CSAP PROFESSIONAL DEVELOPMENT WEBINAR: CSAP Submissions



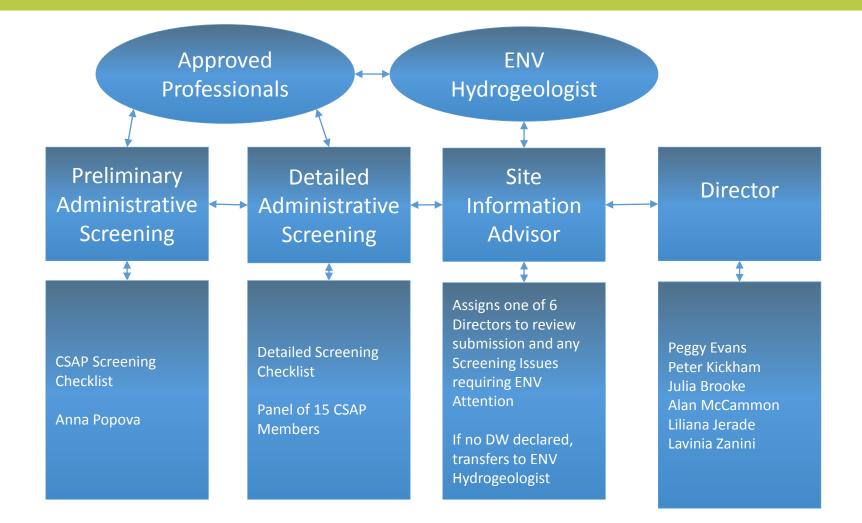
WEBINAR INFORMATION

- The Webinar consists of a Adobe Connect website portal which was supplied to you as a link and where the presentations can be viewed.
- Should you wish, your computer speakers can be used to hear the presentation.
- Should you not be able to hear the presentation please also dial in to the conference call line supplied to you (please note your line will be muted) Phone Number <u>1-855-747-8824 - PASSWORD 728369.</u>
- Questions should be typed in in the chatbox and will be answered by the presenters.

WEBINAR PRESENTERS

Bob Symington, P .Geo.	Gandalf Consulting Ltd.	Moderator/Speaker
Lori Larsen, P.Ag.	TRI Environmental Consulting Inc.	Speaker
Paul Webb, P.Geo	Hemmera Envirochem Inc.	Speaker
James Smith, R.P. Bio	City of Vancouver	Speaker

OVERVIEW



CSAP TOOLS FOR SUBMITTING APs

~ Bob Symington



CSAP TOOLS FOR SUBMITTING APs

CSAP Members – Make a Submission

https://csapsociety.bc.ca/members/make-a-submission/

- Mandatory Transmittal Letter Template
- AG11 Communications Template
- AP Arms Length Review Template

CSAP TOOLS FOR SUBMITTING APs

CSAP Screening List – PAS and DAS Checklist

https://csapsociety.bc.ca/members/guidelines/submission-screening/

- Annotated SoSC and Word Copy of SoSC
- ENV Borehole Form
- CSAP Webinars (SLRA, Omnibus Standards Review, Lessons Learned)

CSAP SUBMISSION MANAGER TOOLS FOR SUBMITTING APs

- Instruments Released from ENV
- ENV Templates in effect Nov 1st, 2018
- Submission Manager

ENV TOOLS FOR SUBMITTING APs

- Admin Guidance 3 Applying for Contaminated Sites Services
- Admin Guidance 5 Approved Professional Recommendations for Non-High Risk Sites
- Procedure 3: Ministry Procedures for the Roster of Approved Professionals

ENV TOOLS FOR SUBMITTING APs

- Procedure 6: Establishing the Boundaries of a Site (PDF)
- Procedure 12: Procedures for preparing and issuing contaminated sites legal instruments
- Protocol 6: Eligibility of Applications for Review by Approved Professionals (PDF)

TRANSMITTAL LETTER

~ James Smith



TRANSMITTAL LETTER (part 1)

Re: Approved Professional Submission Package for a Recommendation under Protocol 6 for a (Instrument)

TRANSMITTAL LETTER (part 2)

(AP Name) of (Company name) has reviewed the reports submitted in support of this application as per the attached Summary of Site Condition for a: (Instrument)

Please accept the attached materials in support of the attached recommendation by (AP Name) under BC Ministry of Environment (ENV) document *Protocol 6 For Contaminated Sites, Eligibility of Applications for Review by Approved Professionals* for issuance of a (Instrument) for (Site Civic Address), British Columbia.

If you have questions or require additional information, please contact the undersigned.

Yours truly, (Company name)

(AP Name)

TRANSMITTAL LETTER

Templates: Page 1



613 - 744 West Hastings Vancouver, BC Canada V6C 1A5

T: 604.451.4555 F: 604.451.4558

CSAPsociety.bc.ca

CSAP Submission Transmittal Letter

Submitting Company Name	Click or tap here to enter text	
Risk AP Name	Click or tap here to enter text	
STD AP Name	Click or tap here to enter text	
Is there anything CSAP and ENV need to know about this application? (e.g. change of address, owner, parcel subdivision, previous communication with ENV, etc.)	[Comments here]	
To avoid potential conflicts of interest during CSAP Detailed Administrative Screening and/or Performance Assessments, check this box if the site (and/or associated sites) is involved in or pending Itigation.		

Instrument 1	Choose an Instru	Choose an Instrument Type from the Dropdown ->]			
Site ID	Click or tap here	to enter text]			
Address	Click or tap here	Click or tap here to enter text			
PID	Enter PID(s]	Enter PID(s)			
Owner	Enter Owner Mang				
Applicant					
Latitude	[Dd]	[MM]	s		
Longitude	[Dd]	MM	SS		
Comment (source, off-site, future dedication, etc.)	Comments here	2			

Page 2

CSAP Submission Transmittal Letter

	Document Title	Author/Company	Report Date (dd/mm/yyyy)	Report Location (included or appended)
1	PSI, DSI, RAP, CoR, HHERA as appropriate	[]	[[]
2	Click or tap here to enter text	[]		[]
3	Click or tap here to enter text	[[]	[]
4	Click or tap here to enter text	[]	[[
5	Click or tap here to enter text	[]	[]	[]
6	Click or tap here to enter text	[]	[[]
7	Click or tap here to enter text	[]	[]	[]
8	Click or tap here to enter text	[]	[[]
9	Click or tap here to enter text	[]	[[]
10	Click or tap here to enter text	[1]	[[]
11	Click or tap here to enter text	[]	[[:
12	Click or tap here to enter text	[]	[]	[]
13	Click or tap here to enter text	[]	[[]
14	Click or tap here to enter text	[]	[]	[]
15	Click or tap here to enter text	[]		[]
16	Click or tap here to enter text	[]	[[]
17	Click or tap here to enter text	[]		[
18	Click or tap here to enter text	[]	[[]
19	Click or tap here to enter text	[]	[[]
20	Click or tap here to enter text	[]	C .	[]

TRANSMITTAL LETTER

Templates: Page 3

Additional documentation is attached to this letter as noted below.

REQUIRED

	Cheque made payable to the CSAP Society for applicable CSAP fees and a separate cheque made payable to the Minister of Finance for applicable MoE fees
STANDALON	E DOCUMENTATION (electronic [pdf or word as specified] file) on a CD or memory stick:
	Completed Contaminated Site Service Application Form
	Draft Instrument Cover Letter – word version
	Draft Instrument – word version

Completed Summary of Site Condition (CSAP annotated version used)

Page 4 of 6

CSAP Submission Transmittal Letter

Completed Site Risk Classification Form (not required for negative Determinations)
Completed Technical Guidance 10 (PSI checklist)
Completed Technical Guidance 11 (DSI Checklist)
Copy of applicable Land Title Office legal plan(s) or other land survey results (current title within last 6 months)
Area Based Site Registry Search, 0.5 km radius (current search within the last 6 months)
Detailed Site Registry Search (current report within the last 6 months)

Page 4

ADDITIONAL STANDALONE DOCUMENTS (included as appropriate in electronic (pdf) format):

	INCLUDED	NOTES
PERFORMANCE VERIFICATION PLAN	C Included	Enter notes here
NOTICE OF INDEPENDENT REMEDIATION (INITIATION AND COMPLETION)	C Included C NA	Enter notes here
Notice of Off-Site Migration	C Included C NA	(Enter notes here)
Consent of both owners to join sites	C Included C NA	Enter notes here
Administrative Guidance 11 communication records		Enter notes here
Typical Borehole Log (PDF with disclaimer and MoE excel form) for MOE mapping	C Included C NA	Enter notes here
Preapproval and Approvals required under protocols (2,3,4,6,7 and 9)		(Enter notes here)
Supporting Documents for use of PAAD Attenuation TG4	C Included C NA	Enter notes here
Other as Applicable:	C Included C NA	Enter notes here

Please include an alternative company contact that can be contacted in your absence regarding the submission.

