

**SYNOPSIS OF
PROPOSED AMENDMENTS TO THE RULES OF THE
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
RELATING TO HAZARDOUS SITE RESPONSE, CHAPTER 391-3-19**

Rule 391-3-19-.02 “Conventions” is being amended.

Purpose: To provide references for new abbreviations added to the Rules.

Main feature: Subparagraph (1) is being amended to add references for the abbreviations MCL (Maximum Contaminant Level for Safe Drinking Water) and RAGS (Risk Assessment Guidance for Superfund) Parts E and F.

Rule 391-3-19-.04 “Release Notification” is being amended.

Purpose: To clarify the notification exclusion for properties that have applied for a Brownfield limitation of liability.

Main feature: Subparagraph (2)(p) is being amended to clarify that soil contamination reported to EPD during any phase of work in compliance with the Georgia Brownfield Act is exempt from notification requirements. This clarification was requested during public comment for the October 2014 Rule change.

Rule 391-3-19-.06 “Corrective Action” is being amended.

Purpose: To allow the Director to designate removal actions conducted under the National Contingency Plan as complying with Type 5 cleanup standards.

Main feature: Subparagraph (7)(a)7. provides the Director authority to designate a site as compliant with Type 5 standards after EPA has conducted a removal action. This will eliminate the need for additional work on sites where EPA has conducted a cleanup, and the Director concurs that the action is protective of human health and the environment.

Rule 391-3-19-.07 “Risk Reduction Standards” is being amended.

Purpose: To modernize the risk reduction standards to reflect the most current risk assessment methodology and standard industry practices. To provide the regulated community with more flexibility and options in complying with risk reduction standards, resulting in more cost-effective cleanups, while continuing to protect human health and the environment. To provide a streamlined, consistent, scientifically sound and defensible risk assessment framework and to eliminate ambiguity.

Main feature: A sentence is being moved from Subparagraph (3) to Subparagraph (1) and modified slightly to address a perceived stigma against site-specific cleanup standards. This makes more prominent the declaration that all cleanups are adequately protective.

Subparagraph (2) is being added to provide the cancer and non-cancer thresholds upon which the risk reduction standards are based, and the methodology for conducting the risk assessment. This allows for the removal of duplicative language from the multiple sections referenced below. The methodology is being modernized, but the thresholds have not changed.

Subparagraph (4) is being amended to clarify that the referenced corrective action elements should be considered and addressed where applicable, but do not necessarily apply to every site. Amendments also remove an unnecessary pore space requirement, allow for considerations in addressing free product, and provide additional flexibility in calculating background concentrations.

Subparagraphs (6), (7), (8), and (9) are being amended to provide the specific methods for calculating the Type 1 (default residential), Type 2 (site-specific residential), Type 3 (default non-residential), and Type 4 (site-specific non-residential) cleanup standards, as follows:

- The method for calculating Type 1 soil standards that are protective of groundwater is being changed. The outdated practice of multiplying the groundwater criteria by 100 is being replaced with the soil partitioning equation, which is a more robust and scientifically-accepted method.
- Site groundwater conditions may be used to demonstrate that soil concentrations are protective of groundwater under the Type 2 and 4 scenarios.
- Area averaging of soil concentrations may be used under the Type 2 and 4 scenarios to demonstrate compliance with those standards.
- A methodology is provided for calculating a Type 3 (default non-residential) groundwater standard. Currently, the Type 3 value is the same as the Type 1 (residential) value. For most constituents this will provide a default Type 3 standard that is higher than the Type 1 standard, but that remains protective.
- Criteria are provided for calculation of subsurface values that are protective of excavation workers under the Type 3 and 4 scenarios. Currently, the only risk evaluated in subsurface soils is the leaching component.
- For lead, the methodology for calculating soil cleanup values protective of human health is being changed from the Georgia Adult Lead Model (GALM) to the U.S. EPA Adult Lead Model. Several parameter values incorporated into GALM are outdated and inconsistent with current practice, including information on blood lead concentrations and food-chain lead exposure in the U.S.
- Groundwater use restrictions may be used under a Type 4 scenario to move the point of compliance with drinking water standards off the property to the point where groundwater use is not controlled.

