

Guidance for the Issuance of Response Action Outcomes (RAO)

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(Draft-Deliberative Material)

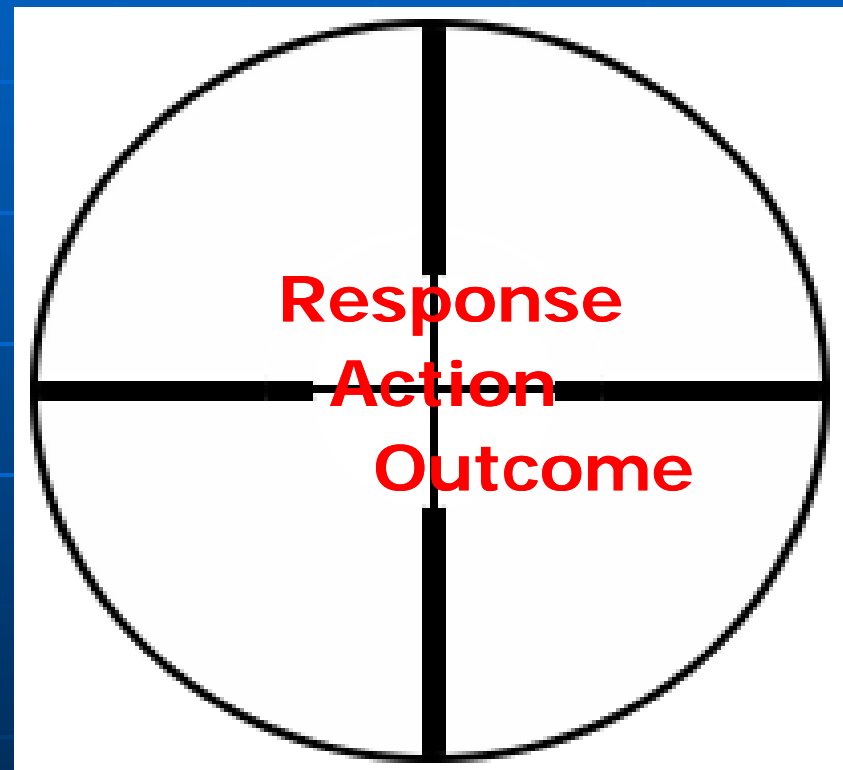
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Today's Presentation

- What is a RAO?
- Define the different RAO Variations
- Who are RAOs issued to?
- When is a RAO issued?
- How is a RAO prepared and structured?

Site Remediation Reform Act – Section 2 and 14

- SRRRA added RAO as the new target
- RAOs and NFAs Collectively known as “Final Remediation Documents”

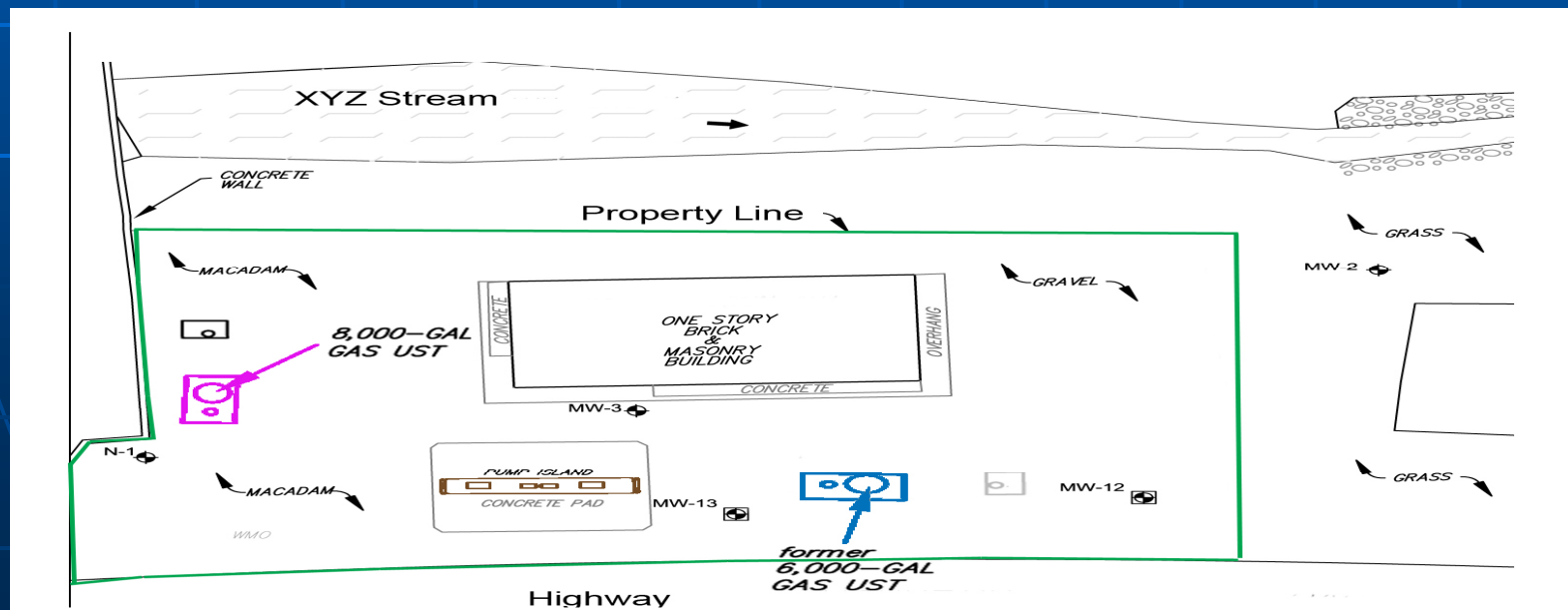


Location being Remediated

Entire Site
vs.
Area of Concern

Entire Site

Entire Site - The entire parcel subject to remediation. Includes any contamination within that subject parcel and where ever those contaminants have migrated on site or off site, regardless of media impacted.