Enter name here	Enter Phone here	Enter Email here
Name	Phone	Email

CONTAMINATED SITES SERVICES APPLICATION FORM

~ Lori Larsen



CONTAMINATED SITES SERVICES APPLICATION FORM (CSSAF)

Mandatory for ANY submission to BC ENV

Form Availability –<u>Home></u> Environmental Protection & Sustainability> Air, Land & Water> Site Remediation> Guidance & Resources>Site Remediation Forms

https://www2.gov.bc.ca/gov/content/environment/air-land-water/siteremediation/guidance-resources/forms

Relevant ENV Documents:

- AG3 Applying for Contaminated Site Services
- Procedure 12 Section 7.2.2

CONTAMINATED SITES SERVICES APPLICATION FORM (CSSAF)

Who is the Applicant? Should be the same as on SoSc Part 1: Cover Sheet Procedure 12 Sec 7.2.2

- <u>Determinations</u>: Not specified
- <u>AiPs</u>: Only a responsible person
- <u>CoCs</u>: Anyone
- <u>CSRAs</u>: The person relocating the soil

Who is the Billing Contact ? Whoever issues the cheques

	BRITISH COLUMBIA The Best Place on Earth	Ministry of Environment		ATED SITES SERVICE LICATION FORM	S	Land Remediation S PO Box 9342 Stn P Victoria B.C. V8W 9 Telephone: (250) 3 Fax: (250) 387-889 E-mail: site@gov.b	rov Govt 9M1 87-4441 97
	Part A - Applicant I	Information					
-	First name			Last name			
	Organization (if applic	able)					
	Address						
	City			Province/State	_Postal o	code	
l	Telephone	Fa	<	E-mail			
	Part B - Billing Con	itact 📃 Same a	s applicant	ł	IST exempt?	Yes	No
	First name			Last name			
	Organization (if applic	able)					
	Address						
	City			Province/State	Posta	l code	
	Telephone	Fax	(E-mail			

CSSAF – MOST COMMON MISTAKES & OMISSIONS

Most Common Mistakes Noted by CSAP Screener

 <u>Part C:</u> In addition to checking off the legal instrument you are applying for you must also check off SoSC in "Other Services"

Telephone	Fax		E-mail	I		
Part C - Application Inf	ormation		Sele	ect one	or mor	e of the listed services
Services Requested as I	Services Requested as listed in Contaminated Sites Regulation Schedule 3 Table 2 and Table 3					
Report F	Reviews		Othe	er servi	ces	
Preliminary site inve	stigation		Summary of Site Condition			Monitoring report
Detailed site investi	gation		Determination of Contaminate	ed Site		Trapefer agreement
Remediation plan w	ithout usk assessment		Approval in Principle			
Remediation plan	n risk assessment		Certificate of Compliance		Г	Covenant
Risk assessment no Confirmation of rem	t in a remediation plan ediation		Voluntary Remediation Agree Wide area site designation	ment		Additional services /
Background substar			Minor contributor determination	n	г	
Site-specific numeri			Contaminated Soil Relocation		nent 🖣	Allocation panel
Process Ministry r	eview 🗌 External re	view	Roster submission	Resul	omissior	n? 🗌 Yes 🔀 No
Part D - Site Information Please attach additional pages, if necessary						
			Flease	anach	addition	har pages, in necessary
Site ID (if applicable)						

CSSAF – MOST COMMON MISTAKES & OMISSIONS continued

- <u>Part D</u>: Mistakes and typos are found in the Site Information Section.
 - The text should match the draft instrument Schedule A.
 Use a separate page if necessary.
 - Add proper property owner. Should match SoSC Part 1: Cover Page

Part D - Site Information	Please attach additional pages, if necess
Site ID (if applicable)	
Civic Address	
Legal Address	
Parcel Identifier (PID/PIN)	
Is applicant the property owner?	No If no, provide owner name
Site Risk Classification High Ris	sk 🔲 Non-high Risk 🗌 Risk Managed High Risk

CSSAF – How to Avoid Mistakes

- Using the Submission Manager will automatically fill out your CSSAF up to Part D.
- You NEED to fill out Part E Key Information Requirements.

CSSAF – MOST COMMON MISTAKES & OMISSIONS continued

• <u>Part E</u>: Not filling Part E – Key Information

• Sigh, yes you must....

Part E - Key Information Requirements

A satisfactorily completed Summary of Site Condition (SoSC) must be submitted to the ministry with each service application. Such applications must also be accomparied with site investigation reports, remediation plans and confirmation of remediation and risk assessment reports as applicable to the application. The checklist below must be completed for submissions for detailed review by ministry staft.

Type of Report	Ministry References*	Key Report Deliverables	Included in Report(s)	Report References**
All types	CSR 63	<u>Clear report conclusions</u> . Assessment of the adequacy of previous investigation and remediation documentation and the extent to which it was, or was not, relied upon.		
		Detailed descriptions of field and laboratory methods (including QA/ QC). Fully supported explanations shall be provided for any deviations from ministry guidance, other documentation etc.		
		Professional statements. Report authors must ensure that report waiver or liability clauses do not preclude ministry reliance on the information presented.		
Preliminary Site Investigation		Copy of up to date land title record and legal sketch plan or engineering drawing. Evidence of area-based Site Registry search.		
Stage 1	CSR 58 and 12; Technical	Figure showing onsite and offsite areas of potential environmental concern (APEC) and contaminants of potential concern associated with each APEC.		
	Guidance 10	Clearly supported specification of land and water uses, and site- specific factors applicable to the site.		
Stage 2	CSR 58 and 12; Technical Guidance 1, 3, 6, 10	Figure(s) showing the <u>general</u> areas of environmental concern (AECs) and contaminantis of concern (COCs) associated with each AEC in consite and offsits soil and water. Sample locations and corresponding analytical results shall be shown on each figure and in tabular form with reference to applicable standards.		
Detailed Site Investigation	CSR 59 and 1 (definition of remediation plan, item (a)); Technical Guidance 1, 2, 3, 6, 11, 12	Figures (plan and section), with contours, showing the <u>specific</u> lateral and vertical distribution of each COC in onsite and offsite soil and water. Sections must 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 must be shown on the figure and in tabular form with reference to applicable standards.		
Remediation Plan	CSR 1 (definition of	Plan shall address each applicable item in CSR 1 definition of remediation plan i.e. (a) through (j).		
	remediation plan); Technical	Signed/sealed plans and statement of assurance for any remediation system design included in the remediation plan.		
	Guidance 1, 2, 3, 6, 12	Legal sketch plan or engineering drawing showing boundaries of any offsite contamination.		
Remediation confirmation	CSR 49(2); Technical Guidance 1, 2, 3, 6, 12	Figure(s) showing the lateral and vertical extent of any treated or removed contamination. Confirmatory sample locations and corresponding analytical results must be shown on each figure and in tabular form with reference to applicable standards.		
		Conclusion stating to what standards the contaminated site has been remediated and how any requirements imposed (e.g. conditions in an Approval in Principle, order requirements etc.) have been met.		
		Legal sketch plan or engineering drawing showing boundaries of any offsite remediation.		
Site Risk Classification	EMA 64(2)(i); Protocol 11.	Site Risk Classification Report Form		
CidaamoduUII	12, 16	Exposure Pathway Questionnaire		

CSSAF – PART E – Handy Tip

✓ Handy Tip

Use your report table from your SoSC as a Legend to the Reports for Part E. Then you only need to list the reports as #1, #2, #3, #4, etc. with the actual Sections, pp. or Figure #s.

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).

