

Regulatory Approval of Risk Tools

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One of the key challenges in getting site-specific risk assessments approved by regulators is the lack of formally approved tools, resources and methods. This limits the review of risk assessments to a small number of technical experts with limited available time. However, there are a variety of tools already developed that are broadly applicable to large numbers of sites and have been shown to effectively reduce remediation requirements/costs at very low cost. If these tools were vetted and approved by regulators, the review and approval of risk assessments could be streamlined.

The intent of this project is to work with regulators to get a small number of existing risk assessment tools vetted by AEP and AER and endorsed for use for their intended purposes. A further step (in a subsequent funding year) would be to then translate these tools into web applications which PTAC funders could access.

It is anticipated that this project would also include endorsement of specific screening Tier 2 approaches

for common site conditions that are not currently addressed within Tier 2 guideline modification:

- Guidelines for the protection of domestic use aquifers (DUAs) at sites where the shallow groundwater is not a DUA but the DUA pathway cannot be unconditionally eliminated;
- Screening groundwater guideline calculation approaches for inorganics; and
- 1-D vertical unsaturated zone transport.
- The project is expected to result in faster and more consistent regulatory approval of site-specific risk assessments, saving time while reducing remediation costs at large numbers of sites.

2019 Update Report

2019 Event Presentation – May 2, 2019

2021 Update

The Tier 1 groundwater model has a built-in assumption that shallow groundwater is a domestic use aquifer (DUA). However, in many cases shallow groundwater is not a DUA. The proposed tool is intended for use when DUA is a critical pathway, shallow groundwater is not a DUA, but the pathway cannot be unconditionally eliminated (i.e., insufficient data to demonstrate adequate isolating unit, isolating unit doesn't meet elimination requirements, or substance not eligible

for elimination). The proposed tool is a simple modification of the existing Tier 1 groundwater model, adjusted to account for vertical transport through clean saturated (instead of unsaturated) soils and dilution within a deeper DUA.

Estimated date of completion: June 2022