

**Annotated**

**Summary of Site Condition**

**06 2017**

**Purpose of this Summary of Site Condition**

This Summary of Site Condition will serve several purposes. It will provide the Ministry of Environment (the ministry) with a summary of key information that will be used to understand the status of investigations and remediation, the nature and extent of remediation that is proposed or has been undertaken, further work that will be required, or closure documentation requested that is authorized by legislation and regulations in B.C. The Summary of Site Condition will also provide information to persons with an interest in investigations and management of contaminants on or adjacent to a property or properties that are considered a site.

The information contained in this Summary of Site Condition is provided by or on behalf of the British Columbia Ministry of Environment to assist individuals to become familiar with conditions and issues at a site for which contaminant investigations and / or remediation has been carried out and reviewed under the guidance of the British Columbia Contaminated Sites Regulation (CSR), the Hazardous Waste Regulation (HWR), and the *Environmental Management Act (*EMA*).*

It is emphasized that this is a summary only and should in no cases, be the sole basis for important decisions about the site. Those with an interest in contaminant issues and the status of the site should seek more complete technical information as contained in site investigation, risk assessment, remediation plan and confirmation of remediation reports prepared by and signed by appropriately qualified individuals. Firms and individuals that rely on the information contained herein do so entirely at their own risk.

**Notes and instructions**

A Summary of Site Condition is to be completed by the Approved Professional(s) making submission to the Ministry of Environment with application for a regulatory instrument (e.g. Determination, Approval in Principle, Contaminated Soil Relocation Agreement or Certificate of Compliance).

This Summary of Site Condition will provide ministry regulatory officials with much of the information on which they will evaluate the recommendation of an Approved Professional(s).

A separate Summary of Site Condition is required for each service request submitted for a site.

All applicable parts of this Summary of Site Condition and required attachments (e.g., site plan; site plan showing areas of potential environmental concern, and / or areas of environmental concern) must be completed and submitted or it will be returned and processing of any application(s) will be delayed.

If the Summary of Site Condition is to accompany a recommendation by an Approved Professional that a service be provided as described in section 7.1 of the Contaminated Sites Regulation, the following must also be submitted with the package:

[ ]  a completed Contaminated Sites Service Application form

[ ]  a contaminated sites legal instrument cover letter (hard copy and electronic version)

[ ]  a completed draft contaminated sites legal instrument (using current template)

[ ]  the applicable fees

[ ]  a signed Summary of Site Condition (hard copy and electronic version with PDF format preferred)

**As the SoSC is a legal EMA document, you should not change or add any additional sections to the document.** The items listed below are provided for your information only and should not be copied onto the form.

May also need (see Procedure 12):

* a Site Risk Classification Report Form with Exposure Pathway Questionnaire
* all relevant technical reports in pdf and hard copy, including PA report or addendum
* a current printout of land title record(s)
* current Land Title Office Legal Plan(s)
* area-based Site Registry search (0.5 km radius) and Detail Report for the site
* completed PSI / DSI checklists
* if not owner, written owner consent to obtain instrument, and confirmation that owner commits to any conditions
* communication documents as per AG #14
* copy of any earlier Director’s decision on land, water, sediment or vapour use
* stamped engineering designs for remedial works
* copy of any draft or final covenant under section 492 of the *Land Title Act*
* CD with versions of all above information in MS Word® or pdf format

Failure to accurately fill out the Summary of Site Condition may result in delays issuing the legal instrument.

Note that the Ministry generally only looks at this document when finalizing instruments. The MoE would appreciate that a brief rationale for all major decisions associated with the site conditions be provided (such as why applicable standards are selected, deviations from guidance, etc.). Typically the rationale should be provided in the relevant comment sections in the SoSC where the decision or aspect of the site condition is noted.

The form is a legal document and cannot be changed to make it reflect current practice. To address the limitations of the document, make sure that you add sufficient information and use the various notes areas within the document to clarify any issues or situations that do not fit the form’s current structure or content.

**Part 1: Cover Page**

*(To be completed by the Approved Professional)*

|  |  |
| --- | --- |
| **Current Site Owner:**(*Attach additional sheets with names and contact information for additional site owners as required*) | **Mailing Address:**Company Name:Address:City: Postal Code:Contact Name: Phone: Fax: E-mail: |
| **Applicant***(If instrument is being applied for)*[ ]  Same as above, or: | **Mailing Address:**Company Name:Address:City: Postal Code:Contact Name: Phone: Fax: E-mail: |
| **Agent**[ ]  Same as applicant above, or: | **Mailing Address:**Company Name:Address:City: Postal Code:Contact Name: Phone: Fax: E-mail: |
| **Approved Professional(s)** (*If making a recommendation under the CSR or another submission*) | **Mailing Address:**Company Name:Address:City: Postal Code:Approved Professional Name: Phone: Fax: E-mail:Scope of review completed by Approved Professional: Describe AP scope such as "Arm's Length Numerical Standards Review"Company Name:Address:City: Postal Code:Approved Professional Name: Phone: Fax: E-mail:Scope of review completed by Approved Professional: |

|  |  |
| --- | --- |
| **Reason for Completing this Summary**[ ]  Recommendation is being made, or:[ ]  This is a submission without a recommendation under the CSR: | **Role of Approved Professional:**Reviews:[ ]  Stage 1 preliminary site investigation report (Stage 1 PSI)[ ]  Stage 2 preliminary site investigation report (Stage 2 PSI)[ ]  Detailed site investigation report (DSI)[ ]  Background substance concentrations report[ ]  Remediation plan without risk assessment report [ ]  Remediation plan with risk assessment report [ ]  Confirmation of remediation report (CoR)[ ]  Quantitative human health or ecological risk assessment report[ ]  Screening level risk assessment report[ ]  Other *(please specify)*Recommendation(s) (*With Regulatory Instrument)*:[ ]  Determination *(Determination)*[ ]  Approval in Principle, numerical standards *AiP numerical standards)*[ ]  Approval in Principle, risk-based standards *(AiP risk-based standards)*[ ]  Contaminated Soil Relocation Agreement *(CSRA)*[ ]  Certificate of Compliance, numerical standards *(CoC numerical standards)*[ ]  Certificate of Compliance, risk-based standards *(CoC risk-based standards)*[ ]  Other *(please specify)*Section 4 of the Summary of Site Condition does not need to be completed with the request for Certificate of Compliance where an Approval in Principle exists for the site provided that no new information has been obtained for the site applicable to this section of the form. |

**Part 2: Executive Summary**

*(To be completed by the Approved Professional(s) reviewing site investigation, risk assessment, remediation or confirmation of remediation reports)*

**Ensure that all the information requested in Part 2 is provided, if available.**

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| **Site Location:****(***The site and location plans are to be provided as Schedule A of the draft instrument.)*Hard copies of figures and plans do not have to be submitted with SoSC if they are:• included in submitted reports and referenced in the SoSC, or• included in Schedule A of a draft contaminated sites legal instrument submitted with the SoSC. |
| Subject Site: If you are preparing a SoSC for a site and affected off-site property / management areas with separate instruments, you must prepare an individual SoSC for each instrument. (Note that you should only be charged for one review fee)For clarity provide comments in this section to describe the site relationship here. For example:This summary of site condition has been prepared for an off-site management area located in the roadway adjacent to the former Service Station at xxx Avenue, Any Town, BC (MOE Site ID xxxx). The area has been impacted by contaminants migrating from historical operations at the source site.  |
| Civic Address(s):  |  |
| Site Common Name:*(if applicable)* |  |
| Legal description(s) *or* metes and bounds: *(add additional pages if needed)* |  |
| PID(s*)*:*(or PIN(s) if untitled Crown land)* |  |
| Centre of site:*(using NAD 83 convention)**(accurate to ± 0.5 second)* | Latitude: \_\_\_\_ degrees \_\_\_\_ min \_\_.\_\_ secs |
| Longitude: \_\_\_\_ degrees \_\_\_\_ min \_\_.\_\_ secs |
| **Offsite impacted Properties *or*** **Receiving Site:** | [ ]  Offsite impacted propertie(s) – provide information for each [ ]  Receiving site for Contaminated Soil Relocation Agreement [ ]  Not Applicable **At least one check box must be completed.** |
| Civic Address(s):  |  |
| Site Common Name*:**(if applicable)* |  |
| Legal description(s) *or* metes and bounds (if a portion of a site):*(add additional pages if needed)* |  |
| PID(s):(*or PIN(s) if untitled Crown land)* |  |
| BC Site ID *(if applicable)*: |  |
| Approximate Centre of site: | Latitude: \_\_\_\_ degrees \_\_\_\_ min \_\_\_\_ secs |
| *(accurate to ± 0.5 second)* | Longitude: \_\_\_\_ degrees \_\_\_\_ min \_\_\_\_ secs |