#	Document Title	Author/Company	Document Date (MMM/DD/YY)	Add	Delete
1	Stage 1 Preliminary Site Investigation - 1234 Colour Street, Rainbow City, BC	Qualified Professional, P.Eng/We do Everything Inc.	Jan/02/18	+	-
2	Stage 2 Preliminary Site Investigation - 1234 Colour Street, Rainbow City, BC	Qualified Professional, P.Eng/We do Everything Inc.	Feb/04/18	+	-
3	Detailed Site Assessment - 4321 Lego Place, Rainbow City, BC (formerly 1234 Colour Street)	Qualified Professional, P.Eng/We do Everything Inc.	May/05/18	+	-
4	Confirmation of Remediation - 4321 Lego Place, Rainbow City	Qualified Professional, P.Eng/We do Everything Inc	Aug/15/18	+	-

CSSAF – PART E – Example 1

Part E - Kev I	nformation Re	auirements	PAR	T 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).							
A satisfactorily	completed Sumn	nary of Site Condition (SoSC) must be su	Document Title Auth Stage 1 Preliminary Site Investigation - 1234 Colour Street, Rainbow City, BC Qualified Profession			pany	Document Date (MMM/DD/YY)	Add	Delete	
applications mu	ist also be accom	panied with site investigation reports, re.				ssional, P.Eng/We do Everything Inc. Jan/d		+	-	
assessment rep	ports as applicabl	e to the application. The checklist below	2	Stage 2 Preliminary Site Investigation - 1234 Colour Street, Rainbow City, BC	Qualified Professional, P.Eng/	sional, P.Eng/We do Everything Inc. Feb		+	-	
staff.	, ,		3	Detailed Site Assessment - 4321 Lego Place, Rainbow City, BC (formerly 1234 Colour Street)	Qualified Professional, P.Eng/	We do Everything Inc	. May/05/18	+	-	
			4	Confirmation of Remediation - 4321 Lego Place, Rainbow City	Qualified Professional, P.Eng/	We do Everything Inc	a Aug/15/18	+	-	
Type of	Ministry				Includ	ed in	Report			
Report	References*	Key Report De	live	erables	Report		Refere		s**	
All types	CSR 63	<u>Clear report conclusions</u> . Assessment of the adequacy of previous investigation and remediation documentation and the extent to which it was, or was not, relied upon. Detailed descriptions of field and laboratory methods (including QA/ QC). Fully supported explanations shall be provided for any deviations from ministry guidance, other documentation etc.				Summa	#3, #4 - Exe ary #4 - Sectior		ve	
							Section 3 Section 4			
		Professional statements. Report authors waiver or liability clauses do not precluinformation presented.		X	#1, #2,	#3, #4: Se	ction	2		
Preliminary Site		Copy of up to date land title record and engineering drawing. Evidence of are				#1 - A	ppendix B			
Stage 1 CSR 58 and Figure showing onsite and offsite 12; concern (APEC) and contaminant Technical with each APEC.					X	#1 - Fig	jure 4			
	Guidance 10	Clearly supported specification of land specific factors applicable to the site.	l an	d water uses, and site-	X	#1 - Se	ection 5			
Stage 2	CSR 58 and	Figure(s) showing the <u>general</u> areas o	fen	vironmental concern (AE	Cs) X	#2· ⊑i	auree / 5	6 an	ч.	

CSSAF – PART E – Example 2

Part E - Key Information Requirements

A satisfactorily completed Summary of Site Condition (SoSC) must be submitted to the ministry with each service application. Such applications must also be accompanied with site investigation reports, remediation plans and confirmation of remediation and risk assessment reports as applicable to the application. The checklist below must be completed for submissions for detailed review by ministry staff.

Type of Report	Ministry References*	Key Report Deliverables.	Included in Report(s)	Report References*
All types	CSR 63	Clear report conclusions. Assessment of the adequacy of previous investigation and remediation documentation and the extent to which it was, or was not, relied upon.		а
		Detailed descriptions of field and laboratory methods (including QA/ QC). Fully supported explanations shall be provided for any deviations from ministry guidance, other documentation etc.		b
		Professional statements. Report authors must ensure that report waiver or liability clauses do not preclude ministry reliance on the information presented.		c
Preliminary Site Investigation		Copy of up to date land title record and legal sketch plan or engineering drawing. Evidence of area-based Site Registry search.	Atta	ched to submission
Stage 1	CSR 58 and 12; Technical	Figure showing onsite and offsite areas of potential environmental concern (APEC) and contaminants of potential concern associated with each APEC.		d
	Guidance 10	Clearly supported specification of land and water uses, and site- specific factors applicable to the site.	\boxtimes	e
Stage 2	CSR 58 and 12; Technical Guidance 1, 3, 6, 10	Figure(s) showing the <u>general</u> areas of environmental concern (AECs) and contaminants of concern (COCs) associated with each AEC in conste and offste soil and watter. Sample locations and corresponding analytical results shall be shown on each figure and in tabular form with reference to applicable standards.		f
Detailed Site Investigation	CSR 59 and 1 (definition of remediation plan, item (a)); Technical Guidance 1, 2, 3, 6, 11, 12	Figures (plan and section), with contours, showing the <u>specific</u> lateral and vertical distribution of each COC in onsite and offsite soil and water. Sections must be tonguitatinal 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 must be shown on the figure and in tabular form with reference to applicable standards.		g
Remediation Plan	CSR 1 (definition of remediation	Plan shall address each applicable item in CSR 1 definition of remediation plan i.e. (a) through (j).		
	plan); Technical	Signed/sealed plans and statement of assurance for any remediation system design included in the remediation plan.		
	Guidance 1, 2, 3, 6, 12	Legal sketch plan or engineering drawing showing boundaries of any offsite contamination.		
Remediation confirmation	CSR 49(2); Technical Guidance 1, 2, 3, 6, 12	Figure(s) showing the lateral and vertical extent of any treated or removed contamination. Confirmatory sample locations and corresponding analytical results must be shown on each figure and in tabular form with reference to applicable standards.		h
		Conclusion stating to what standards the contaminated site has been remediated and how any requirements imposed (e.g. conditions in an Approval in Principle, order requirements etc.) have been met.		1
		Legal sketch plan or engineering drawing showing boundaries of any offsite remediation.	Attac	hed to submission
Site Risk Classification	EMA 64(2)(i); Protocol 11,	Site Risk Classification Report Form	Attac	hed to submission
Classification Part F - Signa	12, 16	Exposure Pathway Questionnaire		
Signed : Du	ncan Macdonald	Dated :	50 10	- 2014
	Print Name	Signature	mmm	/dd/yyyyy
I am acting as	agent for the ap	plicant Ves No Telephone 604 682 3707	ax 604 682	3497

Appendix A - Additional PIDs and Legal Descriptions

Legal Description	Civic Address	PID
Lot 4 through Lot 9, Block 1,	1314-1348 Southwest Marine	014-052-113 (Lot 4)
District Lot 318, Plan 2067,	Drive, Vancouver, BC	014-052-121 (Lot 5)
New Westminster Land		014-052-130 (Lot 6)
District.		014-052-148 (Lot 7)
		014-052-156 (Lot 8)
		014-052-164 (Lot 9)

Report References

- a) SoSC Report #17 (Stage 1), Section 6.1 and Report #18, Section 3.0 b) SoSC Report #18 (Stage 2 PSI, DSI, COR) Section 6.1.4 and Appendix 9
- c) SoSC Report #18 (Stage 2 PSI, DSI, COR)Section 11
 - d) SoSC Report #17 (Stage 1) Figure 5
 - e) SoSC Report #17 (Stage 1) Section 5
 - f) SoSC Report #18 (Stage 2 PSI, DSI, COR) Figure 4 through Figure 17
 - g) SoSC Report #18 (Stage 2 PSI, DSI, COR) Figure 18 through Figure 28c
 - h) SoSC Report #18 (Stage 2 PSI, DSI, COR) Figure 19

 - i) SoSC Report #18 (Stage 2 PSI, DSI, COR) Section 8 and Section 10

R stands for the Cont nds for the Environmental Management Act ** Note the section(s), page(s) and/or figure number(s). Use a separate sheet if necessary

~ Paul Webb



Provides the ENV with:

summary of key site information regarding status of investigations the nature and extent of remediation proposed or undertaken further work that will be required part of legislated and regulated closure documentation.

