

Spring 2016 members update

Message from the President

University of Victoria's Report on Professional Reliance in BC

I would to discuss a study completed by the University of Victoria's Environmental Law Centre, entitled Professional Reliance and Environmental Regulation in British Columbia. This report was completed to provide a review of the role that professional societies, such as CSAP, are playing in environmental regulation in BC's new regime of reduced regulation and increased reliance on non-governmental professionals. The report can be found at the following link:

<http://www.elc.uvic.ca/professional-reliance-and-environmental-regulation-in-british-columbia/>

The overarching aim of the study was to evaluate whether the professional organizations were providing the level of public trust that is required to protect BC's environment. The evaluation was based on evaluating the organizations on 10 criteria (the criteria are clearly listed in the document and are not listed here for brevity).

While the results of the review clearly indicate that the authors clearly see issues with the downloading of environmental governance on to industry and non-governmental professionals, it does indicate that CSAP is seen as providing a very good example of an organization that provides this professional reliance. In fact of the ten criteria used CSAP was rated as good in 8 of the categories and moderate in only two (criteria 5 and 10). Of note is that it was indicated that CSAPs auditing function was considered to be the best of all the professional reliance regimes reviewed. The auditing function is one of the most contentious roles played by CSAP, however; it is one of the most linked to public trust. The two where CSAP was ranked as moderate were; Conflict of interest, self-interest and independence and Monitoring, compliance and enforcement. With respect to the Conflict of interest, self-interest and independence criteria CSAP is currently in the process of creating policies and protocols to ensure that we have a proper conflict of interest framework in place. The Monitoring, compliance and enforcement criteria refers to providing the field verification of the results of reports. As acknowledged in the report, this would be an expensive and cumbersome task for CSAP to provide. We will however look to see if there exists a means in which this criteria can be practically implemented.

I think this review is informative and provides us with good evidence in which to look into the mirror and tell ourselves we have done a good job. More importantly though I believe it gives us some good information that along with feedback from members and stakeholders can be used to further strengthen our organization.

Gender Balance within CSAP

I would also like to discuss is the representation of female practitioners within CSAP. CSAP currently has 107 members (Approved Professionals) of which 19 are female. When I attend CSAP AGM or Professional Development meetings or when I look at the staffing of my firm I do not get the impression that there are only 1 in 5 females actively practicing in our industry. Even though there appears to be a

significant number of female practitioners in environmental consulting few are choosing to become APs. Only a few of the female APs that are currently registered are choosing to join committees or run for Board positions, we would like to understand why this is the case and if possible try to remove any real or perceived barriers.

It is my understanding that studies show that organizations that have boards and committees with mixed gender involvement typically have more creative, innovative and robust decision making processes, right now CSAP has only one female appointed Director. CSAP is not benefiting from the expertise and creativity of our female members and it would benefit all of us if we did. I encourage our female members to put their names forward for committee work as a first step and as Board candidates when they have the required 2 years of committee work. If we need to make some changes to our society's culture to foster an attitude of inclusiveness let's do so.

I hope everyone enjoys the summer and that you are all able to find time to enjoy it with your friends and family in between your busy work life.

MINISTRY UPDATES:

Required information on water use determinations in SOSCs

The ministry continues to check the Summary of Sites Condition (SOSC) in Protocol 6 submissions for information on water use determinations made under Protocol 21 "Water Use Determination" (P21). A number of submissions continue to have insufficient detail to support an exemption of drinking water use and a few submissions provide incorrect information.

On a site where a specified water use (DW, AW, IW or LW) has been determined not to apply using the criteria in P21, the arguments for the water use exemption must be included in the SOSC under Section 4.2 "Site Conditions". 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.

Water use determinations are site specific, but below are some examples of information/data required in the SOSC for DW exemptions:

- No current DW use:
 - No DW use within 500 m; or
 - Proof of natural confining barrier (NCB) protecting DW aquifer.
- Unit near marine or estuarine foreshore:
 - Site located within infilled marine or estuarine foreshore; or
 - Site located within 500 m; include sodium and chloride data.
- Unit does not qualify as a viable aquifer:
 - Include K-value (K_{max} if <6 wells or $K_{geometric\ mean}$ if ≥ 6 wells).
 - For bedrock; include both K-value and measured yield.
- Unit qualifies as a natural confining barrier:
 - Include NCB type (Type A or Type B);

