



**Remediation Standards Order of Magnitude and  
Phase-in of Remediation Standards  
Frequently Asked Questions (FAQs)  
September 2021**

**Order of Magnitude Evaluation**

*(For sites or areas of concern that have a final remediation document and a remedial action permit)*

**1. When is the order of magnitude evaluation conducted?**

The order of magnitude evaluation is conducted as part of the next remedial action protectiveness/biennial certification for the site or area of concern. The Exception to this is if the next scheduled remedial action protectiveness/biennial certification occurs between May 17, 2021, and November 17, 2021, the order of magnitude evaluation can be conducted as part of the 2023 remedial action protectiveness/biennial certification. It should also be noted that this applies only to the order of magnitude evaluation. All other aspects of the remedial action protectiveness/biennial certification will be required in 2021.

**2. What type of evaluation do I need to do if a limited restricted use or restricted use soils-only Response Action Outcome (RAO) was issued?**

The same evaluation as you would if an area of concern RAO was issued except that only soils would be evaluated.

**3. Can the pre-2021 remediation standards (default and site-specific remediation standards) be used to demonstrate protectiveness of the remedial action?**

The pre-2021 remediation standards (default and site-specific remediation standards) can be used to demonstrate protectiveness of the remedial action **except** for a newly adopted remediation standard for a given contaminant for a given exposure pathway that is more stringent by an order of magnitude or more compared to the prior remediation standard. Under this scenario, the new remediation standard must be used to determine the continued protectiveness of the remedial action.

**4. What remediation standards are subject to the order of magnitude evaluation?**

An order of magnitude evaluation is conducted for every newly adopted remediation standard for a given exposure pathway that is more stringent by an order of magnitude or more compared to the prior remediation standard.

**5. How is the order of magnitude evaluation conducted?**

The new remediation standard is compared against the greatest concentration of the applicable contaminant that remains at the site or area of concern. If the difference between the greatest remaining contaminant concentration and the new remediation standard is less than an order of magnitude, no further action is required at the site or area of concern for that contaminant for the applicable exposure pathway. The remedial action protectiveness/biennial certification should include the results of this comparison. The deed notice and remedial action permit do not need to be modified.

If the difference between the greatest remaining contaminant concentration and the new remediation standard differs by an order of magnitude or more, then a protectiveness evaluation is required.

If this evaluation indicates that the existing remedy is protective, no further remedial action is required. If the deed notice and remedial action permit do not have the order of magnitude contaminant(s) listed, then the deed notice will have to be terminated, a new deed notice will have to be filed, and the remedial action permit will need to be modified to incorporate any new contaminant(s) that needs to be included.

If this evaluation indicates that the existing remedy is not protective, then it will be required to determine how long it will take to conduct additional remediation at the site or area of concern in order for the remedy to again be protective of public health and safety and of the environment.

1. If the site or area of concern can be remediated before the next remedial action protectiveness/biennial certification is due, the additional remediation can be conducted under the remedial action permit. The remediation activities must be documented in the next remedial action protectiveness/biennial certification submittal. If the remediation changed any aspect of the remedial action permit, then it will be necessary to terminate the deed notice, file a new deed notice, and modify the existing remedial action permit.

If the additional remediation results in order of magnitude contaminant concentrations remaining on the site that are less than an order of magnitude difference compared to the new remediation standard, no further remediation is required. If the remediation changed any aspect of the remedial action permit, then it will be necessary to terminate the deed notice, file a new deed notice, and modify the existing remedial action permit.

2. If the additional remediation will not be completed prior to the submittal of the next remedial action protectiveness/biennial certification, then such remediation will be conducted as a new case. This would include calling in the discharge to the Hotline (877-WARNDEP; 877- 927-6337) and the assignment of a new case number.

If the additional remediation results in order of magnitude contaminant concentrations remaining on the site that are less than an order of magnitude difference compared to the new remediation standard, no

further remediation is required. If the remediation changed any aspect of the remedial action permit, then it will be necessary to terminate the deed notice, file a new deed notice, and modify the existing remedial action permit.