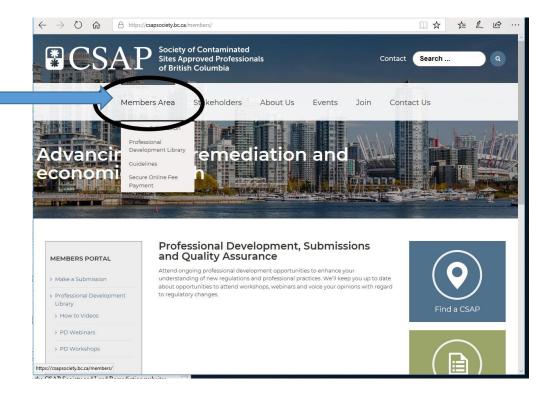
The Summary of Site Condition can also provide information to persons managing contaminants on adjacent property.

Where to find:

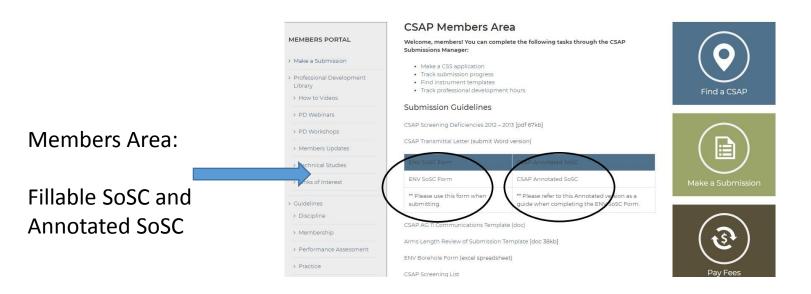
Click: Members Area

then

Make a Submission



Where to find:



Where to find:

CSAP Members Area Fillable SoSC MEMBERS PORTAL Welcome, members! You can complete the following tasks through the CSAP Submissions Manager: Make a Submission Make a CSS application Track submission progress Professional Development Find instrument templates Track professional development hours Find a CSAP MS Word version > How to Videos Submission Guidelines > PD Webinars with legal text CSAP Screening Deficiencies 2012 - 2013 [pdf 67kb] > PD Workshops CSAP Transmittal Letter (submit Word version) > Members Updates secured - can be hnical Studies ENV SoSC Form CSAP Annotated SoSC filled in and ** Please use this form whe ** Please refer to this Annotated version as a Guidelines submitting. guide when completing the ENV SoSC Form. saved. CSAP AG munications Template (doc) > Membership Arms Length Review of Submission Template [doc 38kb] > Performance Assessment ENV Borehole Form (excel spreadsheet) > Practice

CSAP Screening List

SoSC has been updated to reflect Stage 10 and 11 amendments

Fillable form restricts data entry to the sections that we are legally allowed to modify.

Residential Land Uses updated

• Still need to select "Other" if Vapour Attenuation Factors applied

Wildlands would also use "Other"

Property	CSR Land Use									
		AL	PL	RLLD	RLHD	CL	IL	Other		
Subject site	Current									
10	Proposed									
Receiving site (if completed in support of a Contaminated Soil Relocation Agreement)										
Offsite impacted property / management area										

Soil (standards):

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

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).

#	Document Title	Author / Company	Document Date		
-					

Should also be listed:

- performance verification plans;
- <u>approvals and preapprovals under protocols (e.g., 2 4, 6, 7, and 9) to establish, for example,</u> <u>background levels of substances and site-specific standards;</u>
- <u>determinations of land, water, sediment or vapour use by a Director;</u>
- discharge authorizations issued under Section 6 of the EMA;
- hazardous waste authorizations

4.2. Site Conditions – Hydrogeology Current Use

Hydrogeology

Describe groundwater levels, confining / semi-confining layers, flow direction and velocity For Current Use:

- state whether there are any drinking water, irrigation or livestock watering wells within 500m of the site.

- indicate if a background groundwater decision was obtained and for what COCs.

at a site with bedrock aquifer, indicate whether groundwater contamination reaches the bedrock surface.

- state whether there are any drinking water, irrigation or livestock watering wells within 500m of the site.
- indicate if a background groundwater decision was obtained and for what COCs.
- at a site with bedrock aquifer, indicate whether groundwater contamination reaches the bedrock surface.

Hydrogeology section contains P21 Water Use Evaluation flow chart information

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

P21 Water Use Evaluation

AW use:

Q: Is the site located within 500 m of an aquatic receiving environment? Ves (go to 1) O (go to 2)

1 - Can it be demonstrated that site groundwater does not flow to that aquatic receiving environment? Ves (go to 2) No (AW applies) Rationale:

Don't forget to provide rationale to support your evaluation!

Section 5.6. Remediation Issues

For type 1B, 2 and 3 sites, list the principal risk control clauses.

5.6 Remediation Issues

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.

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

Section 6.1 updated to reflect Stage 10 and 11 Amendments

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)

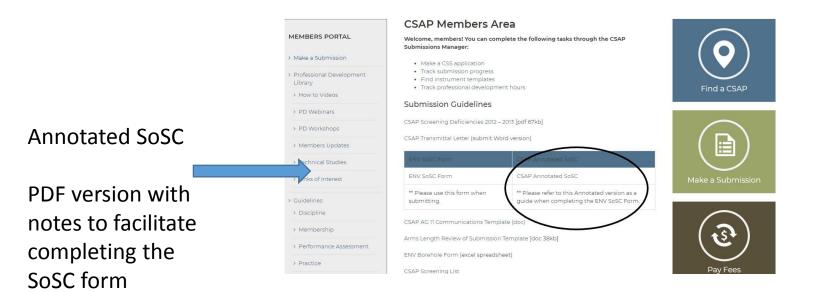
APEC # (Use same #s as for APECS in Table above)	Contaminant of Concern (List separately)	Classification of the soil to be Relocated (> WL _N , WL _R , AL, PL, RL _{LD} , RL _{HD} , CL, IL; Columns 2 through 9) Schedule 3.1	Volume m ³	

Receiving Site

Soil to be relocated has been adequately characterized?						No
Total Volume of soil to be relocated?	SX		28		- Comparents	m ³
Applicable CSR Land Use at receiving site	AL	PL 🔲	RLLD 🔲		CL	Ш

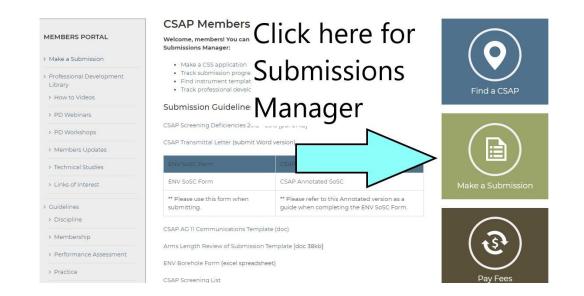
SUMMARY OF SITE CONDITIONS

Where to find:



SUMMARY OF SITE CONDITIONS

Can also prepare through CSAP Submissions Manager:



CSAP Submissions Manager improvements:

- Create your own Section 4.5 substance lists
- "Alias" for substance classes
- SoSC Table 4.5 shows Alias lists parameters below table

CSAP Submissions Manager

Custom Lists for adding Section 4.5 substances

	Add Substances to Submission Cancel
These are the selected substances for the subm	nission.
Remove Substance	
Custom Substances	
Add Substance Lists:	
Add substances from a list (Substances will be a	added to the Selected Substances above).
BETX - Soil	
PAHs - Soil Metals	
VOCs - Soil	
Add All Substances From List Create	/ Edit Substance Lists
Add Individual Substances	
Select single substances from the lists below (S	Substances will be added to the Selected Substances above).
Select single substances from the lists below (S	Substances will be added to the Selected Substances above).
	Substances will be added to the Selected Substances above).
Select single substances from the lists below (S Medium: Soil Search for names antimony	Substances will be added to the Selected Substances above).
Select single substances from the lists below (S Medium: Soil Search for names	Substances will be added to the Selected Substances above).
Select single substances from the lists below (S Medium: Soil Search for names antimony arsenic barium beryllium	Substances will be added to the Selected Substances above).
Select single substances from the lists below (S Medium: Soil Search for names antimony arsenic barium	Substances will be added to the Selected Substances above).
Select single substances from the lists below (S Medium: Soil Search for names antimony arsenic barium beryllium	Substances will be added to the Selected Substances above).
Select single substances from the lists below (S Medium: Soil Search for names antimony arsenic barium beryllium Add Substance	
Select single substances from the lists below (S Medium: Soil Search for names antimony arsenic barium beryllium Add Substance Add Custom Substances:	Substances will be added to the Selected Substances above). ded to the Selected Substances above):

CSAP Submissions Manager

Section 4.5 substance lists

- Create custom lists of substances investigated for each media
- Manage your lists
- Add all list substances to submission

Sul	osta	nces
-----	------	------

	Cancel
These are the selected substances for th	e submission.
Remove Substance	
Custom Substances	
VOCs - Soil	Remove
BETX - Soil	Remove
Add substances from a list (Substances v	will be added to the Selected Substances above).
BETX - Soil	
DALL 0-1	
PAHs - Soil	
Metals	
Metals VOCs - Soil	
Metals VOCs - Soil	Create / Edit Substance Lists
Metals VOCs - Soil Add All Substances From List C	Create / Edit Substance Lists
Metals VOCs - Soil	create / Edit Substance Lists

Search for names.