- Include K-value (K_{\max} if <6 wells or $K_{90\text{th percentile}}$ if ≥ 6 wells);
- Include proof of sufficient thickness (depending on NCB type);
- Include proof of contaminant free (depending on NCB type); and
- Include statement regarding unit being continuous, uniform and fracture free.
- Exemption of shallow aquifers:
 - Proof unit is not hydraulically connected to underlying viable aquifer; i.e. show underlying NCB or no underlying viable aquifers; and
 - Include exemption criteria for shallow aquifer:
 - Not viable aquifer; include K-value;
 - Saturated thickness less than 2 m;
 - Aquifer in fill;
 - Aquifer in peat; include organic content (% organic matter by weight); or
 - Aquifer has poor natural water quality; include TDS (mg/L).

If a Director's determination of water use has been obtained on the site, please mention the decision in the SOSC. For questions regarding water use determinations please contact Amy Sloma or Annette Mortensen.

PSI requirements for Determinations of non-contamination

When can a Determination that a site is not a contaminated site be requested on the basis of a PSI Stage 1 investigation alone?:

- When a PSI Stage 1 is conducted on a Schedule 2 use site and no APECs are identified on the site or on neighbouring sites that could cause contamination of the site for which the Determination is sought.
- Technical Guidance 10 outlines the ministry's general expectations for Stage 1 and Stage 2 PSIs. Although not explicit in TG10, it is implicit that Stage 2 PSIs, and DSIs if warranted, will occur where APECs are identified. The ministry is in the process of revising TG10 and TG11 to adopt the 2015 CSAP Practice Guidelines which are more current and comprehensive than existing TG10 and 11.

Note: As a general rule, the ministry does not support requests for Determinations that a site is not a contaminated site for sites that are not captured under the CSR, effectively non Schedule 2 use sites. There may be exceptions. Recall that non Schedule 2 use sites become Schedule 2 use sites when they receive a NOM indicating they have been or likely have been contaminated by substances migrating from other properties (CSR, Sched 2, E10). If Determinations of non-contamination are sought for a non Schedule 2 use site, the same requirements apply as for a Schedule 2 use site, PSI Stage I investigations would be required to identify APECs on both the site seeking the Determination and on neighbouring sites, and if APECs were identified (such as an underground heating oil tank on a residential property), PSI Stage II investigations would need to be conducted to demonstrate the site was uncontaminated.

Minor Changes to Determination Template

- Clause 1 of Schedule B refers to “Determination of Contaminated Site” twice; once in the first paragraph and, if vapour clauses are required, in the last paragraph. In applications for Determinations that a site is not a contaminated site, these clauses should simply refer to “Determination”.
- Schedule C of the current template prefaces the list of substances for each media investigated with “To meet <not meet> numerical standards prescribed for defining whether a site is contaminated:”. A number of recent Determinations include the following language which is incorrect: “To meet <not meet> numerical remediation standards prescribed for defining whether a site is contaminated:”. Please use the Determination template to avoid this error.

Interpretation of Spill Reporting Requirements in the Context of Residential Underground Heating Oil Tanks

Background

The ministry originally received a request from an Approved Professional to clarify whether a spill report must be submitted when a leaking heating oil underground storage tank (UST) has been identified. Subsequently, the ministry was also asked to confirm whether the presence of a spill report on record would preclude the need for submission of a notice of independent remediation commencement.

Legal Context

The governing legislation includes the *Environmental Management Act* (EMA) and the Spill Reporting and Contaminated Sites Regulations (SRR and CSR respectively).

Analysis

Under the Spill Reporting Regulation (SRR), a spill is deemed to have occurred when a substance in an amount greater than the amount listed for that substance in the SRR is released or discharged into the environment.

"spill" means a release or discharge into the environment, not authorized under the Act, of a substance in an amount equal to or greater than the amount listed in Column 2 of the Schedule opposite that substance in Column 1. S. 1, SRR

Heating oil is considered a class 3 flammable liquid. The reportable spill volume for this class of substances is 100L.

According to the regulation, a spill must be reported when a person who had possession, charge or control of the substance immediately before the spill becomes aware of the spill.

2 (1) For the purposes of section 79 (5) of the Environmental Management Act, a person who had possession, charge or control of a substance immediately before its spill shall immediately report the spill to PEP. SRR

(2) Where it appears to a person observing a spill that a report under subsection (1) has not been made, he or she shall make the report referred to in this section.