**If there is insufficient room to provide information for all the affected parcels, attach additional information, such as a current Notification of Likely or Actual Migration.Part 3: Document Summary**

*(List of all known site investigation, risk assessment (including screening level risk assessment), remediation plan and confirmation of remediation reports completed and directly supporting correspondence submitted (subject site and offsite impacted sites).*

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| --- | --- | --- | --- |
| **#** | **Document Title** | **Author / Company** | **Document Date** |
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**In addition to the reports and plans listed in this section (site investigations reports, risk assessment reports, remediation plans, confirmation of remediation reports and supporting correspondence), if the following exist they should also be listed:**

**• performance verification plans;**

**• approvals under protocols (e.g., 2, 4, 6, and 9) to establish, for example, background levels of substances and site-specific standards;**

**• determinations of land, water, sediment or vapour use by a Director;**

**• preapprovals**

**• discharge authorizations issued for works at the site under section 6 of the Environmental Management Act;**

**• hazardous waste authorizations applicable to the site issued under the Environmental Management Act and Hazardous Waste Regulation.**

**\*\*\*NB: Check that there are no disclaimers that preclude the MOE from reliance on the reports\*\*\*Part 4: Investigation Summary**

* 1. **Investigations Completed**

**These are investigations and should not include risk assessment.**

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| --- | --- | --- | --- |
|  | **Yes** | **No** | **n/a** |
| Stage 1 PSI | Completed? | [ ]  | [ ]  | [ ]  |
| Includes Stage 1 PSI information as listed in CSR S.58 and any current applicable ministry protocols, guidelines, checklists, etc.? | [ ]  | [ ]  | [ ]  |
| Stage 2 PSI | Completed? | [ ]  | [ ]  | [ ]  |
| Includes Stage 2 PSI information as listed in CSR S.58 and any current applicable ministry protocols, guidelines, checklists, etc.? | [ ]  | [ ]  | [ ]  |
| DSI | Completed? | [ ]  | [ ]  | [ ]  |
| Includes DSI information as listed in CSR S.59 and any current applicable ministry protocols, guidelines, checklists, etc.? | [ ]  | [ ]  | [ ]  |
| Other Reports | Completed? *(Specify in Notes below)* | [ ]  | [ ]  | [ ]  |
|  | According to other guidelines? *(Provide explanation in notes below. Indicate how reports assist understanding of conditions and remediation.)* | [ ]  | [ ]  | [ ]  |
| *Notes: Briefly note details about the investigations such incomplete delineation, etc. here. Provide more detailed information or rationale in Section 4.8*  |

*n/a – not applicable*

*If completed investigation reports are not adequate or if reports are titled differently or have a different scope than those listed above in accordance with the Contaminated Sites Regulation (i.e., PSI, DSI), complete Section 4.8 (Investigation or Interpretation Issues).*

**4.2 Site Conditions**

**This section should include site-specific information and sound rationale supporting the applicable water use standard proposed for the site.**

**In addition to the hydrogeology information currently requested in this section, explicit statements/descriptions to support the Protocol 21 Water Use Determination for current and future water use should also be presented under Hydrogeology**.

**Topography**

## Describe steepness and direction of slope and position of site in relation to surrounding land

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**Stratigraphy**

*Describe depth and thickness, grain size, etc. of typical stratigraphic components and note depth to cemented or very compact materials, bedrock / refusal, etc.*

|  |
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| Describe: depth and thickness, and,  |
|  grain size, etc. of typical stratigraphic components |
|  Note: depth to cemented or very compact materials |
|  bedrock / refusal |

