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April 1, 2021

Ministry of the Environment, Conservation and Parks (MECP) Technical Assessment and Standards Development Branch 40 St Clair Avenue West, 7th Floor Toronto, Ontario

Toronto, Ontari

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Attn: Paul Welsh, Brownfields Program Coordinator

Sent via email: paul.g.welsh@ontario.ca

RE: Environmental Registry of Ontario (ERO)# 019-2546 – Proposed updates to the Procedures for the Use of Risk Assessment under Part XV.1 of the Environmental Protection Act

Dear Mr. Welsh,

I am writing on behalf of the member firms of the Ontario Environment Industry Association (ONEIA) to provide our response to the proposed updates to the document entitled, *Procedures for the Use of Risk Assessment under Part XV.1 of the Environmental Protection Act* (here after referred to as the RA Procedures Document) posted as ERO# 019-2546.

Ontario is home to Canada's largest group of environment and cleantech companies. The most recent statistics from the federal government show that Ontario's environment sector employs more than 226,000 people across a range of sub-sectors. This includes firms working in such diverse areas as materials collection and transfer, resource recovery, composting and recycling solutions, alternative energy systems, environmental consulting, brownfield remediation, and water treatment – to name just a few. These companies contribute more than \$11-billion to the provincial economy, with approximately \$4.5-billion of this amount coming from export earnings.

ONEIA would like to thank MECP for the opportunity to review and provide comments on the proposed amendments to the RA Procedures Document. ONEIA's Brownfield Committee has solicited comments from interested members and is happy to provide the high-level feedback included in Table 1.

Table 1. ONEIA Comments on ERO# 019-2546				
No.	Section	Comment		
1	General Comment	Overall, the document is well written and easily understandable. The language is clear and easy to follow, and the cross references to the regulation (including the specific identification of related sections and information) are helpful in terms of understanding what is required.		
2	General Comment	The document would benefit from acknowledging specific emerging contaminants or issues for which a generic standard or process does not exist or is not addressed within this document (e.g., PFAS, LLRW or NORM, etc.)		

3	General Comment	An electronic RA submission process is pending. It would be helpful to acknowledge that point within the document so the anticipated change in procedure is acknowledged.
4	General Comment	Since 2011, the MECP has released several items that change the approach to the RA for various parameters or specific processes (e.g., treatment of lead, assessment of PFAS, etc.). References or direct inclusion via attachment in an appendix to these MECP changes should be included in this document.
5	Preface, First sentence	The first sentence references a more sensitive use as a "community centre", which is not specifically identified in the regulation. For clarity, this could be changed to indicate "indoor arena" or another example that directly aligns with the regulation.
6	Definitions and Section 5.3, page 41	Component Value: The Ministry's approved model does not include the most up-to-date component values reflecting changes to the TRVs which occurred since 2016.
7	Section 1.1, Paragraph 4	This text notes information that is not covered in the Procedures document. It may be worth noting that detailed associated radiological exposures/risk assessment is also not included.
8	Section 1.3, Paragraph 2	The text notes "site condition standards are applicable at most situations encountered at contaminated sites but may not always be appropriate for situations where property-specific considerations deviate substantially from the conditions assumed in the Ministry generic process used to develop the site condition standards". It may be worth noting specifically, somewhere in the document, that the site condition standards for soil are developed assuming only unsaturated conditions, as this seems to be an ongoing point of confusion in the industry.
9	Section 1.4.3, Page 6, Second bullet list	The way the text is written suggests every RA team should have the specialists included in the list; however, many RAs will not require all of the specialities noted. The language could be revised to note the RA team may require one or more team members with experience in those disciplines, depending on the specifics of the RA.
10	Section 1.4.3, Page 6, Second bullet list	The list should also note a team member with expertise in risk management measures and engineering controls may also be required.
11	Section 1.5, Paragraph 2	The text notes "the Ministry is fully supportive of the use of novel and innovative techniques to investigate environmental contamination, identify contaminant sources and extent of contamination, and develop a conceptual site model in a cost effective and timely manner". The demonstration of such support has not generally been observed in practice to date. Ideally, this is the approach the MECP intends to take going forward.
12	Section 1.6, Bullet 2	The text indicates that only the latest version of the model may be used; however, please be aware that practitioners often have no notice on the date at which new versions may be released and RAs will be in various states of development (including complete and about to be submitted) whenever the new model is released. A grace period for applying the former model should be applied for

