total Suspended Solids (TSS) must not exceed 25 mg/L for up to 1 in 10 year return period flood event of 24 hour duration.

#### Details/Findings:
SIRM October 8 11 a.m. sample showed results exceeded TSS BCWWQG by over 3 times.

- **TSS maximum:** 25 mg/L; result: 95 mg/L

### Compliance: **Out**

### Requirement Type: Operations

**Requirement Description:**

1.5 Ancillary Discharge -- Settling Pond

This section applies to the discharge of stormwater from the settling pond. The site reference number for the settling pond outlet is E292898.

1.5.3 The source of the discharge must be limited to non-contact site storm water runoff and treated effluent released from the WTS described in Subsection 1.4.

#### Details/Findings:
On October 8, 2016, untreated contact water escaped the containment system and flowed directly to the settling pond. Discharge source from the settling pond was not limited to non-contact runoff and treated effluent only.

### Compliance: **Out**

### Requirement Type: Operations

**Requirement Description:**

2.16 Bypasses

The discharge of contaminants which have bypassed the authorized treatment works is prohibited unless the prior approval of the Director is obtained and confirmed in writing, except those authorized under Subsection 1.2 of this permit.

#### Details/Findings:
Contaminants from the contact water did not pass through the treatment works prior to discharge.
Compliance: Out

Were the following collected during inspection:

- Samples? [ ]
- Photos? [ ]
- EMS Number: [ ]

Other (please specify):

Is the Inspection related to an EA Project? [ ]

EA Project Certificate Number: [ ]

**INSPECTION CONDUCTED BY:**

Signature: Laura Hunse

Date Signed: 2016-10-12

**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/](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](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

Mailing Address: 2080-A Labieux Rd

Nanaimo, BC V9T 6J9

Phone: (250) 751-3100

Fax: (250) 751-3103

Website: [http://www.gov.bc.ca/env](http://www.gov.bc.ca/env)
Photo 1
Oct 8 2016, 0840h, landfill with eroded sides, site photo submitted by SIRM

Photo 2
Oct. 8, 2016, 0841h, landfill with eroded sides, site photo submitted by SIRM
<table>
<thead>
<tr>
<th>Photo 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 9, 2016, approx. 1400h, settling pond no longer discharging from pipe</td>
<td><img src="image" alt="Photo 3" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Photo 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 9, 2016, approx. 1400h, contact water collection area prior to pumping to containment pond</td>
<td><img src="image" alt="Photo 4" /></td>
</tr>
</tbody>
</table>