**Hydrogeology**

## Describe groundwater levels, confining / semi-confining layers, flow direction and velocity

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| Describe: groundwater **levels** |
|  **confining** / semi-confining **layers** |
|  flow **direction** |
|  flow **velocity** |
|  hydraulic conductivity – see below for specific requirements related to viable aquifers and natural confining barriers. |
| **Must also include information regarding Protocol 21 Water Use Determination Information** Present arguments where a specified water use (DW, AW, IW or LW) has been determined not to apply. Provide **explicit statements/descriptions** based on the example outline below. The information needs to be of sufficient detail, including supporting data, to show compliance with P21 **for every geological unit** exempted from a specified water use. **\*\*\*\*\*\*copy & paste the info below into your document and use as needed \*\*\*\*\*****P21 Water Use Evaluation** **AW use:****Q:** Is the site located within 500 m of an aquatic receiving environment? [ ]  **Yes** (go to 1) [ ]  **No** (go to 2)**1** - Can it be demonstrated that site groundwater does not flow to that aquatic receiving environment? [ ]  **Yes** (go to 2) [ ]  **No** (AW applies) Rationale:**2** - Does groundwater with concentrations >AW standards have the potential to migrate within 500 m of an aquatic receiving environment? [ ]  **Yes** (AW applies) [ ]  **No** (AW does not apply) Rationale:**Irrigation and Livestock use:****Q:** Is site or contamination plume within 500 m of an irrigation or livestock water well or intake (100m if upgradient)? [ ]  **Yes** (go to 1) [ ]  **No** (IW or LW do not apply) Describe:**1** - Is a natural confining barrier protecting the aquifer? [ ]  **Yes** (IW or LW applies to confined aquifer) [ ]  **No** (go to 2) If Yes, describe in NCB section below.**2** - Can it be shown that site groundwater will not enter the capture zone of nearby irrigation or livestock wells? [ ] **Yes** (IW or LW does not apply) [ ]  **No**  or [ ]  **Unknown**  (IW or LW applies to all aquifers) Rationale:**Natural Confining Barrier (NCB)**  [ ]  N/ANatural Confining Barrier type: [ ]  Type A or [ ]  Type B K-value:       m/s Kmax if <6 wells *or*       m/s K90th percentile if ≥6 wellsNatural Confining Barrier thickness: > 5m [ ]  (Type A) *or* > K x 5 x 107 =       m (Type B)Contaminant free depth: [ ]  Soil       m and/or [ ]  Water       m (both sol and water for Type B and DNAPL)Check if confining unit is: [ ]  continuous across extent and predicted migration pathway of contaminant plume [ ]  uniform, and [ ]  fracture free.**Current DW use evaluation for unconsolidated aquifers:****CDW Q1:** Is water at or near the site currently used for drinking water? [ ]  **Yes** (go to 1) [ ]  **No** (go to Future DW use)**1** - Is a natural confining barrier protecting the drinking water aquifer? [ ]  **Yes** (Current DW applies to confined aquifer) [ ]  **No** (go to 2) Provide details in NCB section:**2** - Can it be shown that site groundwater will *not* enter the capture zone of nearby drinking water wells? [ ]  **Yes** (Current DW does not apply to aquifer, evaluate Future Use) [ ]  **No** or [ ]  **Unknown** (Current DW applies) Rationale:**Future DW use evaluation for unconsolidated aquifers:** (Copy the FDW questions below to evaluate all aquifers in the subsurface; commence with deepest)**FDW Q1:** Is the site located within filled former marine or estuarine foreshore? [ ]  **Yes** (Future DW does not apply) [ ]  **No** (go to FDW Q2) If YES, describe:**FDW Q2** - Is the aquifer ***confined*** and protected by a natural confining barrier? [ ]  **Yes** (go to 1) [ ]  **No** (go to FDW Q3) If YES, describe:**1** - Does the *confined* aquifer have a bulk hydraulic conductivity >10-6 m/s *or* a yield ≥1.3 L/min *or* is the aquifer mapped in the BC Water Resource Atlas? [ ]  **Yes** (go to 2) [ ]  **No** (Future DW does not apply) Rationale: *Confined* aquifer properties: Bulk hydraulic conductivity (K) **-**       m/s K**max** if <6 wells *or*        m/s K**geometric mean** if ≥6 wells Yield  **-**       L/min [ ]  Mapped in BC Water Resource Atlas **-** Insert Aquifer Name Here **2** - Is the average saturated thickness of the *confined* aquifer ≤1m? [ ]  **Yes** (Future DW does not apply) [ ]  **No** (go to 3) Provide details: *Confined* Aquifer saturated thickness **-**       m**3** - Is the natural water quality of the *confined* aquifer unsuitable for domestic water supply? [ ]  **Yes** (Future DW does not apply) [ ]  **No** (Future DW applies to confined aquifer) Provide details: [ ]  Aquifer in organic soils (**peat) or muskeg**; organic content:       % organic matter by weight; or [ ]   Aquifer has poor natural water quality (TDS(**>4000 mg/L**); TDS       mg/L:**FDW Q3** - Does drinking water use apply to an underlying aquifer? [ ]  **Yes** (go to 1) [ ]  **No** (go to FDW Q4) **1** - Is a natural confining barrier protecting the underlying aquifer? [ ]  **Yes** (go to FDW Q4) [ ]  **No** (Future DW applies to all aquifers at the site) If YES, provide details in NCB section.**FDW Q4** - Does the *unconfined* aquifer have a bulk hydraulic conductivity >10-6 m/s or a yield ≥1.3 L/min or is the aquifer mapped in the BC Water Resource Atlas? [ ]  **Yes** (go to 1) [ ]  **No** (Future DW use does not apply to unconfined aquifer. Evaluate other aquifers if present) Provide details: *Unconfined* aquifer properties: Bulk hydraulic conductivity (K) **-**       K**max** if <6 wells *or*        K**geometric mean** if ≥6 wells Yield  **-**       L/min [ ]  mapped in the BC Water Resource Atlas **-** Aquifer Name **1** - Is the *unconfined* aquifer comprised only of imported fill or present only seasonally or is the average saturated thickness ≤2m? [ ]  **Yes** (Future DW does not apply to unconfined aquifer. Evaluate other aquifers if present) [ ]  **No** (go to 2) Provide details: *Unconfined* Aquifer is: [ ]  **seasonal -**       [ ]  in imported **fill -**       [ ]  Saturated thickness **less than 2 m -**       m**2** - Is the natural water quality of the *unconfined* aquifer *unsuitable* for domestic water supply? [ ]  **Yes** (Future DW does not apply to unconfined aquifer. Evaluate other aquifers if present) [ ]  **No** (Future DW applies to unconfined aquifer. Evaluate other aquifers if present) Provide details: [ ]  Aquifer in organic soils (**peat) or muskeg**; organic content:       % organic matter by weight; or [ ]   Aquifer has poor natural water quality (TDS(**>4000 mg/L**); TDS       mg/L**Current DW use evaluation for *Bedrock* aquifers:****CBDW Q1:** Is water from bedrock at or near the site currently used for drinking water? [ ]  **Yes** (go to 1) [ ]  **No** (go to Future DW bedrock use)**1** - Is a natural confining barrier protecting the bedrock drinking water aquifer? [ ]  **Yes** (Current DW applies to confined aquifer) [ ]  **No** (go to 2) Provide details in NCB section above.**2** - Can it be shown that site groundwater will *not* enter the capture zone of nearby drinking water wells? [ ]  **Yes** (Current DW does not apply to bedrock aquifer, evaluate Future Use) [ ]  **No** or [ ]  **Unknown** (Current DW applies) Rationale:**Future DW use evaluation for Bedrock aquifers:** **FBDW Q1:** Is the site located within filled former marine or estuarine foreshore? [ ]  **Yes** (Future DW does not apply) [ ]  **No** (go to FDW Q2) If YES, describe:**FBDW Q2** - Is the bedrock aquifer mapped in the BC Water Resource Atlas? [ ]  **Yes** (Future DW use applies to the bedrock aquifer. Evaluate other aquifers if present) [ ]  **No** (go to FDW Q3) If YES, provide details:**FBDW Q3** - Has contamination in soil and groundwater > DW standards reached the bedrock? [ ]  **Yes** (go to 1)  [ ]  **No** (Assessment of bedrock for future drinking water use not required. Evaluate other aquifers if present) Provide details:**1** - Do in-situ bedrock investigations on the site or within 500 m show a bulk hydraulic conductivity >10-6 m/s and a yield ≥1.3 L/min? [ ]  **Yes** (go to 3) [ ]  **No** (Future DW use does not apply to the bedrock aquifer. Evaluate other aquifers if present) Provide details:**2** - Is the natural water quality of the bedrock aquifer *suitable* for domestic water supply? [ ]  **Yes** (Future DW use applies to the bedrock aquifer. Evaluate other aquifers if present) [ ]  **No** (Future DW use does not apply to the bedrock aquifer. Evaluate other aquifers if present) Rationale: [ ]   Aquifer has poor natural water quality (TDS(**>4000 mg/L**); TDS       mg/L [ ]  Saturated unit is: located within 500 metres of a marine and estuarine foreshore; **and** contains naturally occurring Cl and Na concentrations greater than the DW standards measured in wells spatially distributed across the site and located within the same geological unit. Provide details:: [ ]   a Director’s **determination** of water use has been obtained for the site, please describe decision:[ ]   a **background** groundwater decision has been obtained, please describe and indicate for what PCOCs:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*For questions regarding water use determinations please contact Amy Sloma or Annette Mortensen at the MOE. |
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**Surface Water Features**

## List name, direction and distance to nearest surface water bodies andwhether fresh or marine water body

***Fresh water:***

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***Marine waters:***

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**4.3 Land Use**

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| --- | --- |
| **Location** | **Description of Current Land Use(s) / Activities** |
| Onsite | Subject site |  |
| Offsite | North |  |
| East |  |
| South |  |
| West |  |

### Proposed land use of subject site: [ ]  same as above or [ ]  other (*please specify*)

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* 1. **Applicable Numerical Concentration Standards and Criteria**

**(if more than one land or water use applies to the site, expand this section to specify additional land uses covered by the instrument, i.e. riparian areas, roadways, etc. Include a diagram to clearly show the areas with different standards)**

**Since the Summary of Site Condition form was created, there have been amendments to the Regulation which have not been reflected in the current version of the form. If present, the ministry requests that the following be indicated by checking “Other” check box and noting below the “CSR Land Use” check box area if the following have been used:**

**• vapour attenuation factors;**

**• generic numerical vapour standards in Schedule 11 of the Regulation; or**

**• wildlands land use.**

**Soil (standards)**:

|  |  |
| --- | --- |
| **Property** | **CSR Land Use** |
|  | **AL** | **PL** | **RL** | **CL** | **IL** | **Other** |
| Subject site | Current | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Proposed | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Receiving site*(if completed in support of a Contaminated Soil Relocation Agreement)* | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Offsite impacted property / management area | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |

If Other is specified above, please explain: *(applicable or excluded guidance, protocols or policies specific to the site)*

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| If vapour attenuation factors have been used, please include a description of the assumptions regarding current/future development of the Site that the selected vapour attenuation factors are based on, such as the following examples: * *Current site grade will be maintained,* or
* *Attenuation factors were applied using the assumptions that future building will be slab on grade and no groundwater contact with the slab will occur,* or
* *Attenuation factors were based on a two story underground parkade where the slab will not be in contact with the groundwater*
 |
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Further to the MOE request that the rationale be provided for all major decisions, if a typical standard does not apply (such as AW or DW on most sites, or IW or LW where land use is AL), the **reasons why** should be provided in the above comment section

**Water (standards):**

*(Check all that apply)*

Only check No Water Use if no other water use applies to site

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **AW fresh** | **AW marine** | **IW** | **LW** | **DW** | **No Water Use** |
| Groundwater(CSR Schedule 6 & 10) | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | Ambient fresh | Ambient marine |  |  |  |  |
| Surface Water(Ambient Guidelines and/or Criteria) | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |  |

**Sediment (criteria CSR Schedule 9):**

|  |  |  |
| --- | --- | --- |
| Type of Aquatic Life | Type of habitat |  |
| [ ]  Freshwater | [ ]  Marine/Estuarine | [ ]  Sensitive | [ ]  Typical | [ ]  Not applicable |