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		RAs that are already in progress; otherwise, significant rework can be required adding undue burden to the process.
13	Section 2.2,	As above with regards to the Tier 2 model, a grace period for use
13	Sentence 1	of the old PSF should be allowed to avoid rework on PSFs that are
	Sentence 1	nearing submission.
14	Soction 2.2.1	
14	Section 2.2.1,	The text notes the need for owners to sign the PSF. The rules
	Last sentence	around signatures (i.e., wet vs electronic) are evolving. It would be
		helpful to note here the new rules around how signatures can be provided.
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15	Section 2.2.2,	The last sentence notes the need to identify the proposed RA
	Paragraph 1	approach. It would be helpful to note that if the RA does not align
		with any of the types of RA approaches listed in the PSF (e.g., it is a
1.0	Cartian 2.2.4	standard RA), then the RA approach is considered "other".
16	Section 2.2.4,	The text notes that the non-standard delineation (NSD) approach is
	Page 12,	intended for Tier 3 RAs (not Tier 2 RAs). Since the NSD approach is
	Second last	still fairly new to the industry, and there is confusion regarding
	paragraph	when and how it is to be used, it is likely worth emphasizing this
		limitation in its use. The text could potentially be bolded or
17	Cartian 2.2.C	highlighted to note its significance.
17	Section 2.2.6,	The last sentence notes that information included in the Phase
	Paragraph 1	Two Conceptual Site Model (CSM) does not need to be duplicated.
		This is also worth emphasizing, given the challenges with file sizes
		(noting the MECP is restricting submissions of files greater than a
		certain size) and consistency of information included throughout
		many RA reports (when CSM-related information is included in
40	Carlina 2 III	multiple places in the report).
18	Section 3, List	Consider including the engineering or hydrogeological report
	of Required	recommending the design of engineering and/or hydrogeological
10	Sections	controls (if applicable) in the list of appendices.
19	Section 3.3.1,	Editorial Comment: the formatting of the table should be updated
20	First Table	so the footnote appears on the same page as the table.
20	Section 3.3.1,	The text indicates that the Property-Specific Standard (PSS) can be
	Last	set at the maximum site concentration or the concentration below
	paragraph	which adverse effects would not occur. It should be clarified that
		this is only allowed if the concentration below which adverse
		effects would not occur is lower than the maximum site
		concentration.
21	6	
l	Section 3.3.2,	The first sentence suggests you could specify a standard in the RA
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	Paragraph 3	The first sentence suggests you could specify a standard in the RA that exceeds the maximum observed concentration by a "significant amount", implying greater than 20%, but that additional RMMs may then be required. This contradicts what is said in Section 3.3.1 and examples of this being allowed in practice are unknown. Does the MECP actually allow standards to be set higher than the maximum +20% concentration?
22	Paragraph 3 Section 3.3.2,	The first sentence suggests you could specify a standard in the RA that exceeds the maximum observed concentration by a "significant amount", implying greater than 20%, but that additional RMMs may then be required. This contradicts what is said in Section 3.3.1 and examples of this being allowed in practice are unknown. Does the MECP actually allow standards to be set higher than the maximum +20% concentration? While the option to remediate part of a property to avoid having
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		be established that aligns with the regulatory requirements and
		guidance.
23	Section 3.3.6, Paragraph 3	The first sentence references the need to remove free product to the "extent technologically practicable". Given the evolution in the concepts around managing free product in place since 2005, the Ministry may wish to consider updating this language, or expanding on the concept, so a better understanding of what is considered "practicable" can be gained from the document, as well as an understanding of MECP preferences (if relevant). It is acknowledged that the last sentence in this paragraph seems to be new, noting "QPs should contact the Ministry's local District Office in cases where free product (or the risk of free product formation) is expected to remain at an RA property".
24	Section 3.4, Third bullet in first list	Typically, RA reports do not include contact information for work references for the QPRA – nor do they need to, as the QPRAs have already been vetted at the PSF stage. The second sentence in that bullet should be deleted.
25	Section 4.2.1	Noting that the Phase Two CSM should essentially be lifted out of the Phase Two ESA and added to the RA document is helpful, as this has traditionally been another area of confusion in the development of the RA reports. Part of this confusion may come from the fact that the Phase Two CSM is the mandatory Section 6.10 of the Phase Two ESA. If instead the MECP could make the Phase Two CSM a mandatory Appendix of the Phase Two ESA, this would further facilitate the direct lifting out of the CSM from the Phase Two ESA report for inclusion in the RA.
26	Section 4.3	It is appreciated that the document notes that the QPESA and QPRA should work together to identify sites COCs. This concept has been frequently missed in delivery. The list of items to consider in selecting COCs is also helpful.
27	Section 4.3, First bullet on page 34	The text notes vinyl chloride is a known degradation product of trichloroethylene, "under specific conditions". Given the confusion around how to account for vinyl chloride as a degradation product, it would be helpful to include a reference to where information on those "specific conditions" could be found.
28	Section 4.3.1, Paragraph 2 under PAH Section	The text notes all carcinogenic PAHs detected at the RA property should be carried forward. Please confirm that only detected PAHs need be considered in this evaluation (i.e., non-detect PAH can be excluded). Also please confirm if PSS need to be set for all PAHs that are carried but did not exceed their respective SCS.
29	Section 5.4, Last paragraph	The text suggests that even for a Tier 3 RA, the MECP's expectation is that site-specific input parameters used in the approved model are to meet the requirements of Table 4 of Schedule E. Given the Tier 3 process is specifically supposed to be different from the Tier 2 process, the broad and strict application of Tier 2 requirements is inappropriate.
30	Section 6.2.5, Last paragraph	There are standard processes for deriving EPCs that the MECP should be wholly familiar with, such as via use of the US EPAs ProUCL software. As such, broadly considering any RA that derives EPCs as a new science RA is inappropriate.