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CSAP Submissions Manager

Section 4.5 substance lists

 You can create and manage your custom substance lists to suit your needs

Manage Substance Lists:

Substance Lists

Back

BETX - Soil		*
PAHs - Soil		
Metals		
VOCs - Soil		
Metals - Groundwat	er	
3.1_PHCs		
3.1_BETX		
		Y
Edit List Delete	List Create New List	

CSAP Submissions Manager

Section 4.5 substance lists

- Create custom lists of substances investigated for each media
- Coming soon: create an alias for the list (eg. VOCs)

Add subst	tances to you	r list.			
Medium:	Soil	¥			
Class:	Miscellane	eous Inorganic a	and Organic S	ubstances	•
Substan	ces			New List	
aniline				Add >	
HEPHs LEPHs				< Rem	
VPHs					
VPHs					

A d d I int

CSAP Submissions Manager

Section 4.5 substance lists

 Your custom lists of substances can be edited at any time

Edit I	.ist				
List name	: Metals]		
Add subst	ances to your	list.			
Medium:	Soil	•			
Class:	Inorganic S	ubstances		.▼	
Substan	ces			New List	
antimon arsenic barium berylliur boron (h bromate cadmiur chromiu cobalt copper fluoride lead lithium mangan mercury molybde nickel	n not water solu n m ese	<mark>ıble</mark>)	Add > < Rem	antimony (Soil-Inorganic Substances) beryllium (Soil-Inorganic Substances) cobalt (Soil-Inorganic Substances) fluoride (Soil-Inorganic Substances) molybdenum (Soil-Inorganic Substances) nickel (Soil-Inorganic Substances) selenium (Soil-Inorganic Substances) silver (Soil-Inorganic Substances) thallium (Soil-Inorganic Substances) tin (Soil-Inorganic Substances) vanadium (Soil-Inorganic Substances) barium (Soil-Inorganic Substances) arsenic (Soil-Inorganic Substances) cadmium (Soil-Inorganic Substances) cadmium (Soil-Inorganic Substances) chloride Ion (CI-) (Soil-Inorganic Substances) chromium (Soil-Inorganic Substances) copper (Soil-Inorganic Substances)	•

Save List

Cancel

CSAP Submissions Manager

Section 4.5 substance lists

 Your custom lists of substances are added to the Submissions Manager

Add Potential Contaminants of Concern

Potential Contaminant of Concern (PCOC)		Check where analyses completed						
(indicate products, chemicals, waste type, etc. and / or analytical parameter)		Sediment	Ground Water	Surface Water	Vapour	Other (explain)		
1,2-dichloropropane	1			(3)			Delete	
carbon tetrachloride							Delete	
dichloroethane (1,1-, 1,2-)	\checkmark						Delete	
dichloroethene (1,1-, 1,2-)	1						Delete	
dichloromethane				63			Delete	
trichloroethane (1,1,1-, 1,1,2-)							Delete	
trichloroethylene (TCE)	$\overline{\mathscr{A}}$			8			Delete	
1,3-dichloropropane	1						Delete	
vinyl chloride (chloroethene)				6			Delete	
styrene							Delete	
benzene	\checkmark			8			Delete	
ethylbenzene	1						Delete	
toluene	1						Delete	
xylene	1						Delete	

Remove APEC Description

Word Output of Section 4.5 substance lists

- Your custom lists of substances are included in Table 4.5
- ...and the parameters listed below in a legend

Area of Potential Environmental Concern (APEC)				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)	Potential Contaminant of Concern (PCOC) (indicate products, chemicals, waste type, etc. and / or analytical parameter)	Soil	Sediment	Ground water	Surface Water	Vapour	Other (explain)		
1	Service Station	VOCs - Soil								
		BETX - Soil								
	(please explain):		đ					100		
Other	(piease explain).									

List Name	Substances
VOCs - Soil	1,2-dichloropropane,carbon tetrachloride,dichloroethane (1,1-, 1,2-),dichloroethene (1,1-, 1,2-),dichloromethane,trichloroethane (1,1,1-, 1,1,2-),trichloroethylene (TCE),1,3- dichloropropane,vinyl chloride (chloroethene)
BETX - Soil	styrene, benzene, ethylbenzene, toluene, xylene

APPROVAL AND DIRECTORS DECISION: Water Use Determination other than P21 and Approval under P6

~ Lori Larsen



APPROVALS & DIRECTORS DECISIONS Water Use Determination

Typical Approach Protocol 21

• Must be set out in detail in the SOSC and reports

Under P6 – Background Water Determination

• Using Protocol 9 and making a submission to the Director

Request that DW does not Apply to Site

- This an application that is sent to the Director. The application should:
 - give adequate evidence of hydrogeological investigation,
 - Submit reports of environmental investigation
 - Shows how it fails Protocol 21
 - Then give multiple lines of evidence to support the case
 that DW is not applicable
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APPROVALS & DIRECTORS DECISIONS Water Use Determination

• Examples

- False Creek Flats (historical industrial use, historical contamination, unlikely gw use)
- Fraser River in New Westminster (Westminster Pier Park)
- Fractured Bedrock Sites beside Marine Waters
- Must include the actual water use determination letter from BC ENV in your list of documents that support the application

APPROVAL AND DIRECTORS DECISION: BACKGROUND DETERMINATION

~ James Smith



Relevant ENV Document – Protocol 6 (Eligibility of Applications for Review by Approved Professionals)

Relevant Section: Section 4.9 (Page 4):

Pre-approval is needed for the Ministry for the types of applications detailed in <u>Table 2</u> of Protocol 6 (Page 5)

Useful Reference: Protocol 6 pre-approvals issued by ENV: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/site-remediation/docs/protocols/protocol_6.pdf

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Pre-approval Situations:

- 1. Delineation Full extent of contamination is not delineated / remediated.
- 2. Background Substances Background concentrations in surface water, sediments or vapour were derived by any methods.
- 3. Involving Orders If the site is subject to a remediation order, pollution prevention order or pollution abatement order under the Act
- 4. Greater than 5 year Approval in Principle
- 6. Risk Assessment with:
 - a. Modification of toxicity reference values
 - b. Derivation or use of a site-specific risk-based concentration
 - c. SLRA at high risk sites

Items to consider for 6 Pre-approval situations

- **1.** Delineation Full extent of contamination is not delineated / remediated.
- Fact Sheet 16 Remediation Liability Overview Details the Ministry's expectations of who is responsible for what
- Procedure 6: Establishing the Boundaries of a Site Provides guidance on how the Ministry expects boundaries to be established.
- Admin Guidance 11 Expectations and Requirements for Contaminant Migration Speaks to boundary issues and how to communicate with off-site impacted owners.

Items to consider for 6 Pre-approval situations

2. Background Substances – Background concentrations in surface water, sediments or vapour were derived by any methods.

3. Involving Orders – If the site is subject to a remediation order, pollution prevention order or pollution abatement order under the Act

None to date.

4. Greater than 5 year Approval in Principle

None listed, but has been done. Provide rationale (new owners,

Items to consider for 6 Pre-approval situations

5. Risk Assessment with:

- a. Probabilistic analysis
- b. Toxicity test
- c. Modification of toxicity reference values
- d. Derivation or use of a site-specific risk-based concentration.

Quite a number of these have been issued to date and have included:

- Probabilistic RA, toxicity testing, food chain modeling, modification of TRVs, weight of evidence arguments

- Still no site specific risk based concentrations

DRAFT CoC INSTRUMENT

~ Bob Symington



New Templates issued and available on the CSAP Website. Check you are using the current ones.

> May 7, 2018 Date Issued

Site Identification Number 21403 Version 9.0 R



Environment and Climate Change Strategy

CERTIFICATE OF COMPLIANCE (Pursuant to Section 53 of the Environmental Management Act)

THIS IS TO CERTIFY that as of the date indicated below, the site identified in Schedule A of this Certificate of Compliance has been satisfactorily remediated to meet the applicable Contaminated Sites Regulation remediation standards and criteria.