**4.5 APEC and PCOC Summary**

*(Not applicable for a receiving site in a Contaminated Soil Relocation Agreement)*

Provide reference to a figure showing onsite and offsite areas of potential environmental concern (APEC) and contaminants of potential concern associated with each APEC: Report #­­­\_\_\_, Figure #\_\_\_Page #\_\_\_

**The spelling of each substance listed in a Summary of Site Condition must match the spelling for that substance in the applicable schedule of the Regulation.**

**Substances should be grouped by substance class and listed alphabetically.**

**For clarity, use either of the following approaches to complete the table in section 4.5:**

**a) list each individual substance which is a potential contaminant of concern in the body of the table, or**

**b) list the substance classes (e.g., waste type or chemical group such as volatile organic compounds) in the body of the table, together with a list of individual substances that may exceed the numerical standards either as a footnote to the table or as an appended table (see examples below).**

**For guidance on the above, as well as listing odorous substances, nonaqueous phase liquids, hazardous waste, consult section 9.4 of Procedure 12**

|  |  |  |
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| **Area of Potential** **Environmental Concern (APEC)** | **Potential Contaminant of Concern (PCOC)***(indicate products, chemicals, waste type, etc. and / or analytical parameter)* | **Check where analyses completed** |
| **#** | **Description***(describe location in relation to process source, waste, filling, land use or activity, etc. giving rise to APEC, and if APEC is primary due to soil or water contamination)* | Soil | Sediment | Groundwater | SurfaceWater | Vapour | Other (explain) |
| **On Site** |
| **If you are preparing the SoSC for a site and affected off-site property / management area(s) with separate instruments, for clarity you can modify this table to indicate on and off -site APECs** |
| 1 | Historical USTs and pump islands. | Metals, VPHs, LEPHs, HEPHs, BTEX, PAHs  | [x]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Dissolved metals, VPHw, LEPHw, VHw6-10, EPHw10-19, VOCs, BTEX, PAHs | [ ]  | [ ]  | [x]  | [ ]  | [ ]  | [ ]  |
| BTEX, 1,3,5- trimethylbenzene, 1,2,4-trimethylbenzene, n-hexane, n-decane, naphthalene1,3-butadiene, methylcyclohexane, isopropylbenzene, VPHv, 1,2‑dibromomethane, 1,2-dichloroethane, MTBE | [ ]  | [ ]  | [ ]  | [ ]  | [x]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| 2 | Former waste oil UST north of former service building. | VPHs | [x]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| LEPHs | [x]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| HEPHs | [x]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Benzene | [x]  | [ ]  | [x]  | [ ]  | [x]  | [ ]  |
| Ethylbenzene | [x]  | [ ]  | [x]  | [ ]  | [x]  | [ ]  |
| Tetrachloroethylene (PERC) | [x]  | [ ]  | [x]  | [ ]  | [x]  | [ ]  |
| Toluene | [x]  | [ ]  | [x]  | [ ]  | [x]  | [ ]  |
| Xylenes | [x]  | [ ]  | [x]  | [ ]  | [x]  | [ ]  |
| VPHw | [ ]  | [ ]  | [x]  | [ ]  | [ ]  | [ ]  |
| LEPHw | [ ]  | [ ]  | [x]  | [ ]  | [ ]  | [ ]  |
| VPHw6-10 | [ ]  | [ ]  | [x]  | [ ]  | [ ]  | [ ]  |
| EPHw10-19 | [ ]  | [ ]  | [x]  | [ ]  | [ ]  | [ ]  |
| VPHv | [ ]  | [ ]  | [ ]  | [ ]  | [x]  | [ ]  |
| **Off Site** |
|  |  |  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  |  |  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
|  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |

*Note that this list should be inserted into the main document as shown, or attached on a separate piece of paper.*

*Note also that* *the list of substances provided is* ***not exhaustive*** *and is intended as an* ***example*** *only.*

Legend: **BTEX** in soil = benzene, toluene, ethylbenzene, xylene

 **BTEX** in groundwater = benzene, toluene, ethylbenzene, xylenes (total)

**BTEX** in soil vapour = benzene, toluene, ethylbenzene, xylenes, mixture

**PAHs** in **soil** include:

|  |  |  |
| --- | --- | --- |
| benz[a]anthracenebenzo[b]fluoranthenebenzo[k]fluoranthene | benzo[a]pyrenedibenz[a,h]anthracene indeno[1,2,3 –cd] pyrene | naphthalenephenanthrenepyrene |

**PAHs** in **groundwater** include:

|  |  |  |
| --- | --- | --- |
| acenaphtheneacridineanthracenebenzo[a]anthracene | benzo[a]pyrene chrysenefluoranthenefluorene | naphthalenephenanthrenepyrenequinoline |

**PCBs** = polychlorinated biphenyls

**Metals (total)** in **soil** include:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| antimonyarsenicbarium beryllium | cadmiumchloride ion (Cl-)chromium cobalt | copperfluoride leadlithium | manganesemercurymolybdenumnickel  | selenium silver sodium ion (Na+)strontium, stable | tinuraniumvanadiumzinc |

**Dissolved Metals** in **groundwater** include:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| aluminumantimonyarsenicbariumberyllium | boroncadmiumcalciumchloridechromium | cobalt copperflourideironlead | lithium magnesium manganesemercurymolybdenum | nickelseleniumsilversodium thallium | titanium uranium vanadiumzinc |

**VOCs** = volatile organic compounds, in **soil** include:

|  |  |  |
| --- | --- | --- |
| trichloromethane (chloroform)1,1-dichloroethane1,2-dichloroethane1,1-dichloroethylene1,2-dichloroethene (cis)1,2-dichloroethene (trans)dichloromethane (methylene chloride)1,2-dichloropropane1,3-dichloropropene (cis)1,3-dichloropropene (trans) | tetrachloromethane (carbon tetrachloride)1,1,1-trichloroethane1,1,2-trichloroethane1,2-dichlorobenzene1,3-dichlorobenzene1,4-dichlorobenzenemonochlorobenzenetetrachloroethylene (PERC)trichloroethylene (TCE) | bromodichloromethane (BDCM)chloroethane (ethyl chloride)chloroethene (vinyl chloride)monochloromethane (methyl chloride)dibromochloromethane (DBCM)methyl tert-butyl ether (MTBE)1,1,1,2-tetrachloroethane1,1,2,2-tetrachloroethanetribromomethane (bromoform)trichlorofluoromethane (Freon 11) |

**VOCs** = volatile organic compounds, in **groundwater** include:

|  |  |  |
| --- | --- | --- |
| methyl tert-butyl ether (MTBE)vinyl chloride1,2-dichlorobenzene1,3-dichlorobenzene1,4-dichlorobenzenechlorobenzene1,2-dichloroethane1,1-dichloroethenetetrachloroethylene (PERC)trichloroethylene (TCE)bromodichloromethane (BDCM) | dibromochloromethane (DBCM)dichloromethane (methylene chloride)tetrachloromethane (carbon tetrachloride)tribromomethane (bromoform)trichloromethane (chloroform)chloroethane (ethyl chloride)chloromethane (methyl chloride)1,1-dichloroethane | 1,2-dichloroethene (cis)1,2-dichloroethene (trans)1,2-dichloropropane1,3-dichloropropene (cis)1,3-dichloropropene (trans)trichlorofluoromethane (Freon 11)1,1,1,2-tetrachloroethane1,1,2,2-tetrachloroethane1,1,1-trichloroethane1,1,2-trichloroethane |