Subparagraph (10) is being amended to allow for considerations in addressing free product and to clarify that groundwater removal or treatment is not necessarily required at every Type 5 site.

Rule 391-3-19-.08 “Property Notices” is being amended.

Purpose: To correct inconsistent language and to provide appropriate notice for properties with continuing obligations.

Main feature: Subparagraph (1)(a) is being corrected to make the wording of the property notice consistent with the wording of the same notice in the Hazardous Site Response Act, O.C.G.A. 12-8-90, et seq. Subparagraph (6) is being amended to clarify that further action (such as residential-use restrictions) may be required at the property even though it has been delisted. Controls are routinely used to prevent future exposure that may be inconsistent with the exposure assumptions on which the cleanup standards are based.

Rule 391-3-19-.09 “Funding to State and Local Governments from the Hazardous Waste Trust Fund” is being amended.

Purpose: To correct an error.

Main feature: The citation to the Rules for Solid Waste Management is being corrected.

Rule 391-3-19 “Appendix III” is being amended.

Purpose: To reflect the changes to Rule 391-3-19-.07 and the current risk assessment methodology.

Main feature: Table 1. “Ground Water Criteria” is being updated. Table 1 provides the Type 1 groundwater standards for select regulated substances. The values are being updated to be consistent with current methodology.

Table 2. “Type 1 Soil Criteria” is being updated. Table 2 provides the Type 1 soil standards for select metals. The values are being updated to be consistent with current methodology.

Table 3. “Parameters, Definitions and Standard Assumptions to be used in Equations 1, 2, 6, and 7 in RAGS, Part B” is being renamed as “Standard Default Exposure Assumptions for Risk Reduction Standard Calculations” and is being updated. This table provides standard values that must be used for the default risk assessment calculations.

Table 4. “Equation and Default Values for Calculating Soil Concentrations Pursuant to Rule 391-3-19-.07(6)(c)(1) and 391-3-19-.07(8)(d)(1)” is being added. This table provides the equation and standard values that must be used to calculate default soil concentrations that are protective of groundwater.

Rule 391-3-19 “Appendix IV Georgia Adult Lead Model” is being amended.

Purpose: To reflect the changes to Rule 391-3-19-.07 and the current risk assessment methodology.

Main feature: As noted above, the outdated Georgia Adult Lead Model is being replaced with the U.S. EPA Adult Lead Model.

STATEMENT OF RATIONALE RULES FOR HAZARDOUS SITE RESPONSE

The basis for the proposed amendments to Chapter 391-3-19 is to update the Rules to:

1. Bring Georgia's risk assessment methods into alignment with the current state of the science, federal standards, and common practice in other states (particularly those in Region 4). The current standards have not been revised since 1994, despite important changes since that time in scientific understanding and regulatory guidance relevant to establishing risk-based cleanup levels at hazardous waste sites. Additionally, some of the values in the existing tables cannot be replicated.
2. Simplify calculations by providing expanded state look up tables and aligning the standards to allow easier use of the free, online, EPA calculator.
3. Increase the flexibility under site specific scenarios (Type 2 and 4) by allowing area averaging and under Type 4 the use of covenants for groundwater compliance.
4. Provide defensible, health-protective, and cost-effective cleanup standards for hazardous sites in Georgia.

By updating the Rules, EPD, responsible parties, Brownfield purchasers, and future users of contaminated sites will have the assurance that risks at the property were evaluated using the most up-to-date scientific methods. These amendments ensure that human health and the environment are protected while allowing for cost effective cleanups in Georgia. The proposed amendments do not incur any additional costs to the Environmental Protection Division. Because the default cleanup standards for certain constituents will be more restrictive and others will be less restrictive, the cleanup cost for the regulated community may go up on some sites, go down on other sites and for some will remain unchanged. Additionally, the opportunity to use free tools to derive default cleanup standards and the added site-specific flexibility proposed in these amendments may result in an overall cost savings for the regulated community.