This Certificate of Compliance is qualified by the requirements and conditions specified in Schedule B.

The substances for which remediation has been satisfactorily completed and for which this Certificate of Compliance is valid are listed in Schedule C.

I have issued this Certificate of Compliance based on a review of relevant information including the documents listed in Schedule D. I, however, make no representation or warranty as to the accuracy or completeness of that information.

A Director may rescind this Certificate of Compliance if requirements and conditions imposed in the Certificate of Compliance are not complied with or any fees payable under Part 4 of the Act or regulations are outstanding.

This Certificate of Compliance should not be construed as an assurance that there are no hazards present at the site.

May 7, 2018 Date Issued

J.A. Brooke Director, Environmental Management Act

Site Identification Number 21403 Version 9.0 R

1 of 6

Affected Parcel Instruments

Last paragraph of cover page of Instrument

"The substances to which this Certificate of Compliance applies migrated to the site from a neighbouring source. It should not be assumed that this Certificate of Compliance certifies the remediation of all contaminants at the site. "

Schedule A

If metes and bounds, this should be described here

Schedule A

The lands covered by this Certificate of Compliance are located adjacent to and northeast of 1314-1348 Southwest Marine Drive, Vancouver BC, which is more particularly known and described as:

Commencing at the northeast corner of Lot 6, Block 1, Plan 2067, District Lot 318, NWD Lot 7, Block 1, Plan 2067, District Lot 318, New Westminster Land District; Then N 61o 13' 09.77" W 0.939m; Then N 61o 13' 09.77" W 21.61m; Then S 73o 10' 38.78 E 7.916m; Then S 61o 11' 51.54 E 13.867m; Then S 28o 48' 08.46" W 1.683m to point of commencement.

The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude:	49°	12'	11.82"
Longitude:	123°	08'	9.27"

Schedule A

The site covered by this Certificate of Compliance is located at 1314-1348 Southwest Marine Drive, Vancouver BC, which is more particularly known and described as:

Lot 4, Block 1, District Lot 318, Plan 2067, New Westminster Land District PID: 014-052-113

Lot 5, Block 1, District Lot 318, Plan 2067, New Westminster Land District PID: 014-052-121

Lot 6, Block 1, District Lot 318, Plan 2067, New Westminster Land District PID: 014-052-130

Lot 7, Block 1, District Lot 318, Plan 2067, New Westminster Land District PID: 014-052-148

Lot 8, Block 1, District Lot 318, Plan 2067, New Westminster Land District PID: 014-052-156

Lot 9, Block 1, District Lot 318, Plan 2067, New Westminster Land District PID: 014-052-164

The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude: 49° 12' 11.33" Longitude: 123° 08' 10.30"

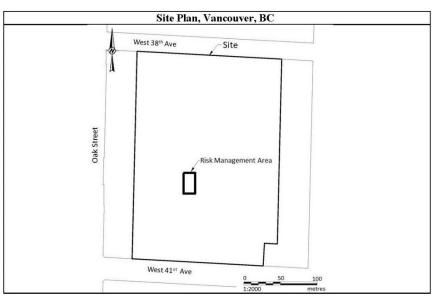
Schedule A

Scale Bar

North Arrow

Bold Line

Can you drive to it?





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Schedule B Condition 1

1. Any changes in land, vapour, or water uses must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Certificate of Compliance may be necessary. The uses to which this condition applies are described in Schedule C and in the site investigation documents listed in Schedule D.

The documents listed in Schedule D indicate that vapour attenuation factors were applied to meet Contaminated Sites Regulation numerical standards at the site. These vapour attenuation factors were selected based on assumptions about the structures, locations and depths of buildings existing or expected at the site. These assumptions include the following:

- (a) Future high density residential buildings will be slab-at-grade, or
- (b) Future high density residential buildings will be constructed with one level of underground parkade.

Any inconsistencies that arise between the structures, locations and depths of proposed or constructed buildings at the site and the range of structures, locations and depths of buildings assumed in the selection of vapour attenuation factors in the documents listed in Schedule D must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Certificate of Compliance may be necessary.

Schedule B Condition 2

- 2. The principal risk controls which must be present or implemented and must be maintained at the site include the following:
 - (a) Groundwater from the site will not be used as a source of drinking water.
 - (b) The maintenance of a minimum of 1 m of uncontaminated material or a cap/cover over the risk management area, as shown in the Site Plan and described by the following metes and bounds.

COMMENCING AT THE SOUTHWESTERLY CORNER OF PLAN VAP7764, DISTRICT LOT 526, NEW WESTMINSTER, BLOCK 866, EXCEPT PART IN REFERENCE PLAN 15238, THENCE NORTH 38.2° EAST, A DISTANCE OF 113.180 METRES TO THE POINT OF COMMENCEMENT; THENCE NORTH, A DISTANCE OF 28.073 METRES

Schedule C - Listing of Substances Soils

Substances remediated in soil for commercial land soil use:

To meet numerical remediation standards:

naphthalene	91-20-3	VPH	NA
selenium	7782-49-2		

To meet risk based standards:

antimony	7440-36-0	HEPHs	NA
arsenic	7440-38-2	lead	7439-92-1
benz(a)anthracene	56-55-3	LEPHs	NA
benzo(b+j)fluoranthenes	205-82-3	manganese	7439-96-5
cadmium	7440-43-9	mercury	7439-97-6
chromium	7440-47-3	nickel	7440-02-0
cobalt	7440-48-4	tin	7440-31-5
copper	7440-50-8	zine	7440-66-6
indeno(1,2,3-cd)pyrene	193-39-5		

Schedule C - Listing of Substances Water

Substances remediated in water for marine aquatic life water use:

To meet numerical remediation standards:

acenaphthene	83-32-9	naphthalene	91-20-3
acridine	260-94-6		

To meet risk based standards:

anthracene	120-12-7	phenanthrene	85-01-8
fluoranthene	206-44-0	pyrene	129-00-0
LEPHw	NA		

Schedule C - Listing of Substances Vapour

Substances remediated in soil vapour for parkade land vapour use:

To meet risk based standards:

benzene 71-43-2 naphthalene 91-20-3

DRAFT DETERMINATIONS

~ James Smith



- Draft generated by submission manager
- Requires edits, mostly if/not contaminated and to Substances.



FINAL DETERMINATION (Pursuant to Section 44 of the Environmental Management Act)

I have made a Final Determination that the site identified in Schedule A of this document is not a contaminated site.

This Final Determination is qualified by the requirements and conditions specified in Schedule B.

The site does not have concentrations of the substances specified in Schedule C that exceed the applicable standards and criteria prescribed in the Contaminated Sites Regulation for determining whether a site is a contaminated site.

I have issued this Final Determination based on a review of relevant information including the documents listed in Schedule D. I, however, make no representation or warranty as to the accuracy or completeness of that information.

This Final Determination should not be construed as an assurance that there are no hazards present at the site.

Date Issued

Signing Authority For Director, Environmental Management Act

Site Identification Number <Site ID> Version 9.0 R

1 of 10

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DRAFT INSTRUMENTS – DETERMINATION

Schedule A

- Generated by submission manager
- If metes and bounds, this should be described here

àc	h	ed	11	le	A

The site covered by this Final Determination is located at 2555 Cedar Mountain Road, Vancouver, British Columbia> which is more particularly known and described as:

 Amended Lot 9 (See 1212878L)
 Block 3455 District Lot 256 Plan VAP 590

 PID: 015-994-184
 2555 Cedar Mountain Road

The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude: 49° 15' 47.50" Longitude: 123° 7' 45.00"

Date Issued

1

Signing Authority For Director, Environmental Management Act

Site Identification Number <Site ID> Version 9.0 R

2 of 10

Schedule A continued

 Follow rules regarding figures



Schedule B

- Use the ENV templates
- Edit according to determination conditions
- The signing director will read this schedule!

Schedule B

Requirements and Conditions

 Any changes in land, <u>vapour</u>, or water use must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Determination of Contaminated Site may be necessary. The uses to which this condition applies are described in Schedule C and in the site investigation documents listed in Schedule D.