**VOCs** = volatile organic compounds, in **soil vapour** include:

|  |  |  |
| --- | --- | --- |
| bromodichloromethane (BDCM)1,3-butadiene chlorobenzenechloroethane (ethyl chloride)chloroethene (vinyl chloride)chloromethane (methyl chloride)decane (nC10)1,2-dibromoethane (ethylene dibromide) (EDB)dibromochloromethane (DBCM)1,2-dichlorobenzene1,3-dichlorobenzene1,4-dichlorobenzene | 1,1-dichloroethane1,2-dichloroethane1,1-dichloroethene1,2-dichloroethene (cis)1,2-dichloroethene (trans)dichloromethane (methylene chloride)1,2-dichloropropane1,3-dichloropropene (cis)1,3-dichloropropene (trans)hexane (nC6)isopropyl benzene (cumene)methylcyclohexanemethyl tert-butyl ether (MTBE) | 1,1,1,2-tetrachloroethane1,1,2,2-tetrachloroethanetetrachloroethylene (PERC)tetrachloromethane (carbon tetrachloride)tribromomethane (bromoform)1,1,1-trichloroethane1,1,2-trichloroethanetrichloroethylene (TCE)trichlorofluoromethane (Freon 11)trichloromethane (chloroform)1,2,4-trimethylbenzene1,3,5-trimethylbenzene |

Other (please explain):

|  |  |
| --- | --- |
| APEC # |  |
|  |  |
|  |  |
|  |  |

**4.6 AEC and Contaminant Summary**

Stage 2 PSI - Provide reference to figure(s) showing the areas of environmental concern (AEC) and contaminants of concern associated with each AEC in onsite and offsite soil, water, sediment and/or vapour. Sample locations and corresponding analytical results shall be shown on each figure and in tabular form with reference to applicable standards:

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

DSI – Provide references to figures (plan and section), with contours, showing the specific lateral and vertical distribution of each contaminant of concern in onsite and offsite soil, sediment, water and vapour. Sections shall be longitudinal and transverse with respect to groundwater flow and include physical conditions (e.g. stratigraphy, water table etc.). Sample locations with corresponding analytical results used to develop each figure shall be shown on the figure and in tabular form with reference to applicable standards:

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

**Substances which meet applicable numerical vapour standards after the application of appropriate attenuation factors should not be listed, as they would not have been remediated**

**Don’t renumber or re-label the AECs – use same numbers as APECs in Section 4.5**

**Note that this should be a sub-set of the above Section 4.5 list, indicating which contaminants exceed standards. List individual substances or list the substance classes in the body of the table, together with a list of individual substances that exceed the numerical standards either as a footnote to the table or as an appended table.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **AEC / APEC #***(Use same #s as for APECs in Table above)* | **Contaminant of Concern** | **Medium***(e.g., soil, groundwater, sediment, vapour, surface water, other)* | **Maximum Measured****Concentration (indicate units)** | **Extent of Contamination** |
| **Area (m2)** | **Depth Range (m)** |
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| --- |
| Notes:In this notes box in this section please indicate:• if a site type exists for the site, what is the type number (1A, 1B, 2 or 3);• if the site has been classified a high risk site, what are the high risk site conditions; and• if background soil or groundwater quality levels have been set under Protocols 4 or 9, what background levels have been approved for each applicable substance. |

* 1. **Offsite Migration**

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Is there evidence that one or more substances has migrated or is likely to have migrated to a neighbouring site and is or is likely causing contamination of the neighbouring property? | [ ]  | [ ]  |
| Has any sampling occurred offsite for PCOCs in any media?  | [ ]  | [ ]  |
| Have preferential pathways been assessed? (including assessment of all neighbouring underground utility rights-of-way) | [ ]  | [ ]  |

*If yes to the first question, complete the following:*

There is evidence of [ ]  historical, or [ ]  current offsite transport of contaminants from the site in:

 [ ]  groundwater;

 [ ]  surface water;

 [ ]  vapours; and/or

 [ ]  other

*Briefly describe the nature of and evidence for offsite migration (either known, suspected or potential)*

|  |
| --- |
|  |
|  |

The impacted offsite lands are categorized as: [ ]  having a potable groundwater source;

[ ]  being aquatic habitat, as formally defined;

[ ]  agricultural lands

[ ]  residential or urban parklands

[ ]  commercial land

[ ]  industrial land

**4.8 Investigation or Interpretation Issues to be Addressed**

*Identify any issues regarding investigations or interpretations if the PSI and DSI information may not satisfy the requirements of CSR Sections 58 and 59 and applicable protocols and guidance documents*. *Briefly describe how these deficiencies will be addressed (examples include destroyed wells, completion of detailed delineation following building demolition or other proposed work at a later stage of remediation).*

|  |
| --- |
| General comments regarding the investigation that have not been included in the previous sections can be provided here. |
| * This is the appropriate place to provide comment on the investigation such as if a **pre-approval** was obtained for not fully delineating the contamination or statistical analysis was used.
* You may also add a reference to a report section (such as that provided in Sections 4.5 and 4.6 above) or reference a document (as listed in Part 3: Document Summary) that provides additional details on the issues, or attach the document to the SoSC.
* **NB** - any **pre-approval** should be included in the submission package for review, and listed in the SoSC (Part 3: Document Summary) and CoC
 |
|  |
|  |

**Part 5: Remediation Summary**

**5.1 Remediation Reporting Summary**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** | **n/a** |
| Risk Assessment  | Completed? | [ ]  | [ ]  | [ ]  |
|  | Includes quantitative human health and ecological risk assessment report information or screening level risk assessment per EMA, CSR and current applicable ministry protocols, guidelines, checklists? | [ ]  | [ ]  | [ ]  |
| Remediation Plan | Completed? | [ ]  | [ ]  | [ ]  |
| Includes CSR specified information for a Remediation Plan *(see CSR S.1, 16, 47)* and current applicable ministry protocols, guidelines, checklists, etc.? | [ ]  | [ ]  | [ ]  |
| Confirmation of Remediation | Completed? | [ ]  | [ ]  | [ ]  |
| Includes CSR specified information *(see CSR S.49)* and any current applicable ministry protocols, guidelines, checklists for COR reports? | [ ]  | [ ]  | [ ]  |
| Other Reports | Completed? | [ ]  | [ ]  | [ ]  |
|  | According to other guidelines? *(Provide explanation in notes below. Indicate how reports assist understanding of conditions and / or remediation.)* | [ ]  | [ ]  | [ ]  |
| *Notes:***Note if the site is a type 1A, 1B, 2 and 3 risk site.** Type 1B sites require one or more intrinsic controls, but no institutional or engineering controls to meet the risk-based standards. At Type 2 and 3 sites, institutional and/or engineering controls are required to meet those standards.- Note that risk controls for the temporary future construction scenario or trench worker are not considered when establishing the type of remediation |

If completed remediation reports are not adequate or if reports have a different scope than those listed above in accordance with the CSR complete Section 5.6 - Outstanding Remediation Issues.

**5.2 Proposed or Completed Remedial Activities**

(*Describe all aspects of remediation, including regulatory actions and activities to comply with numerical and/or risk-based standards)*

### Regulatory

*(Notification of Independent Remediation, Approval in Principle, Certificate of Compliance, Determination, Restrictive Covenant, etc.)*

|  |
| --- |
|  |
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If commitments or conditions to be met are included in an Approval in Principle issued for the site, list these conditions and identify how they were met though remedial activities.

|  |
| --- |
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Remediation to comply with numerical standards/criteria

|  |
| --- |
| *(Excavation / disposal of soil, Treatment of soil; Treatment of groundwater, etc.)*  |
|  |
|  |
|  |

Remediation to comply with risk-based standards

Are either of the following intended for use at the site, or have they been carried out?

|  |  |  |
| --- | --- | --- |
|  | Intended | Carried Out |
| Screening Level Risk Assessment | [ ]  Yes  | [ ] No | [ ]  Yes  | [ ] No |
| Quantitative Risk Assessment | [ ]  Yes  | [ ] No | [ ]  Yes  | [ ] No |

If yes for any above, complete Section 5.5 (Summary of Residual Contamination)

Describe risk management / exposure reduction methods intended or implemented and indicate the status of any measures. *(e.g.,* Physical / engineering*: monitoring, capping or barriers to exposure;* Institutional: *registration of restrictive covenants, financial security, etc.)*

**For type 1B, 2 and 3 sites, please also list the principal risk control clauses in this section.**

|  |
| --- |
|  |

Provide a reference to signed and stamped design drawings provided by a professional engineer for works installed at site boundaries to prevent recontamination of a site.