31	Section 6.3.2, Last paragraph on page 57	The text references TRVs in the 2011 Rationale Document; however, the MECP has several times since 2011 released documents with updated TRVs. A reference to these updated documents (or ideally, a direct attachment of those documents to this report in an appendix) should be included here.
32	Section 6.3.2, Third bullet list on page 58	If the MECP's approved TRVs are being applied, the inclusion of this information should not be required. This just adds burden to the process, without adding value.
33	Section 6.4.4	Editorial: last column of the table, "Site Condition Standard" – standard is missing
34	Section 7.2, First paragraph and Section 7.5, Second paragraph on page 83	These sections reference the 2011 Rationale Document. Any related updates to the 2011 Rationale Document should also be identified and referenced.
35	Section 9.1.2	Given how uncommon the community assessment report (CAR) is, it would be helpful for an example to be included here as to when a CAR would be completed or considered.
36	Section 10.1, Paragraph 3	"If the RA is accepted by the Director and remediation is required"; This would never happen since the Director will not accept an RA until the remediation is complete.

We welcome the opportunity to discuss our ideas further. Please do not hesitate to contact the co-chair of our Brownfields Committee, Theresa Phillips (tphillips@pinchin.com) should you have any questions or feel free to contact the ONEIA office directly at 416-531-7884.

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Yours truly,

Alex Gill

Executive Director