The documents listed in Schedule D indicate that vapour attenuation factors were applied to meet. <u>Contaminated</u> Sites Regulation numerical standards at the site. These vapour attenuation factors were selected based on assumptions about the structures, locations and depths of buildings existing or expected at the site. These assumptions include the following:

(a) "A slab-on-grade building will cover the entire site";

Any inconsistencies that arise between the structures, locations and depths of proposed or constructed buildings at. the site and the range of structures, locations and depths of buildings assumed in the selection of vapour attenuation factors in the documents listed in Schedule D must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Determination of Contaminated Site may be necessary.

Date Issued

Signing Authority For Director, Environmental Management Act 5 of 11

Site Identification Number <Site ID> Version 9.0 R

Schedule C

- Use the ENV templates
- Follow the rules!
 - Organize alphabetically
 - Separate by media use
 - Use regulated names
 - Include CAS #

Schedule C

Substances and Uses

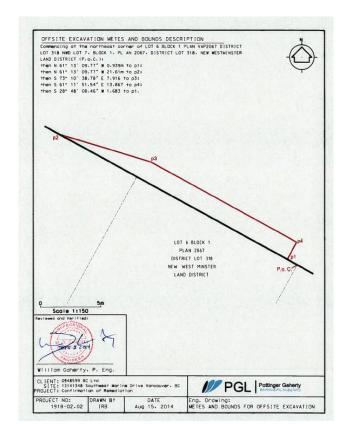
Substances evaluated in soil for commercial land soil use:

To meet numerical standards prescribed for defining whether a site is contaminated:

acenaphthene	83-32-9	dichloroethane, 1,2-	107-06-2
anthracene	120-12-7	dichloroethylene, 1,1-	75-35-4
antimony	7440-36-0	dichloroethylene, 1,2-cis	156-59-2
arsenic	7440-38-2	dichloroethylene, 1,2-trans	156-60-5
barium	7440-39-3	dichloromethane	75-09-02
benz[a]anthracene	56-55-3	dichloropropane, 1,2-	78-87-5
benzene	71-43-2	dichloropropene, 1,3- (cis+trans)	542-75-6
benzo(a)pyrene	50-32-8	ethylbenzene	100-41-4
benzo(b)fluoranthene	205-99-2	ethylene glycol	107-21-1
benzo(k)fluoranthene	207-08-9	fluoranthene	206-44-0
beryllium	7440-41-7	fluorene	86-73-7
bromodichloromethane	75-27-4	HEPHs	NA
bromoform	75-25-2	indeno(1,2,3-cd)pyrene	193-39-5
cadmium	744-43-9	lead	7439-92-1
carbon tetrachloride	56-23-5	LEPHs	NA
chlorobenzene	108-90-7	mercury	7439-97-6
chloroform	67-66-3	methyl tert-butyl ether	1634-04-4
chromium	7440-47-3	methylnaphthalene, 2-	91-57-6
chrysene	218-01-9	molybdenum	7439-98-7
cobalt	7440-48-4	naphthalene	91-20-3
copper	7440-50-8	nickel	7440-02-0
libenz[a,h]anthracene	53-70-3	phenanthrene	85-01-8
libromochloromethane	124-48-1	pyrene	129-00-0
dichlorobenzene, 1,2-	95-50-1	selenium	7782-49-2
lichlorobenzene, 1,3-	541-73-1	silver	7440-22-4
lichlorobenzene, 1,4-	106-46-7	styrene	100-42-5
lichloroethane, 1,1-	75-34-3	tetrachloroethane, 1,1,1,2-	630-20-6

DOCUMENTATION

- Land Title
- Legal Plans
- Road Dedications and Boundary Issues



BOREHOLE LOG TEMPLATE

~ James Smith



BOREHOLE LOG TEMPLATE

- Only one representative log required
- Use most recent XL version
- Some cells are locked
- Use drop down menus

								AIIIUD	E	0	ONGITU	DE	Date	e of Insta	llation	
Example Data: Borehole Name	Site Address	Site Municipality	BH Total Depth	Top of MW Pipe Elevation	Ground Surface Elevation	MOE Site ID	Deg°	Mins '	Sec "	Deg °	Mins '	Sec "	Day	Month	Year	BH Log Document Name (please use this name for your BH Log file)
MW2008-1	5433 Bridge Street	Vancouver	29.3	7.2	6.57	3100	49	34	7	123	45	11	13	Mar	2009	3100_MW2008-1.pdf
Please enter you	r borehole information	below:	BH Total	Top of MW Pipe	Ground Surface		1	ATITUD	E	U	ONGITU	DE	Date	of Insta	llation	
Borehole Name	Site Address	Site Municipality	Depth (mbgs)	Elevation	Elevation (masl preferred)	MOE Site ID	Deg°	Mins '	Sec "	Deg°	Mins'	Sec "	Day	Month	Year	BH Log Document Name (please use this name for your BH Log file)
													*use	drop dov	wns	.pdf

BOREHOLE LOG TEMPLATE

- Only one representative log required
- Use most recent XL version
- Some cells are locked
- Use drop down menus

Example: Lithologic UNIT Number	Depth to Top of UNIT	Depth to Bottom of UNIT	UNIT Description	Screened Interval TOP Depth	Screened Interval BOTTOM Depth	Hydraulic Conductivity	Depth to Groundwater (Top of MW Pipe)
1	0.00	5.20	Fill				1
2	5.20	14.00	Poorly graded sand				
3	14.00	19.20	Sand and gravel				
4	19.20	29.00	Poorly graded gravel	27.10	28.60	0.03	22.260
5	29.00	29.30	Inorganic clay - high plasticity				
Please enter yo	ur Borehole Lith	ology informat	ion below:				
Lithologic UNIT Number (Automatically Generated)	Depth to Top of UNIT (Automatically Generated)	Depth to Bottom of UNIT	Lithologic UNIT Description	Screened Interval TOP Depth (Note screen depths on associated Unit row)	Screened Interval BOTTOM Depth	Hydraulic Conductivity (m/s) (Note on screened Unit row)	Depth to Groundwater (m) (measured from Top of MW Pipe) (Note depth on screened Unit row)
1	0.00	2.50	Gravel, clayey	×			
			Clay, gravelly				

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~ Lori Larsen



Relevant ENV Documents:

- **Protocol 12:** Site Risk Classification, Reclassification and Reporting
- **Protocol 11:** Upper Cap Concentration of Substances

Other References:

- **Protocol 16:** Determining the Presence of Mobility of NAPL and Odourless Substances
- **Protocol 11:** Ministry Response to Comments
- Fact Sheet 45: Site Risk Classification

Protocol 12: Site Risk Classification, Reclassification and Reporting

- OBJECTIVE: Determine if Site is HIGH RISK
- HIGH RISK is when either one or both of two conditions exist:
 - 1. Mobile NAPL is present (Protocol 16)
 - 2. Upper Cap Concentrations are
 - a) exceeded and
 - b) exposure pathway present
- If the Site is classified as High Risk you can only submit it for an instrument with BC ENV pre-approval.
- The classification is based upon current conditions, but you also must consider the proposed use.

Protocol 11: Upper Cap Concentration of Substances

Provides upper cap concentrations for:

- **Table 1.** Human Health Intake of Contaminated Soil, Upper Cap Concentrations for Schedule 3.1 Part 1 Substances
- **Table 2.** Ecological Health Toxicity to Soil Invertebrate and Plants, Upper Cap Concentrations for Schedule 3.1 Part 1 Substances1
- **Table 3.** Ecological Health Livestock Ingesting Soil and Fodder, Upper Cap Concentrations for Schedule 3.1 Part 1 Substances
- **Table 4.** Human Health Intake of Contaminated Soil, Upper Cap Concentrations for Schedule 3.1 Part 2 Substances
- **Table 5**. Ecological Health Soil Invertebrate and Plants Exposure Upper Cap Concentrations for Schedule 3.1 Part 3 Substances

Protocol 11: Upper Cap Concentration of Substances

Provides upper cap concentrations for:

- **Table 6.** Water Upper Cap Concentrations for Schedule 3.2 Substances
- **Table 7.** Human Health Vapour Exposure Upper Cap Concentrations for Schedule 3.3 Substances
- **Table 8.** Environmental Health Aquatic Life Sediment Exposure Upper Cap Concentrations for Schedule 3.4 Substances

Trigger to Submit Site Risk Classification Report (SRCR) for applications for a legal instrument (CSAP):

- Protocol 12: Table 1, Column 1, #4
 - Application to a Director for a contaminated sites service in Table 2 or 3 of Schedule 3 of the Regulation

Timing:

 At the time the application for a contaminated sites service is submitted

Persons with the Duty to Submit Site Risk Classification Information:

• The applicant for the associated contaminated sites service www.csapsociety.bc.ca | ©Copyright 2018. Society of Contaminated Sites Approved Professionals of British Columbia.