Report # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Page # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or Appendix # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.3 Summary of Remediation Plan**

**Substances which meet applicable numerical vapour standards after the application of appropriate attenuation factors should not be listed, as they would not have been remediated**

**-Don’t renumber or re-label the AECs – use same numbers as APECs**

**-See example data below for recommended information to include**

**Note that this list should include all substances listed in the above Section 4.6 list that have or will be mitigated through remediation. List individual substances, or list the substance classes in the body of the table, together with a list of individual substances that were remediated either as a footnote to the table or as an appended table.**

|  | **AEC #** | **Contaminant(s) of Concern** | **Remediated to the following standard***(proposed or completed)* | **Remediation Schedule** |
| --- | --- | --- | --- | --- |
| *(Use same #s as for APECs in Table above)* |  | **Numerical (Standard, guideline or criteria)** | **Back-ground (attach Protocol 4 or 9 approval if applic-able)** | **Hazardous Waste standard** | **Risk-based** | **Remediation Complete?** | **Proposed or Actual completion date** |
| **Yes** | **No** |
| **Soil** | AEC 1 | LEPHs | X |  |  |  | X |  | Jan 01, 2015 |
| HEPHs | X |  |  |  | X |  | Jan 01, 2015 |
| AEC 3 | Arsenic |  | Region 2 | X |  | X |  | Jan 01, 2015 |
| Lead |  | P4 - 135µg/g |  |  | X |  | Jan 15, 2015 |
| HEPH |  |  | X |  | X |  | Jan 01, 2015 |
| **Groundwater** | AEC 1 | Salinity |  |  |  | X | X |  | Jan 15, 2015 |
| AEC 3 | Chloride |  | P9 – 500 mg/L |  |  | X |  | Jan 01, 2015 |
|  |  |  |  |  |  |  |  |  |
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| **Sediment** |  |  |  |  |  |  |  |  |  |
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| **Surface Water** |  |  |  |  |  |  |  |  |  |
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| **Soil Vapour** |  |  |  |  |  |  |  |  |  |
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In the AEC column, specify as N/ A (not applicable) if remediation or assessment is not required in this environmental medium.

**5.4** **Summary of Contaminant Treatment or Removal**

(Identify and describe all contamination removed from or treated on-site. Ensure section 6.2 is completed if no CSRA is required or only required for a portion of soil removed)

**Note that this list should include all substances listed in the above Section 5.3 list that have been remediated through treatment or removal from the site** (including natural attenuation)**. List individual substances, or list the substance classes in the body of the table, together with a list of individual substances that were remediated either as a footnote to the table or as an appended table.**

Provide references to figure(s) showing the lateral and vertical extent of any treated or removed contamination. Confirmatory sample locations and corresponding analytical results shall be shown on each figure and in tabular form with reference to applicable standards:

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

Environmental medium­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Report #­­­\_\_\_ Figure #\_\_\_ Page #\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| **AEC / APEC #***(Use same #s as for APECS in Table above)* | **Contaminant(s) of Concern** | **Medium***(e.g., soil, groundwater, sediment, surface water, vapour, other)* | **Material Removed** |
| **Volume****(m3 or L)** | **Disposal Location***(indicate if treated on-site)* |
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**5.5** **Summary of Residual Contamination after Remediation**

(Identify and describe all contamination that exceeds CSR numerical standards, after the remediation described above has been implemented.)

**Note that this list should include all substances listed in the above Section 5.3 list that exceed standards and that will remain at the site and not be remediated through treatment or removal from the site. As per note in Section 5.2, this list should include substances that have been assessed to meet risk standards.**

**List individual substances, or list the substance classes in the body of the table, together with a list of individual substances that were remediated either as a footnote to the table or as an appended table.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **AEC / APEC #***(Use same #s as for APECS in Table above)* | **Contaminant of Concern** | **Medium***(e.g., soil, groundwater, sediment, surface water, vapour, other)* | **Maximum Measured****Concentration (indicate units)** | **Extent of Contamination** |
| **Area (m2)** | **Depth Range (m)** |
|  |  |  |  |  |  |
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**5.6 Remediation Issues**

**This section should include any departures from the guidance documents, i.e. different approaches to assessment, remediation or confirmation of remediation.**

*Identify remaining issues if the remediation plan, confirmation of remediation report or risk assessment report does not include CSR specified information and current applicable ministry protocols, guidelines, checklists, etc. for these documents..*

|  |
| --- |
| Provide comment on the remediation, particularly if a **pre-approval** was obtained; such as for use of statistical analysis. |
|  |
|  |

Part 6: Summary of Soil Relocation

**6.1 Relocation with a Contaminated Soil Relocation Agreement**

### Source Site

# *(Soil to be relocated under the CSRA (from Table 4.6). Investigation information may be limited to the soil that is the subject of the relocation agreement)*

|  |  |  |  |
| --- | --- | --- | --- |
| **APEC #*****(Use same #s as for APECS in Table above)*** | **Contaminant of Concern*****(List separately)*** | **Classification of the soil to be Relocated*****(</>AL, PL, RL, CL, IL; Column II, III, IV)*** | **Volume m3** |
| **Schedule 4, 5 or 10** | **Schedule 7** |
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### Receiving Site

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| --- | --- | --- |
| Soil to be relocated has been adequately characterized? |  [ ]  Yes | [ ] No |
| Total Volume of soil to be relocated?  |  | m3 |
| Applicable CSR Land Use at receiving site ­­­ | AL [ ]  | PL [ ]  | RL [ ]  | CL [ ]  | IL [ ]  |

|  |  |  |
| --- | --- | --- |
| **Contaminant*****(as indicated in CSR Schedule 7)*** | **Maximum Contaminant Concentration in soil to be relocated****(mg/kg)** | **Applicable CSR Schedule 4 or 5 standard at receiving site****(mg/kg)** |
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| --- | --- | --- |
| Sufficient data on receiving site?  |  [ ]  Yes | [ ] No |

Ensure to assess any modifying factors for the receiving site soils such as soil pH)

Conditions pertaining to relocation (CSR, Sec. 44):

|  |  |  |
| --- | --- | --- |
| Will the source and receiving municipality be notified before soil is relocated? |  [ ]  Yes | [ ] No |
| Will at least 4 business days be allowed to pass before soil is relocated?  |  [ ]  Yes | [ ] No |

**6.2 Relocation without a Relocation Agreement**

**If soil is moved without CSRA and not under one of the indicated exemptions, then provide information below the table; e.g. soil was appropriately characterized and PCOC met applicable CSR schedule 7 standards prior to relocation.**

Other soil relocation not requiring a Contaminated Soil Relocation Agreement (CSRA):

|  |  |  |
| --- | --- | --- |
| Has or will contaminated soil be relocated without a CSRA?  |  [ ]  Yes | [ ] No |
| Do exemptions apply? *(indicated below; see CSR Sec. 41)* |
| Relocation of contaminated soil on the site at which the contaminated soil originates? |  [ ]  Yes | [ ] No |
| Relocation of contaminated soil which is contaminated due only to the presence of the local background concentration? |  [ ]  Yes | [ ] No |
| Relocation of contaminated soil within an area subject to a wide area remediation plan? |  [ ]  Yes | [ ] No |
| Relocation of contaminated soil originating from emergency cleanup of a spill? |  [ ]  Yes | [ ] No |
| Relocation of soil to an authorized hazardous waste storage or treatment facility?If yes, provide BC Generator Registration #­\_\_\_\_\_\_\_\_\_\_\_  |  [ ]  Yes | [ ] No |
| Relocation of contaminated soil to a destination outside of British Columbia? |  [ ]  Yes | [ ] No |
| Relocation of contaminated soil from a specific site not exceeding 5 cubic metres in volume? |  [ ]  Yes | [ ] No |
| Relocation of contaminated soil to federal property? |  [ ]  Yes | [ ] No |
| Relocation to an authorized landfill that is exempt from a CSRA? |  [ ]  Yes | [ ] No |

### **NB: If you don’t need a CSRA because you have disposed soil at an authorized facility, the last exemption is applicable.Part 7: Recommendation of Approved Professional(s)**

**7.1 Regulatory Instrument and Summary Recommendation**

Based on the detailed technical information available for the site, as summarized in this Summary of Site Condition, I *Approved Professional Name* recommend that the following instrument be issued for the Subject Site.

