

TEXAS RISK REDUCTION PROGRAM

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BACKGROUND:

TEXAS RISK REDUCTION PROGRAM (TRRP)

THE TEXAS RISK REDUCTION PROGRAM (TRRP) RULE (30 TAC 350) AND CONFORMING RULE CHANGES WERE ORIGINALLY PUBLISHED IN THE TEXAS REGISTER ON SEPTEMBER 17, 1999, AND BECAME EFFECTIVE ON SEPTEMBER 23, 1999. THE RULE ESTABLISHES RESPONSE ACTION REQUIREMENTS FOR THE REMEDIATION PROGRAM AREAS OF THE TCEQ.

The intention of TRRP is to focus on releases under the jurisdiction of the TCEQ Remediation Division program and on releases that threaten or affect water resources (groundwater, surface water/sediment), and/or those releases that necessitate a decontamination or control remedy.

IS YOUR RELEASE SUBJECT TO TRRP?

The TRRP Rule (30 TAC Chapter 350) establishes criteria for determining if a release is subject to the program. Certain assumptions are established in determining subjectivity to TRRP. If any of these assumptions is invalid for a specific release, then the release will be subject to TRRP:

- The TCEQ was notified of the release in accordance with the Texas Water Code and the applicable program rules.
- All source areas are adequately identified.
- Properly collected samples are analyzed for all target chemicals of concern (COCs) using method quantitation limits that are at or below the applicable action levels, unless the action level is lower than the lowest MQL for the most sensitive standard available under the analytical method.
- Groundwater sampling is sufficient to characterize COC concentrations in the uppermost saturated zone at all source areas.

BACKGROUND:

TEXAS RISK
REDUCTION
PROGRAM (TRRP)

ACTION LEVELS

For the purpose of determining which releases are subject to TRRP, action levels are defined as the lowest applicable Tier I residential protective concentration level (PCL) for a given COC, assuming a 0.5-acre source area and Class 1 groundwater. The table below indicates the appropriate human health exposure pathway action level for each medium:

MEDIA	TOTSOIL_{COMP}	GWSOIL_{ING}	AIRSOIL_{INH-V}	GWGW_{ING}	AIRGW_{ING}	TEXAS-SPECIFIC BACKGROUND
Surface Soil (0-15-ft)	YES	YES				YES
Subsurface Soil (>15-ft)		YES	YES			YES
Groundwater			YES	YES	YES	YES

OUR SERVICES AND APPROACH:

DETERMINING
TRRP
APPLICABILITY

To determine TRRP applicability, conduct an investigation when there is evidence that there may have been a release, or when there is another voluntary or mandatory reason for investigation (e.g., commercial real estate transactions, closure of a solid waste management unit, permanent removal from service of an underground storage tank). The results of the investigation may result in one of three scenarios:

SCENARIO # 1: COC CONCENTRATIONS ARE BELOW BACKGROUND OR THE MQLS.

TRRP is not applicable and a report to the agency is not required (unless required by rule) when:

- the COC concentrations are not detected above the higher of the MQL or background,
- there is no other evidence of a release, and
- response actions were not required to achieve MQLs or background.

SCENARIO # 2: COC CONCENTRATIONS ARE ABOVE BACKGROUND OR MQLS BUT BELOW ACTION LEVELS, AS DEFINED PREVIOUSLY IN THIS DOCUMENT.

When COC concentrations exceed MQL or background, both ecological and human health exposure pathways must be considered. A Tier 1 Ecological Exclusion Criteria Checklist must be completed to determine if ecological exposure pathways may be of concern. If the site fails the checklist, or if water resources (groundwater, surface water/ sediment) are threatened or affected, the release is subject to TRRP.

OUR SERVICES AND APPROACH:

DETERMINING TRRP APPLICABILITY

If the site passes the ecological checklist, evaluate the human health exposure pathways by comparing the analytical results to the action levels defined in the above table. If the concentrations do not exceed the soil action levels and there is no evidence of other affected or threatened media, the release is not subject to TRRP. Submit a report that documents the investigation and provides justification for no further action. If the agency concurs with the conclusions, a no further action letter will be issued. Otherwise, the release is subject to TRRP.

SCENARIO #3: COC CONCENTRATIONS ARE ABOVE ACTION LEVELS.

If the concentrations exceed soil action levels, the release is subject to TRRP, unless the person elects to evaluate the groundwater exposure pathway. Collect a representative groundwater sample from each source area to document whether groundwater is affected above action levels. Conduct the sampling in a manner that will prevent COCs from migrating to the groundwater during the drilling or sampling process. Compare the results to the groundwater action level. If COC concentrations exceed the groundwater action levels, the release is subject to TRRP. If representative COC concentrations in groundwater do not exceed the action levels, the person can choose a course of action based on which soil action levels are exceeded.

For any action level exceeded, excavation and proper disposal of affected soil can be conducted if the affected soil is located on site, entirely in the vadose zone, and can be removed within 60 days from the date the release was reported to the agency. Collect discrete samples to verify the COC concentrations after excavation. If only the GWSoilng action level is exceeded, the person may choose to collect samples from the areas of highest concentrations for Synthetic Precipitation Leaching Procedure (SPLP) analysis to determine COC leachability. This process can be done before, after, or in lieu of excavation. When the SPLP analytical results are greater than the GWGWIng action level, the release is subject to TRRP unless further excavation is completed within the 60-day timeframe, followed by additional analysis. If the final soil and/or SPLP leachate analytical results do not exceed GWSoilng or GWGWIng, respectively, the release will not be subject to TRRP.

Submit a report documenting the actions taken and justification for no further action. If the agency concurs with the conclusions, a no further action letter will be issued. Conversely, if the final soil and/or SPLP leachate analytical results do exceed GWSoilng or GWGWIng, respectively, the release will be subject to TRRP.

See the generalized process for determining if a release is subject to the TRRP Rules below.

OUR SERVICES AND APPROACH:

DETERMINING TRRP APPLICABILITY

INVESTIGATION PROGRAMS

Once a determination of applicability is established, Sage proceeds with planning and implementation of investigation programs to

- Evaluate and determine all possible pathways and receptors
- Determine the constituents of concern and their appropriate cleanup level(s)
- Develop and submit the APAR
- Determine appropriate action pathway
- Determine the type and standard of remediation mandated by the regulations
- Implement remediation

In addition, Sage develops and prepares all TRRP reports, while performing or assisting in ongoing negotiations with the TCEQ on appropriate pathways and responses.

OUR SERVICES AND APPROACH:

DETERMINING
TRRP
APPLICABILITY

GENERAL PROCESS FOR DETERMINING IF A RELEASE IS SUBJECT TO TRRP RULES