In the case of heating oil contamination in soil that has resulted from historical releases or discharges, a qualified profession or other person is not required to report the spill if:

1. They did not have possession, charge or control of the heating oil prior to its release to the environment, and did not observe the spill
2. If the amount released to did not equal or exceed 100 liters or
3. The amount released exceeds 100 litres but is the result of historic or minor releases where the amount released in any year did not exceed 100 litres.

It is recommended that homeowners or qualified professionals, if unsure as to whether a release occurred when they had possession of the substance, report the spill, or if unsure of the amount of the spill report the spill.

Spills and Notifications of Independent Remediation (NIR)

Under the Contaminated Sites Regulation (CSR), notification of the director is required within 3 days after the commencement of independent remediation involving handling, management or treatment of contaminated soil, water, sediment or vapours, other than for purposes of investigation. Remediation is “independent” when it is conducted outside a ministry Approval in Principle, order or other legal instrument.

57 (1.2) A person who has a duty to provide notification to a director of commencement of independent remediation under section 54 (2) (a) of the Act must provide written notice to a director within 3 days after the commencement of any remediation activity involving handling, management or treatment of contamination, other than activity which has the purpose of obtaining results for investigation purposes... CSR

Where independent remediation is conducted as part of an emergency response to a spill, the person conducting the independent remediation is exempt from the requirement to notify the director of the commencement of remediation under 57 (1.2) provided the spill has been reported in accordance with the requirements of EMA and SRR.

57(2) In the case of independent remediation arising from emergency response to a spill of a polluting substance, a person is exempt from the requirements of subsection (1.2) if the spill has been reported in accordance with the requirements of section 79 of the Act and the Spill Reporting Regulation. CSR

When independent remediation has been completed, whether under an emergency response or not, the person who conducted the independent remediation is required to notify the director in writing within 90 days of completing the remediation.

54 (2) Any person undertaking independent remediation of a contaminated site must
(a) notify a director in writing promptly on initiating remediation, and
(b) notify the director in writing within 90 days of completing remediation. EMA

Failure to provide the required notification may result in an offence under the Act.

120 (17) A person who
(b) fails to notify a director of initiating or completing independent remediation under section 54(2)
commits an offence and is liable on conviction to a fine not exceeding \$200,000 or imprisonment for not more than 6 months, or both.

Summary

In circumstances of soil and groundwater contamination originating from undetermined historic releases or discharges from a residential heating oil UST, a spill report is not required. Exceptions would be where the contamination is indistinguishable from recent releases or discharges of heating oil in an amount or amounts greater than 100L are confirmed.

A notification of independent remediation (NIR) must be submitted to the director within 3 days of commencement of remediation of any contaminated media except where remediation is being conducted as part of an emergency response to a reported spill. A notification of completion of independent remediation must be submitted to the director within 90 days of completion of the remediation, whether or not remediation arose from an emergency response to a reported spill.

Failure to provide notification is an offence under EMA.

PERFORMANCE ASSESSMENT COMMITTEE

Detailed Screening

The results of recent screenings have shown that there are two areas that AP's should focus on which will allow for the quicker release of their instruments;

- The MOE is continuing its own internal screening of the SoSC where DW is indicated not to apply. Please ensure sufficient information is present to allow for this determination to be supported and that it meets the requirements of Protocol 21, and
- Several submissions have run into problems where Preapproval was required either for incomplete delineation or where the instrument does not address the full extent of the contamination as detailed in Protocol 6.

In addition, AP's are asked to review the revised Procedure 12 for the Issuance of Instruments. As per Procedure 12 Sections;

- "9.2.11 A supplemental plan should also be provided and labelled with a figure number where vapour attenuation factors apply to a portion of a site, to show where they apply." And

- “9.2.10 If both the numerical and risk-based standards are used as remediation standards in a legal instrument, the boundaries of the areas to which each type of standard applies must be shown in a supplemental site plan labelled with a figure number. Unique labels identifying the different areas must be provided in the supplementary site plan.”

Where possible these can be shown in “Attachment A” of the Instrument, but in some cases and for more complicated sites, a separate plan showing these area(s) can be attached to the CoC. The previously applied approach is to refer to a plan in a report(s) to show these areas and is no longer acceptable. The instrument should be standalone so that it can be readily understood without having to refer to long lost reports for the applicable areas where restrictions may apply.

If the Submitting AP has questions regarding items identified through the Detailed Screening which require regulatory clarification, the Society recommends that the AP contact the Ministry. When contacting the Ministry, APs must indicate that their enquiry is based on comments received from an ongoing Detailed Screening.