### [ ]  A Determination under section 44 of *EMA*

### [ ]  An AiP under section 53 (1) of *EMA*

### [ ]  A CoC under section 53(3) of *EMA*

### [ ]  A CSRA under section 55(2) of *EMA*

### [ ]  Other (specify)

Although I understand that the basis of such recommendations should only be formally evaluated by reference to detailed technical guidance, the primary basis of this recommendation or these recommendations is as follows:

**If the instrument is risk-based, you may wish to cut and paste the following into your SoSC to clarify the scope of each AP’s role:**

*The following bulleted lists of statements address both “standards” and “risk” requirements under the CSR. By signing the SoSC, the Standards AP confirms that the “standards” requirements of Section 7.1 and 7.2 have been met; and the Risk AP confirms that the “risk” requirements of the same sections have been met.*

For a recommendation for a Determination:

* <On the basis of information provided and reviewed, it is my opinion that no CSR Schedule 2 activities have occurred at the subject site>, *or* < CSR Schedule 2 activities are known or suspected to have occurred at the subject site, therefore in my opinion contaminants may have been released onto the subject site so that the site would be classified as a contaminated site in accordance with the CSR>  *or* < CSR Schedule 2 activities are known or suspected to have occurred at the subject site, but it is my opinion that the specific nature of such activities would not result in contamination so that the site would be classified as a contaminated site in accordance with the CSR>.
* A Preliminary Site Investigation addressing all identified areas of potential environmental concern (APECs) and potential contaminants of concern (PCOCs) was completed. No substances were identified in concentrations exceeding those identified in BC CSR Schedules 4, 5, 6, 7, 9, or 10, as applicable. All PCOCs have been listed in Schedule B of the draft Determination.

For a recommendation for an Approval in Principle and for a Certificate of Compliance:

* A Preliminary Site Investigation addressing all identified areas of potential environmental concern (APECs) and potential contaminants of concern (PCOCs) was completed. One or more substances were identified at concentrations exceeding applicable standards or criteria in CSR Schedules 4, 5, 6, 7 or 10 or criteria in Schedule 9.
* A Detailed Site Investigation addressing the locations and extent of all identified areas of environmental concern (AECs) and contaminants of concern was completed <and forms the basis of a remediation plan or risk assessment> or <was the basis for remediation of the site>.
* When this Summary of Site Condition was prepared <a remediation plan had been prepared that provides for remediating all identified locations and respective extent of all contaminants to either CSR numerical or risk-based standards> or <all contaminants and their respective locations and extent as identified in investigation and risk assessment reports had been remediated to CSR numerical concentration or risk-based standards or criteria (sediments) or both>.

For recommendation for a Contaminated Soil Relocation Agreement:

* The source site soil and receiving site have been adequately characterized to recommend issuance of a Contaminated Soil Relocation Agreement under Protocol 6.

**7.2 Substances Remediated and Standards or Criteria**

<Contaminants have been remediated to comply with standards or criteria listed in the following table:>

*(Remove brackets above and fill in table If the site required remediation and has been remediated.)*

**-See example data below for recommended information to include**

**- Refer to Protocol 12, section 9.4.5 for guidance on listing of nonaqueous phase liquids and odorous substances**

|  |  |
| --- | --- |
|  | **Substances Remediated for Each Type of Standard / Criteria** |
|  | **Numerical Standards****(Criteria for Sediments, Vapour)** | **Risk based Standards****(Criteria for Sediments, Vapour)** |
| Soil | LEPHs |  |
| HEPHs |  |
|  |  |
|  |  |
|  |  |
| Water | Arsenic | Lead |
|  |  |
|  |  |
|  |  |
| Sediments |  |  |
|  |  |
|  |  |
|  |  |
| Soil Vapour |  |  |
|  |  |
|  |  |
|  |  |
| Other |  |  |
|  |  |

Use specific compound names as listed in the Contaminated Sites Regulation schedules.

The Director may accept the recommendations of an Approved Professional(s) involved in the review and submission of investigation, risk assessment or remediation reports based in part on the understanding that:

* As of <the date>, the date of signing of this report the Approved Professional, or Approved Professionals if more than one, is/are member(s) in good standing of the Roster of Approved Professionals, as maintained by the ministry, and member(s) of the Contaminated Sites Approved Professionals Society (CSAP Society);
* The Approved Professionals signing this Summary of Site Condition have reviewed Table 1, Protocol 6 for Contaminated Sites (*Eligibility of Applications for Review by Approved Professionals*) and confirm that the *Application for Contaminated Sites Services* may be processed in the manner for non-high risk sites under the Roster of Approved Professionals process;
* That the reviewer has no obligation to undertake any inquiry into the validity, accuracy or precision of what is reported in the documents reviewed, beyond that which there is reasonable cause to believe that there could be errors or oversights in those reports;
* < *as appropriate*> The subject site has been satisfactorily investigated for all areas of <potential> environmental concern and <potential> contaminants of concern to determine the lateral and vertical extents of contamination with due regard to the *EMA*, the CSR, and the HWR;
* <*as appropriate*> The submitted documentation meets the requirements of Sections <1, 47, 49, 58 and 59> of the CSR;

|  |  |
| --- | --- |
| Section 1 | Definitions |
| Section 47 | Approval in Principle |
| Section 49 | Requests for Certificates |
| Section 58 | Preliminary site investigations |
| Section 59 | Detailed site investigations |

* <*as appropriate*> The Screening Level Risk Assessment meets the requirements of Protocol 13;
* *<for AiPs>* The submitted remediation plan, if implemented in accordance with the specified conditions imposed in its draft Schedule “B” of the AIP, will result in the subject site being remediated in accordance with the applicable standards of the CSR and the HWR;
* *<for AiPs>*  It is feasible to implement all provisions of the Remediation Plan and to achieve its objectives and the conditions of the AIP within 5 years of issuance of the AIP;

For the following statements on CoCs, here are the pertinent regulatory sections:

#### EMA - Approvals in principle and certificates of compliance

**53 (3)** A director, in accordance with the regulations, may issue a certificate of compliance with respect to remediation of a contaminated site if

(a) the contaminated site has been remediated in accordance with

(i)   the numerical or risk based standards prescribed for the purposes of the definition of "contaminated site",

(ii)   any orders under this Act,

(iii)   any remediation plan approved by the director, and

(iv)   any requirements imposed by the director,

(b) [Repealed 2004-18-8.]

(c) a plan has been prepared for the purposes of containing, controlling and monitoring any substances remaining on the site and, if required by the director, works have been installed to implement the plan,

(d) any security in relation to the management of contamination, which security may include real and personal property in the amount and form and subject to the conditions specified by the director, has been provided in accordance with the minister's regulations, and

(e) the responsible person, if required by the director in prescribed circumstances or for prescribed purposes, has prepared and provided to the director proof of registration of a restrictive covenant under section 219 of the [Land Title Act](http://www.bclaws.ca/civix/document/id/complete/statreg/96250_00) acceptable to the director.

#### CSR - Requests for certificates

**49****(2)** In support of the application referred to in subsection (1), the person requesting the certificate of compliance must provide to the director the reports described in paragraphs (a) and (b) and ensure that the director has information on the items described in paragraphs (c) and (d):

(a) preliminary and detailed site investigation reports;

(b) a confirmation of remediation report which describes sampling and analyses carried out after remediation of the contamination including

(i)   a description of sampling locations and methods used,

(ii)   a schedule of sampling conducted, and

(iii)   a summary and evaluation of results of field observations and of field and laboratory analyses of samples;

(c) compliance with all conditions set by a director under section 47 (3) if an approval in principle was issued prior to remediation;

(d) the quality and performance of remediation measures on completion of remediation, including compliance with the remediation standards, criteria or conditions prescribed in this regulation.

* <*for CoCs>*  The confirmation of remediation report meets the requirements of section 49(2) of the CSR;
* *<for CoCs>* The onsite management area(s) has/have been satisfactorily remediated in accordance with section 53 (3) of the *EMA* and section 49(2) of the CSR in accordance with applicable standards as identified in the draft COC;
* *<for CoCs where contamination exists beyond the legal lot boundaries>* The off-site portion(s) of the site has/have been satisfactorily remediated in accordance with section 53 (3) of the *EMA* and section 49(2) of the CSR and makes up part of this application <*or>* a Remediation Plan in accordance with requirements of the the CSR, sections 1 and 47 has/have been prepared and application has been made for AIP for the off-site portions.
* *<for CoCs where contamination exists beyond the legal lot boundaries and engineered works are required to prevent recontamination of the site>* A signed and stamped design drawing has been provided by a professional engineer for works installed at site boundaries to prevent recontamination of the site. The signatory need not be the Approved Professional signing below.

