# **Response Action Outcome Guidance Document Change Log**

## List of significant changes from Version 2.0 (April 2016) to Version 3.0 (October 2021)

The document was updated to reformat the Introduction, provide additional clarification and instruction for the completion of each section of an RAO and use of Notices, RAO Type Decision Matrix and Quick Reference Checklist, guidance for amending and withdrawing an RAO and the addition of RAO Shell Scenarios/Instructions.

#### 1. Cover Page

#### Logo updated

Document Name changed from "Issuance of Response Action Outcomes (RAO)" to "Response Action Outcome Guidance Document" Document Date changed from April 2016 to October 2020. Document version changed from Version 2.0 to Version 3.0.

## 2. Table of Contents (TOC)

TOC has been expanded to identify all individual notices under Section VIII. Hyperlink has been established to link TOC with each section and each individual notice.

#### 3. Section I. Introduction

Minor rewording.

Paragraph is added to explain when ISRA Case numbers and ISRA Transactions are to be used in "Re" section of the RAO.

## 4. Section II. Issuing Response Action Outcomes

## A. To Whom an RAO is issued:

Minor rewording.

A clarification to the definition of the person responsible for conducting the remediation has been added in the third paragraph.

#### B. When to Issue an RAO:

This section has been reworded to better clarify when an RAO can be issued.

Note has been added to clarify how to submit an RAO.

#### 5. Section III. Payment of Department Fees

Minor rewording.

## 6. Section IV. Response Action Outcome – Reference "Re": Section Overview

The Site Information sub-section was expanded to provide details on when to and when not to include ISRA case number(s), ISRA transaction(s) and Well Permit numbers under the "Re:" section of the RAO.

## 7. Section V. Response Action Outcome Variations

## A. Remedial Action Type (Extent of Remediation)

1. Unrestricted Use RAO – This section was expanded to include additional guidelines on the creation of Unrestricted Use RAOs

## B. Scope of Remediation for RAOs

- Area(s) of Concern [AOC(s)] This section was reworded and an additional scenario (Option 3. Area of Concern combined within Individual Medium only AOCs) was added to the list of options.
- **3. ISRA Industrial Establishment as defined according to N.J.A.C. 7:26B** Instructions were included to a) address presence of Historic Fill at ISRA subject properties and b) address Limited Conveyance situations.

# 8. Section VI. Issuing RAOs Involving Ground Water Remedies and Coordination with Remedial Action Permits

- A. Ground water is remediated to the Ground Water Remediation Standards (N.J.A.C. 7:26D): Unrestricted Use RAO - This section was reworded to clarify the intent of the message.
- B. Ground water contamination remains above the Ground Water Remediation Standards: Limited Restricted Use RAO –

Section 1 has been reworded to clarify that soils above the static water table have been addressed. This section now compares soil results to the Migration to Ground Water Soil Remediation Standards (MGWSRS) as well as the Impact to Ground Water Soil Screening Levels (IGWSSL).

Section 2 has been reworded to ensure that various soil compliance options are available using the Introduction to Soil Remediation Standards Guidance dated September 2017.

C. Ground water remains above the standards and cannot be remediated due to technical impracticability: Restricted Use RAO – This section has minor rewording to emphasize that containment is required to address any product or high levels of contamination in ground water that is technically impracticable to treat or remove.

# 9. Section VII. Compliance with All Remedial Action Permits

Minor Edits. Emphasis was included to state that the new statutory permittee is responsible for requesting a remedial action permit transfer and must apply for a remedial action permit pursuant to N.J.A.C. 7:26C-7.11.

## **10.** Section VIII. List of Notices in the RAO

This section has been reworked to include additional instructions for the proper application of each notice. Notices are now organized based upon similar applications. Significant changes and new notices have been identified below.

