cbn
Canadian Brownfields Network

2800 14th Avenue, Suite 210, Markham, Ontario L3R 0E4
Telephone: (416) 491-2886 | Fax: (416) 491-1670
Website: www.canadianbrownfieldsnetwork.ca

September 24, 2020

Alberta Environment and Parks
Land Management

Sent via email: Land.Management@gov.ab.ca

Reference: Supplemental Guidance for Site-Specific Risk Assessments in Alberta

Mr. Sawatsky and Ms. Fairweather,

The Canadian Brownfields Network (CBN) appreciates the opportunity to participate in the Alberta Environment and Parks invitation to comment with respect to the draft Supplemental Guidance for Site-Specific Risk Assessments (SSRAs) in Alberta. CBN's Technical Advisory Committee (TAC) has solicited and compiled comments from interested members for the purpose of making this submission on behalf of CBN. CBN has a diverse membership of site owners, developers, consultants, and industry association representatives who are active in the area of brownfield development within Alberta and across Canada.

CBN is committed to supporting the redevelopment and reuse of brownfield properties through advocacy for regulations and policies that are founded on sound science and appropriate risk, are harmonized across jurisdictions, and provide clarity and certainty with respect to brownfield redevelopment.

The Supplemental Guidance for SSRAs provides clear guidance for practitioners to conduct SSRA in Alberta. CBN thanks Alberta Environment and Parks for developing this detailed guidance document and supports its implementation. We have also identified some areas for suggested modifications or more clarity for your consideration in the attached review comments summary.

In closing, we thank you for the opportunity to provide comments and input on the SSRA Guide and welcome further opportunity to consult with Alberta Environment and Parks on further endeavours to support brownfield development.

Kindest Regards,

Monisha Nandi   Chris De Sousa
Chair, Technical Advisory Committee   President
Canadian Brownfields Network   Canadian Brownfields Network

Page	Section	Line No.	Comments	Suggested Revision(s)	Rationale	Commenter (name &/or group)
	Overall		The draft SSRA is too conservative which is not encouraging risk-based approach.	Open the door to include some administrative controls (such as bylaw to prevent drinking water wells in the city) under SSRA and regulatory closure mechanism.	CBN would like to see that AEP consider to revise current regulatory framework to allow some exposure controls subject to regulatory closure.	CBN
5	1.3 3.2 4.1.2 4.2 4.2.2.3 4.2.5	124-127 304-306 420-422 498-510 596-597 665-666	Consult with "appropriate Regulator or key reviewers". It has been difficult to approach reviewers prior to complete the work/report. Should AEP consider to establish some resources to be approachable for consultantation prior to enter the work/reporting.	Please specify who should be contacted when seek for consultantation.	SSRA approach is complex. It would be very helpful if AEP can establish a team or share contacts who can be reached for consultation prior to beginning the work, and provide consistent review comments between reviewers.	CBN
7	2.1	197-8	"*Regulator closure is not available for sites under exposure control....* ". suggest to open up Alberta contaminated sites regulatory framework to risk-based approaches that encourage more site closures.	Include some exposure control options (such as adminstrative control) under SSRA which are eligible for regulatory closure.	Anticipation of acceptance of Low Probability Receptor and/or DUA exclusion options. Not all exposure control is created equal. For example, some administartive control could be accomodated under bylaw, land use zoning, and thus should not prevent closure.	CBN
10	3.1	270-273	"*However, if risk management is proposed, Alberta's Exposure Control Guide (Government of Alberta, 2016a) requires that risk assessments be conducted in the absence of any risk management assumptions , even when a Risk Management Plan (RMP) has been approved.* " Why can risk assessment not be conducted with risk managment assumptions? Does "risk management assumption" mean exposure controls or mitigations?	Clarity on the intent of this requirement is requested.		CBN
10	3.1	276-7	"*In summary, if a RMP is approved and is in place, SSRAs with and without the RMP in place are required* ." The expectation is unclear.	Clarity is required.		CBN
12	3.3	342-345	"*SSRA requires some form of monitoring to verify predictions......must also provide sufficient information to serve as a baseline for long term monitoring of relevant parameters* " It is unclear if monitoring for verification is required for all the SSRA or some. Should it be completed before SSRA completion? How long would be sufficent? If long-term monitoring is required, it will be difficult to leverage timing for regulatory closure request.	Delete the paragraph.	Once SSRA is completed, the site should be eligible for regulatory closure and terminating activities.	CBN
31	5	931-933	"*It is important to note that this is not an exhaustive list and other deficiencies may also lead to rejection or deferral of a submission.*"	delete this line in its entirety	The list included broad perspectives which could require extensive work due to different reviewers' opinion as "sufficent". The tone of this sentence seems to imply that a reviewer could use different reasons which aren't even listed in this section, to reject a SSRA submission. This is like a black box. The most important components should be identified in the list. Anything not listed there should not be critical and should not be used to reject the report.	CBN
11	3.2	303-306	The level of complexity is not defined and can be quite subjective	The level of complexity can be defined or at least guidance can be provided given hydrogeological and contaminant(s) source and pathway complexity.	For instance, existence of multiple acquifers underneath a given site, along with a combination of contaminants of different nature (DNAPLs, LNAPLs and metals), the duration of time through which the contaminant(s) have migrated through the medium etc. can be employed as criteria to at least provide some guidance as to the level of complexity.	CBN

Page	Section	Line No.	Comments	Suggested Revision(s)	Rationale	Commenter (name &/or group)
21	4.2.5		While it is stated that "It is up to the risk assessor to ensure that the models are used appropriately and validated with sufficient monitoring data.", it should be noted that model validation requires extensive historical data which are in most cases if not all, absent. In most cases, it is practically impossible to calibrate and validate a model, no matter how simple it would be, particularly when dealing with old (over decades old) plumes of DNAPL or LNAPL. Typically adequate temporal data on concentration is not available due to practical limitations in delineation, budget and limited timlines.	Scope of modeling needs to be at least broadly defined.	In general, the current concentrations are known (through delineation) and the model can be used to predict any possible offsite migration or vapour intrusion in a do nothing scenario to be compared to predicted concentrations where different risk management scenarios are implemented. Model results can also be employed for the design of risk management measures. The modeling approach needs to be shifted from a deterministic approach (where under circumstances, inherently would be simplified and practically impossible to validate), to a stochastic one where a range of parameters (typically unknown in a project with not so much historical information available) can be used along with different source and pathway assumptions, and the results can then be statistically analyzed to provide the risk assessor with the ability to "determine" maximum concentrations at an acceptable/agreed upon confidence level. A good example is (from structural point of view) Industrial Waste Management Evaluation Model (IWEM) by the US EPA, where sources such as landfills and waste piles etc. can be stochastically modeled at desired confidence level.	CBN