For the following statements on Determinations, here are the pertinent regulatory sections:

#### EMA - Determination of contaminated sites

**44** (1)A director may determine whether a site is a contaminated site and, if the site is a contaminated site, the director may determine the boundaries of the contaminated site.

(2) Subject to subsection (3), in determining whether a site is a contaminated site, the director must do all of the following:

(a) make a preliminary determination of whether or not a site is a contaminated site, on the basis of a site profile, a preliminary site investigation, a detailed site investigation or other available information;

(b) give notice in writing of the preliminary determination to

(i) the person who submitted the site profile, preliminary site investigation or detailed site investigation for the site,

(ii) any of a municipality, an approving officer or the commission that has received and forwarded to the director a site profile for the site to which the preliminary determination pertains,

(iii) any person with a registered interest in the site as shown in the records of the land title office or a land registry office of a treaty first nation at the time the director searches the land title records, and

(iv) any person known to the director who may be a responsible person under section 45 [persons responsible for remediation of contaminated sites] if the site is finally determined to be a contaminated site;

(c) provide an opportunity for any person to comment on the preliminary determination;

(d) make a final determination of whether or not a site is a contaminated site;

(e) give notice in writing of the final determination to

(i) the person who submitted the site profile, preliminary site investigation or detailed site investigation for the site,

(ii) any of a municipality, an approving officer or the commission that received, assessed and forwarded to the director a site profile for the site to which the final determination pertains,

(iii) any person with a registered interest in the site as shown in the records of the land title office or a land registry office of a treaty first nation at the time of the final determination,

(iv) any person known to the director who may be a responsible person under section 45 [persons responsible for remediation of contaminated sites], and

(v) any person who has commented under paragraph (c);

(f) carry out any other procedures specified in the regulations.

(3) A director, on request by any person, may omit the procedures set out in subsection (2) (a) to (c) and make a final determination that a site is a contaminated site if the person

(a) provides reasonably sufficient information to determine that the site is a contaminated site, and

(b) agrees to be a responsible person for the contaminated site.

#### CSR - Procedures for determination of contaminated site

**15 (5)** A director may require that an application for a determination under section 44 of the Act include a report and the recommendation of an approved professional in respect of whether the site is a contaminated site.

* *<for Determination>* In accordance with section 15 (5) of the CSR, the subject site is <*or is not*> a contaminated site under section 44(1) of the *Environmental Management Act*;

*< if a “direct” final determination>* In accordance with section 15 (5) of the CSR, the subject site is a contaminated site under section 44(3) of the *EMA;*

*<for CSRA*s> In accordance with section 43 (2) of the CSR, the soil to be relocated from the subject site complies with standards in CSR Schedule 7 and is suitable for relocation to the receiving site identified in this Summary of Site Condition.

The opinions, advice and recommendations expressed in this Summary of Site Condition are made in accordance with generally accepted principles and practices as recognized by members of the applicable profession or discipline practising at the same time and in the same or similar locations.  This Summary of Site Condition does not provide a legal opinion or guarantee regarding compliance with applicable laws.

**Further to the earlier comment in 7.1 above, you may wish to cut and paste the following into your SoSC to clarify the scope of each AP’s role:**

*By signing the SoSC, the Standards AP confirms that the “standards” requirements of Sections 7.1 and 7.2 have been met; and the Risk AP confirms that the “risk” requirements of Sections 7.1 and 7.2 have been met.*

|  |  |  |
| --- | --- | --- |
| **Name(s) of Approved Professional(s):** | **Signature(s) of Approved Professional(s):** | **Date:** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**7.3 Arm’s Length Review**

### There may have been an arm’s length review of one or more of the following recommendations to the Director of Waste Management:

1. Making a recommendation to a Director in support of an application for an Approval in Principle based on remediation to numerical standards or a screening level risk assessment where there is offsite migration at the site.
2. Making a recommendation to a director in support of an application for an Approval in Principle based on a risk assessment (other than a screening level risk assessment) and remediation to risk-based standards
3. Making a recommendation to a Director in support of an application for a Certificate of Compliance based on remediation to numerical standards or a screening level risk assessment where there is offsite migration at the site.
4. Making a recommendation to a Director in support of an application for a Certificate of Compliance based on a risk assessment (other than a screening level risk assessment) and remediation to risk-based standards
5. Making a recommendation to a Director in support of an application for a Contaminated Soil Relocation Agreement based on a screening level risk assessment for the parcel at which the soil is to be deposited where there is offsite migration at the source site
6. Making a recommendation to a Director in support of an application for a Contaminated Soil Relocation Agreement based on a risk assessment (other than a screening level risk assessment) for the parcel at which the soil is to be deposited
7. Making a recommendation to a Director in support of any other application based on risk assessment or risk management (other than a screening level risk assessment) not otherwise described in any other row in this list, as required under a protocol signed by a Director.

**If you have completed an “arm’s-length” review, even if not required under the above 1-7 scenarios, you should still sign below but indicate ‘N/A’ in the “Type of Arm’s Length Review” box.**

### If this is the case please have the Approved Professional who carried out the arm’s length review to sign below, specifying the type of arm’s length review done for the site.

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Arm’s Length Review (Insert number from list)** | **Name(s) of Approved Professional(s):** | **Signature(s) of Approved Professional(s):** | **Date:** |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_ |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_ |

### **Part 8: Statement of Site Owner / Agent / Lessee**

* 1. **Offsite Migration Notification**

If it is known that one or more substances has migrated or is likely to have migrated to a neighbouring site and is or is likely causing contamination of the neighbouring site, have notifications been given?

*(See CSR Sec. 57 and 60.1 for requirements)*

|  |  |  |
| --- | --- | --- |
|  | **Yes** | **No** |
| Have owners of impacted offsite properties been formally notified? | [ ]  | [ ]  |
| Has the ministry been formally notified? | [ ]  | [ ]  |

* 1. **Confirmations by Owner / Agent / Lessee Regarding Approved Professional**

If you are preparing a SoSC for a site and affected off-site management areas with separate instruments, you have the option of preparing an individual SoSC for each instrument. In this section, to reflect any agreement for responsibility between the source and affected site owners, you may find it appropriate to substitute “Responsible Party” in place of Owner / Agent / Lessee for the off-site management area SoSC, or arrange for an agent to act for the off-site owner. Include any correspondence that confirms the agreement with your submission as per Administrative Guidance 11.

NB - If acting as agent, provide letter from owner, confirming agent status for applicant.

This is to acknowledge that as <the owner / as the agent on behalf of the owner / lessee> *(strike out and initial that which does not apply – if signing as the agent of the owner or lessee, written consent from the owner or lessee authorizing signature of this Summary of Site Condition must be attached)* of the site I have engaged *Approved Professional Name(s)*

as the Approved Professional(s) to review site investigation, risk assessment and remediation reports and to make submission and application with recommendations, if applicable, for the regulatory instrument(s) as indicated in this Summary of Site Condition.

I agree to comply with any requirements on the site regarding monitoring and maintenance of works as documented in <schedule B of the draft contaminated sites legal instrument >.

I accept that if a risk assessment has been applied at the site, that the risk assessment is only valid as long as conditions at the site do not change.

I have undertaken reasonable inquiry into the previous ownership and uses of the property and to the best of my knowledge I have provided to the Approved Professional, information relevant to the investigation and remediation of the environmental condition of the site, in the preparation of this document.

I acknowledge that this Summary of Site Condition becomes a public document after it has been received and acknowledged by the Director of Waste Management. Any party intending to purchase, lease, take a security interest in, or occupy the site may review this document and any supporting documents to satisfy themselves with respect to the environmental condition of the site, and the extent of responsibility and liability that may arise from taking ownership, taking a security interest, or occupying the site.

I have made no modifications to this document except as allowed by the form.

|  |  |
| --- | --- |
| Name: |  |
| Address: |  |
| Signature: |  |
| Date: |  |

1 **.**