- Well Decommissioning: This notice was incorrect in Version 2.0 and has been replaced with the correct version from the Model Response Action Outcome promulgated in ARRCS, N.J.A.C. 7:26C.
- Building Interiors Addressed: (additional use instructions are provided)

- Regional Natural Background Levels of Materials in Soil: (additional use restrictions are included for the proper use of this notice)
- Historically Applied Pesticides Not Addressed: (minor language changes to instructions are provided)
- Known On-site Contamination Source Not Remediated Historic Fill (Area of Concern RAO): (additional use instructions and restrictions are included for the proper use of this notice)
- In-Service Railroad Lines, Spurs and Sidings Not Remediated: (additional use instructions are provided)
- Sediment Contamination from an Off-Site Source Not Remediated- General (This notice was not present in Version 2.0)
- Contamination Remains On-site Due to Off-site Contamination (additional use instructions are provided when both on and off- site ground water impacts are present. The contaminant plumes are either unrelated contaminants, which may or may not be commingled or are related contaminants and are not commingled on the site)
- The following three notices were included within the Commingled Plume Technical Guidance Document but were not presented in Version 2.0 of the RAO Guidance Document
  - On-site Commingled Plume Condition Exists: Similar constituents on-site and off-site Sources
  - On-site Commingled Plume Condition Exists: Similar constituents multiple on-site discharges
  - On-site Commingled Plume Condition Exists: Dissimilar constituents multiple on-site discharges
- The following three notices are presented to the regulated community for the first time within this RAO Guidance document.
  - Transfer of Monitoring Well Use (Redesignated use)
  - Indeterminate Vapor Intrusion (VI) Pathway Not Yet Evaluated
  - Long-Term Vapor Intrusion Monitoring

## 11. Section IX. Approval Process for Modifications of the RAO Model or RAO

No changes.

## 12. Attachment 1. RAO SHELL DOCUMENT

No changes.

- **13.** (Former) **Attachment 2. Response Action Outcome Issuance Examples** has been moved and modified. It is now located under Attachment 5 and identified as Response Action Outcome Type Decision Matrix.
- 14. (New) Attachment 2. Amended Response Action Outcome Language To Be Used When Amending Administrative Issues This section provides guidance for the LSRP to amend RAOs issued for both non-Child Care and Child Care facilities. It was relocated from Attachment 4 of Version 2.0.
- **15.** (Former) **Attachment 3. RESPONSE ACTION OUTCOME QUICK REFERENCE CHECKLIST** has been relocated under Attachment 6.

- **16.** (New) **Attachment 3. Withdrawing Response Action Outcome and corresponding phase reports** This section has been added to provide the LSRP with guidance and includes an associated shell document for withdrawing RAOs.
- **17.** (Former) Attachment 4. Amended Response Action Outcome Language To Be Used When Amending Administrative Issues This section is relocated to Attachment 2.
- 18. (New) Attachment 4. RAO Shell Scenarios/Instructions- This section has been added to assist the LSRP in crafting the RAO correctly based upon frequently identified scenarios. Examples include issuing RAOs when pre-existing situations are present such as existing Restricted or Limited Restricted conditions, addressing off-site impacts, RAO Issued for Multiple Media with Multiple Restrictions, etc.
- **19.** (Former) **Attachment 5. Withdrawing a Response Action Outcome** This section has been updated and is now located under Attachment 3.
- **20.** (New) **Attachment 5. Response Action Outcome Type Decision Matrix** This section was previously located under Attachment 2 in Version 2.0. It has been moved and modified to clarify which Remedial Action Type corresponds with each remedial phase given various site conditions.
- 21. (New) Attachment 6. Response Action Outcome Quick Reference Checklist This section was previously located under Attachment 3 in Version 2.0. Additional instructions have been provided under the "Re" (Reference) section of the RAO Quick Reference Checklist. Location options have been provided if no Block/Lot information is available for the site. Guidance regarding the appropriate entry of ISRA Transaction and ISRA Case numbers is included. Guidance regarding the appropriate entry of Well Permit numbers is included.