TECHNICAL REVIEW COMMITTEE

Request for Special Projects

Thank you for your suggestions for special projects. CSAP is speaking with the MOE to prioritize the special projects for next year. We are attempting to use the special projects funding wisely to create guidance to help us and our clients in our work.

Artesian Wells

The media recently reported on a situation in Vancouver where a geothermal water well punched through a confining layer with artesian water flowing up to the surface. It has resulted in several million dollars being expended to stop the flow of water. With lower standards, more emphasis on vertical delineation, and the requirement to prove a 5 m aquitard layer we are drilling deeper on many projects. Ministry of Environment has recently provided a preapproval not to vertically delineate partially due to possibility of encountering artesian conditions if the investigation proceeded deeper. It is best to have an experienced driller and hydrogeologist involved to prevent creating artesian conditions and if encountered, addressed quickly. Links to articles:

<http://www.vancouversun.com/touch/story.html?id=11775190>

<http://www.theprovince.com/technology/Water+breach+threatens+several+multi+million+dollar+Vancouver+homes/11774351/story.html>

MEMBERSHIP COMMITTEE

Membership Guidelines

The Membership Guidelines have been updated to clarify eligibility criteria and experience documentation requirements for new applicants. New to the guidelines in 2016 is a preference for applicants to have been involved in 3 successful submissions for Ministry instruments made under Protocol 6 for which the applicant played a primary role. This will be a preference for 2016 applicants but a requirement for applicants beginning in 2017 (note that applicants involved in fewer than 3 submissions may be considered based on the entirety of their experience and an interview). The main objective of this new eligibility criterion is to ensure that new members have prior experience with the CSAP process and therefore are better prepared to make quality submissions.

PD SUB-COMMITTEE

CSAP Fall PD Workshop first call for abstracts

First call for presentation abstract for the annual CSAP Fall PD Workshop to be held in November. The working theme for the event is "Regulatory and Technical Innovation & Case Studies". If you are interested in presenting please send your one page abstract to Andrew Sorensen [asorensen@thurber.ca]. Presentation length should be approximately 30 minutes.

CSAP NEWS

In Recognition

The Board of Directors and the membership as a whole thank Dr. John Wiens, P.Ag. for his dedicated service to the CSAP Society. John was instrumental in the development of the Contaminated Sites Regulation while with MOE. As a consultant he was a member of the Roster Steering Committee and an Approved Professional in CSAP. His knowledge of the regulatory regime was without peer. His invaluable participation in CSAP will be missed. We would like to extend our best wishes for his well-deserved retirement.

2016 AGM Agenda

Members – registration is now open for the CSAP Society AGM to be held on June 8, 2016!

Attendance at the AGM is important not only to vote in the election of directors, but to participate in the members' survey and make your opinions known. The AGM will again be followed by a members-only PD Workshop.

This year's AGM will hold elections for the three Parent Organization director positions. Look for a call for nominations to be sent the week of April 25.

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500 Granville Street
Vancouver, BC V6C 1W6

Updated Elected Director Eligibility Criteria

For those members interested in running for elected Directorships at the June AGM, please note that the eligibility criteria has recently changed. The most up-to-date directors application and eligibility criteria can be found [here](#).

Request for representatives - BCELTA

BC Environmental Laboratory Technical Advisory Committee (BCELTA) is forming two new sub committees to review the Microbiology and Toxicology sections of the Laboratory Manual and has requested a CSAP representative for each of the committees. Committee members will include representatives from MOE, the Environment Canada lab (PYLET - Pacific and Yukon Laboratory for Environmental Testing) and commercial analytical laboratories. This is a volunteer position. If you are interested please contact Cindy Ott (604-742-3876 or cott@slrconsulting.com).

SAB call for abstracts

The Science Advisory Board for Contaminated Sites in British Columbia (SABCS) is pleased to announce our 6th annual conference on Contaminated Sites. The SABCS will be presenting a professional development workshop on October 26, 2016 and a one day conference on October 27, 2016. The **Call for Abstracts for the conference is now open!** Abstracts that pertain to investigation, remediation, risk assessment, risk management and/or regulation of contaminated sites will be considered for inclusion in the conference, and will be accepted until June 3, 2016. Abstract submission details are located at <http://www.sabcs.chem.uvic.ca>. Please contact the conference chair, Zahra Pirani, for further details on abstract submission, opportunities for sponsorship, or for general conference inquiries at zahra.pirani@ch2m.com.