**6. Is there a phase-in procedure for sites or areas of concern that are issued a final remediation document between May 17, 2021 and November 17, 2021?**

Yes. If a site or area of concern is issued a final remediation document during this time period, the order of magnitude evaluation can be conducted pursuant to the Brownfield and Contaminated Site Remediation Act (Brownfield Act) at N.J.S.A. 58:10B-13e. **Note:** If the remedy requires a deed notice and remedial action permit, these must be in place prior to issuing the final remediation document.

1. If the deed notice and remedial action permit are for contaminants that are not impacted by the order of magnitude provisions, then the Department recommends that a remedial action workplan that is certified by the LSRP be submitted to the Department (if not done so already). This would allow the site or area of concern to be remediated using the prior remediation standards (both default and site-specific remediation standards) pursuant to the Brownfield Act at N.J.S.A. 58:10-12j.

If the Department, after its inspection and review, determines that the workplan is not acceptable, the LSRP can withdraw it. If not, the Department will update the status of the RAW to “rejected/incomplete.” If the workplan is withdrawn or rejected, then the protections provided pursuant to the Brownfield Act at N.J.S.A. 58:10B-12j will no longer apply, and the site or area of concern must be remediated using the newly adopted remediation standards.

2. If a newly adopted remediation standard for a given contaminant has decreased by an order of magnitude or more compared to the prior remediation standard, and a limited restricted or restricted use remedy is implemented, a remedial action permit will be required prior to the issuance of the RAO. It will be necessary to submit an approvable soil

remedial action permit application to the Department by October 17, 2021, to allow the Department time to review and approve the permit prior to the November 17, 2021, deadline. For such permit applications, contact the Bureau Chief of the Bureau of Remedial Action Permitting by email indicating that an expedited review of the soil remedial action permit application is being requested. If an approvable remedial action permit is not submitted by that date, then an order of magnitude evaluation cannot be conducted pursuant to the Brownfield Act at N.J.S.A. 58:10B-13e.

If, however, a remedial action work plan has been certified by an LSRP and submitted to the Department by November 17, 2021, as noted in 1 above, an order of magnitude evaluation can be conducted pursuant to the Brownfield Act at N.J.S.A.58:10B-12j. However, for those contaminants with recently adopted remediation standards that are more stringent by an order of magnitude or more compared to the prior remediation standard, the newly adopted remediation standard must be used to remediate the site or area of concern.

**7. Can a responsible party use a mixture of 2021 remediation standards and pre-2021 remediation standards?**

Yes, if the site or area of concern has:

1. a Department-approved RAWP or RAR, or an LSRP certified RAWP or RAR, submitted to the Department no later than November 17, 2021. The RAWP or RAR must be modified to indicate by contaminant and exposure pathway what remediation standards are being applied at the site or area of concern. **Note:** Newly adopted 2021 remediation standards subject to the order of magnitude provisions must be used to remediate the site.
2. been issued a final remediation document no later than November 17, 2021. If a deed notice has been filed and a remedial action permit issued, these must be modified to indicate by contaminant and exposure pathway what remediation standards are being applied at the site or area of concern. **Note:** Newly adopted 2021 remediation standards subject to the order of magnitude provisions must be used to remediate the site.

## Vapor Intrusion

### **1. What are the vapor intrusion exposure pathway equivalents to a remedial action workplan and a remedial action report that can be used to allow old (March 2013) vapor intrusion soil gas and indoor air screening levels for previously conducted and future vapor intrusion investigations?**

For vapor concern cases, the 60-day mitigation plan [N.J.A.C. 7:26E-1.15(e)2] is equivalent to the remedial action workplan (RAW), and the 180-day mitigation response action report [N.J.A.C. 7:26E-1.15(e)4] is the equivalent to the remedial action report (RAR).

For vapor intrusion immediate environmental concern (IEC) cases, the approved Engineered Systems Report Action (ESRA) or IEC Source Control Report are considered equivalent documents to the RAW or RAR, respectively.

The screening levels and/or standards for the VI exposure pathway used in the LSRP-certified and IEC-case manager approved 60-day mitigation and 180-day mitigation response action report (vapor concern cases) or ESRA and IEC Source Control reports (vapor intrusion IEC cases) would remain as appropriate screening levels and/or remediation standards, except that 1,1-dichloroethene contamination must be remediated using its newly promulgated indoor air remediation standard due to the order of magnitude provisions.