Area of Concern

- Location of any contamination and where ever those contaminants have migrated on site or off site, regardless of media impacted.



What is a RAO?

LSRP's written professional opinion that the location was remediated in accordance with applicable statutes, regulations and guidance, based on historical use of the site or Area of Concern (AOC), that:

1. There are no* contaminants at a "site" or "AOC"; or

*Notes one "exception" as a matter of policy to be covered later

What is a RAO (continued)?

2. Any contaminants present at a site or AOC have been remediated; and
3. Remedial action is protective of public health, safety, and the environment; and
4. All applicable permits have been obtained.

Response Action Outcome Variations

Factors to Consider:

- 1) Scope of Remediation – Determined by regulation, oversight document, person conducting the remediation and identified discharges. (i.e. ISRA covers the entire “Industrial Establishment”; UST Regs. cover the regulated UST System; Spill Act covers all discharges)

Response Action Outcome Variations

Scope of Remediation (cont.)

Results in either:

Entire Site RAO – Always based on the completion of a Preliminary Assessment at a minimum; or

Area of Concern RAO – anything less than an Entire Site RAO. An AOC RAO can be issued while an “Entire Site” cleanup proceeds

Response Action Outcome Variations

Factors to Consider (cont.):

2) Extent of Remediation –

Determined by whether applicable remediation standards\criteria have been met, or if institutional and engineering controls, or an institutional control alone, have been used as part of the remediation.

Response Action Outcome Variations

Extent of Remediation

Results in either:

Unrestricted Use RAO – Most stringent remediation standards\criteria met; or

Limited Restricted Use RAO – Institutional Control (IC) only used as part of the remediation (i.e. CEA)

Restricted Use RAO – IC and Engineering Control used as part of the remediation

Response Action Outcome Variations

Six different RAOs

For an Area of Concern

- Unrestricted
- Limited Restricted
- Restricted

For an Entire Site or ISRA Industrial Establishment

- Unrestricted
- Limited Restricted
- Restricted

Who are RAOs Issued To?

SRRA Section 14

“..To the person(s) conducting the remediation....”

When is a RAO Issued?

- After the “entire site” or “AOC” have been remediated in accordance with applicable statutes, rules and regulations protective of public health, safety and the environment.”

(Note: Copy simultaneously filed with the Department with 3 electronic copies of remediation related records. Dept. of Children and Families copied on matters involving Child Care Centers)

When is a RAO Issued (Cont.)?

New for Ground Water (GW) Impacts

- GW remains > GW Remediation Standards but levels are low and non-decreasing** – Limited Restricted Use RAO* if conditions in Attachment 2 – Protective GW Remedies with Non-decreasing Levels of GW Contamination under a Natural Attenuation Remedial Action

Notes: *Assumes soils remediated to unrestricted use

** Assumes GW Remedial Action Permit obtained

When is a RAO Issued (Cont.)?

New for Ground Water (GW) Impacts

- GW remains > GW Remediation Standards requires engineered containment strategy for portion of the plume and decreasing levels** for other portion. – *Restricted Use RAO*

*Notes: ** Assumes GW Remedial Action Permit obtained*

When is a RAO Issued (cont.) & Contamination Remains

1. Contamination migrating onto the site (PA\SI required) – No site contribution;
2. Natural background;
3. Contamination remediated and remedial action permit obtained;

When is a RAO Issued (cont.) & Contamination Remains

4. Less than an Order of Magnitude Change
 - a. Levels in approved RAW changed $< 10X$ or;
 - b. Site subject to a final remediation document and the difference of the new standard and concentrations of remaining contamination is $< 10X$.

When is a RAO Issued (cont.) & Contamination Remains

- 5. RAO issued for an AOC while rest of site is undergoing remediation; or
- 6. The “exception” = “Soils-Only” RAO issued when ground water contamination remains from the site or AOC receiving the soil-only RAO

Miscellaneous

- All Department fees and oversight costs must be paid before RAO is issued.
- Under “Planned Real Estate Development Full Disclosure Act” – RAO for the entire site or portions of the site allows final transfer to occur.
- RAO includes a Covenant Not to Sue (CNS) by Operation of Law. Compliance with Remedial Action Permits required to maintain CNS benefits & prevent RAO revocation

How is a RAO Prepared Structured ?

RAO Format

- Addressee (Person Conducting the Remediation)
- Remedial Action Type (Extent of Remediation)
- Scope of Remediation (AOC vs. Entire Site)
- Location Identifiers
- LSRP Statements
- Conditions (2 possible)
- Notice Section (18 possible)
- LSRP Signature
- CCs