Table 1. Notification triggers and timing for submission of site risk classification information

Column I	Column II	Column III	Column IV	Column V
No.	Notification Trigger	Timing for Submission of Site Risk Classification Information	Persons with the Duty to Submit Site Risk Classification Information	Notes
1	Submission of a Notification of Initiation of Independent Remediation to a Director	At the time the Notification of Initiation of Independent Remediation initiation is submitted	The person with the duty to submit the associated Notification of Initiation of Independent Remediation	1
2	Submission of a site investigation report required or ordered by a Director	At the time the site investigation report is submitted	The person required or ordered by the Director to submit the associated site investigation report	1
3	Submission of a Notification of Likely or Actual Migration to a Director	At the time the Notification of Likely or Actual Migration is submitted	The person with the duty to submit the associated Notification of Likely or Actual Migration	1
4	Application to a Director for a contaminated sites service in Table 2 or 3 of Schedule 3 of the Regulation	At the time the application for a contaminated sites service is submitted	The applicant for the associated contaminated sites service	2
5	Imposition by a Director of the requirement for a Site Risk Classification Report submission	At the time the Director has specified for the submission	The person on whom the Director imposes the requirement for the Site Risk Classification Report	
6	Potential or actual high risk conditions at a neighbouring parcel are indicated in the Site Risk Classification Report submitted to a Director for a parcel under any of the preceding triggers	At the time the Site Risk Classification Report is submitted for the source site	The person who has the duty to submit a Site Risk Classification Report under any of triggers 1 – 5	1, 3

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Protocol 12 Reporting Exemptions:

- Trigger does does not apply to oil and gas sites administered by the Oil and Gas Commission classified as "non-priority"
- When two or more "triggers" exist under Table 2 only one report needed.
- When a report has already been submitted to BC ENV within the past five years ...but...
 - If there is new information the report must be submitted
- Determination of no contamination

Protocol 12 Reporting Exemptions continued

- Independent remediation where the quantity of soil to be remediated does not exceed 5 cubic metres in volume during the entire course of remediation at the site.
- Residential Heating Oil Tanks
 - a) No NOM;
 - b) Only petroleum hydrocarbons in residential heating oil;
 - c) Sites which are not high risk sites;
 - d) Land used for residential land use; and
 - e) UST with a volume </= 2 500 litres has been or will be removed.
- Emergency Response to a Spill
 - This exemption is applicable only if the spill has been reported in accordance with the requirements of the Spill Reporting Regulation under the Act.

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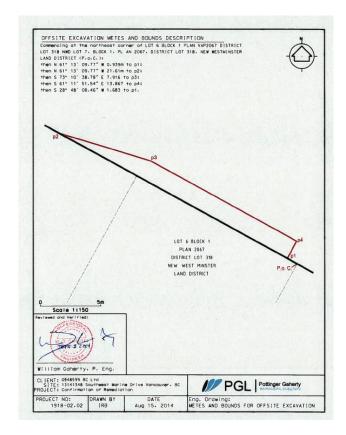
DOCUMENTATION

~ James Smith, Bob Symington, and Paul Webb



DOCUMENTATION

- Land Title
- Legal Plans
- Road Dedications and Boundary Issues



DOCUMENTATION

- Site registry searches
- PSI/DSI checklists (TG10 & 11)
- Include NOIR and NOCIR
- AG11 Notify affected parcel about public records

BRITISH COLUMBIA Miniaty of Environment	4				TECHNICAL G ON CONTAMIN	
This checklist is used in	combinatio	n with Technical Guidance 10.				
SITE:						
Reviewer:						
GENERAL TOPIC		Points of Review (Stage 1 PSI)	Reference	Applicability	Notes	Does report adequately address checklist question?
RELEVANCE	1	Were the Stage 1 PSI historical searches and site visit completed within 6 months of the CSAP review; or, if not, does the investigator provide a clear statement that onsite and offsite land uses have remained substantially the same?		Yes		
AUTHORS AND RELIANCE	2	Does the investigator identify who the major participants are in the investigation and state his/her qualifications?	CSR 5. 63	Yes		
	3	Does the report or cover letter provide reliance of the report to the Ministry?		Yes		
METHODS AND PROCEDURE	4	Does the investigator follow CSR methodology and procedure to complete the Stage 1 PSI?	CSR 5 58(1a)	Yes		
SUBJECT SITE	5	Has the investigator provided:		Ś		
DESCRIPTION	а	site information (e.g., civic address and legal description, etc.) as required in SoSC;		Yes		
	b	current municipal zoning of subject site;	CSSAF	Yes		
	c	approved (i.e. as identified on an Official Community Plan) municipal zoning of subject site;		If available	If there is a change in the zoning anticipated (find reference).	

BRITISH COLUMBIA Ministry of Environment	7		on with Technical Guidance 11.			TECHNICAL GUIL ON CONTAMINATE	
	Centom	315	m with recimical Guidance 11.				
SITE:							
Reviewer:	-	-					
GENERAL TOPIC	#	1	Points of Review (Stage 2 PSI and DSI)	Reference	Applicability	Notes	
AUTHORS AND RELIANCE	1		Does the investigator identify who the major participants are in the investigation and state his/her qualifications?	CSR S. 63	Yes		
	2		Does the report or cover letter provide reliance of the report to the Ministry?		Yes		
PROBLEM DEFINITION	3		Has the investigator:				
General		a	provided site information (e.g., civic address and legal description, etc.) as required in SoSC;		Yes		
		b	listed, reviewed, summarized and interpreted data from relevant previous environmental (investigation and remediation) and geotechnical reports, and identified information and data that was relied upon for assessment of site conditions?		If available		
		c	provided a clear rationale for changes to APEC or PCOC indicated in the Stage 1 PSI?		Yes, if applicable		
Context	4		Does the investigator describe the relationship of	CSR 58(5) and			

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AG11 Communications

- ADMINISTRATIVE **GUIDANCE 11 CSAP Communications Template**
- ADMINISTRATIVE **GUIDANCE 11** COMMUNICATIO **N RECORD**

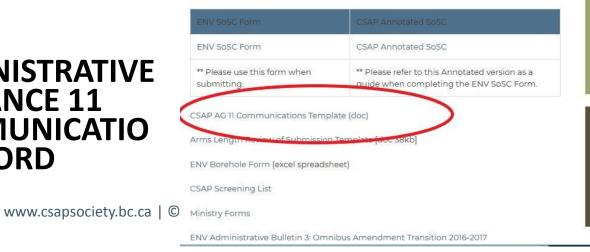
CSAP Members Area

Welcome, members! You can complete the following tasks through the CSAP Submissions Manager:

- Make a CSS application
- Track submission progress
- Find instrument templates
- Track professional development hours

Submission Guidelines

CSAP Transmittal Letter (submit Word version)









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AG11 Communication Record

ADMINISTRATIVE GUIDANCE 11: COMMUNICATION RECORD Project Number: 0987-01 Site Address: 1234 Any Street, Victoria, BC Client: Five W Co.

Affected Parcel Owner	Address	Date Notification of Likely or Actual Migration (NOM) was received by BC MOE and
		Affected Parcel
Property Owners:	1234 Any Street, Victoria, BC	August 23, 2017
John and Jane Doe		NOM and SRCR for 1234 Any St. – submitted by ABC Consulting Ltd.
1234 Any Street, Victoria BC V9T 1S4		
Tel: 250-515-7777		
Email: jdoe@hotmail.com		

Contact Details	Date	Type of Communication	Details Discussed
Property Owner:	22-July-17	Registered Mail	Notification of Contamination letter, Draft CoC
John Doe			
Property Owner:	25-Aug-17	In Person – P. Quigley	Notification of Contamination letter, Draft CoC
John Doe			
Property Owner:	13-Sep-17	Email – R. Guthrie	Notification of Contamination letter, Draft CoC clauses explained
John Doe			

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QUESTIONS?

We'd like to thank James, Lori and Paul for their time and hard work.



THANK YOU FOR YOUR PARTICIPATION

Please look for information on our next webinar: "Submissions Manager Walkthrough" Nov.20th, 2018

