

**GUIDANCE DOCUMENT FOR GROUNDWATER RELEASE NOTIFICATION
REQUIREMENTS UNDER RULE 391-3-4-.17(6)**

October 2018

BACKGROUND

During the 2016 legislative session the State of Georgia adopted the following language into the Comprehensive Solid Waste Management Act:

“The owner or operator of a municipal solid waste landfill shall notify the local governing authorities of any city and county in which such landfill is located of any release from the site of such landfill of a contaminant which is likely to pose a danger to human health. In addition, such owner or operator shall cause notice of such release to be published in the legal organ of the county in which such landfill is located. Compliance with the requirements of this Rule shall occur within 14 days of confirmation of such release by the Division.”

DEFINITIONS

Per the Rules of Solid Waste Management (Rules) in Georgia 391-3-4, relevant definitions to the above are as follows:

(20) “Contaminant which is likely to pose a danger to human health” means any constituent in Appendix I, II, III, or IV or other site specific constituents as specified by the Division in the Groundwater Monitoring or Corrective Action Plan that is found at levels statistically confirmed above a groundwater protection standard.

(21) "Detected" means statistically significant evidence of contamination has been determined to exist by using methods specified in Rule 391-3-4-.14.

(46) "Municipal Solid Waste Landfill" means a disposal facility where any amount of municipal solid waste, whether or not mixed with or including commercial waste, industrial waste, nonhazardous sludges, or small quantity generator hazardous wastes, is disposed of by means of placing an approved cover thereon.

(57) “Qualified Ground water Scientist” means a professional engineer or geologist registered to practice in Georgia who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields that enable that individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.

(64) “Release” means the discharge, deposit, injection, dumping, spilling, emitting, releasing, leaking, or placing of any substance into or on any land or water of the state.

(70) “Site ” means the entire property a permitted solid waste handling facility is located within and includes all activities within that property.

For the specific purposes of this guidance document, the following definitions apply:

Affected aquifer: The monitored aquifer at a solid waste facility, impacted by a contaminant.

Analytical concentration: A concentration of a contaminant determined by analytical analysis of a water sample, which is not necessarily statistically significant (see definition of “detected”).

Groundwater Protection Standard (GWPS): For constituents for which a maximum contaminant level (MCL) has been promulgated under section 1412 of the Safe Drinking Water Act (codified) under 40 CFR part 141, the MCL for that constituent is the GWPS; For constituents for which MCLs have not been promulgated or where background concentrations are higher than the MCL, the background concentrations for the constituent established from wells in accordance with 391-3-4-.14(8)(a) is the default GWPS. The Director may approve an alternate health based site specific GWPS that satisfy criteria listed in 391-3-4.14(32).

APPLICABILITY

Notification requirements apply for all Municipal Solid Waste Landfills (MSWL), that are operating, in-closure, or in post-closure care.

REGULATORY

The reporting requirement for this rule will be triggered when an analytical concentration above a GWPS for an Appendix I, II, III, or IV constituent is found at an off-site delineation well at a facility with an approved corrective action plan (CAP).

Where a statistically significant increase (SSI) above a GWPS is detected at a facility that does not have an approved CAP, per Rule 391-3-4-.14(30), the installation of a monitoring well(s) is required onsite at the facility boundary in the direction of contaminant migration. If sampling of that well(s) indicates that there is potential that plume concentrations above a GWPS have migrated off-site, the plume must be delineated by the installation of a monitoring well(s) at the closest point practicable to the property boundary with the site on the adjacent property. The closest point practicable is dependent on logistical constraints of well installation and will be assessed individually. In this scenario, the reporting requirement for this rule will be triggered when an analytical concentration of the Appendix I, II, III, or IV constituent(s) being delineated is found to be above a GWPS at the newly installed off-site delineation well. The facility will then continue through the corrective action process.

Additional Off-site Contaminants

If after initial notification, an additional constituent is detected onsite above a GWPS and off-site with an analytical concentration above a GWPS, additional notification will be required only if the additional constituent requires a change to the existing CAP. For example: no additional notification is required if the additional constituent is a volatile organic compound (VOC) that would be addressed by the remedial measure of the existing CAP. Conversely, an additional notification is required if a metal constituent is present above a GWPS in the same area as an existing VOC plume or a constituent above a GWPS in another plume in a separate area.

Reporting when an Off-site Delineation Network is Already Installed

For facilities that are in the corrective action process and have already adequately delineated the contaminant plume, in lieu of additional off-site monitoring well installation near the property boundary, the following can be used to meet the notification requirements:

- Notification occurs based on an analytical concentration of an Appendix I, II, II, or IV constituent(s) above a GWPS at a downgradient off-site delineation well; or
- An EPA approved fate and transport model analysis is used to delineate the limit of the contaminant plume; or
- The analytical concentration of the Appendix I, II, III, or IV constituent(s) at the onsite property boundary delineation well is used to determine if notification is required.

Property Boundaries at a Surface Water Feature

Where a permanent surface water feature is located at the facility property boundary of concern, the installation and sampling of a monitoring well(s) immediately adjacent to the surface water or surface water sampling for the appropriate constituents and location(s) may be performed to demonstrate that the reporting requirement for Rule 391-3-4-.17(6) is not required, as long as a demonstration is made by a Qualified Groundwater Scientist that the surface water serves as an hydraulic barrier or groundwater divide for the affected aquifer. Surface water monitoring results may be compared to Georgia Water Quality Standards (<https://epd.georgia.gov/georgia-water-quality-standards>).

Off-site Properties Purchased as a Remedial Measure

Where the affected off-site property has been purchased by the landfill owner/operator for the purpose of contaminant plume assessment and/or mitigation, but has not been integrated into the facility property boundary, reporting requirements for Rule 391-3-4-.17(6) will not be triggered, as long as a demonstration can be made that the contaminant plume is not leaving that separate property owned by the landfill owner/operator.

Off-site Access Issues

Where a transportation or utility right of way (railroad line, highway, power easement, etc.) or denial of access prevents the installation of off-site delineation wells, an EPA approved fate and transport model analysis may be used to delineate the limit of the contaminant plume.

TIMELINE

EPD will provide written confirmation to the owner/operator that the requirement for initial or subsequent public notification and initial or subsequent local government notification has been triggered. Local government notification, and public notice to the legal organ of the county must be submitted within 14 days of receipt of EPD's written confirmation, and documentation of the notification and public notice forwarded to the EPD. EPD understands that publishing or submittal deadlines with the legal organ may preclude the publishing of the notice within 14 days of EPD's written confirmation (for instance a legal

organ that is only published weekly). In such a case, the public notice must be published at the earliest opportunity after the 14 days that publishing logistics allow.

After the initial notification, the facility will continue to perform the notification once every 3-years while an analytical concentration for a contaminant exists above a GWPS at an off-site well. If an additional notification is required during the 3-year period, the need to renotify will be 3-years from the last notification date. EPD will notify the facility when the 3-year notification is required. The approved CAP for the facility must address all constituents that exceed a GWPS. In addition, unless the owner and operator can demonstrate with documented proof that the current owner of the impacted property has been previously informed, formal written notification to the impacted property owner shall occur per Rule 391-3-4-.14(30)(c) concurrently with Rule 391-3-4-.17(6) notification requirements.

As an alternative, the facility may submit within 90 days a demonstration that the contaminant concentration resulted from an error in sampling, analysis, or statistical evaluation due to a natural variation in groundwater quality, or another source unrelated to any onsite activities. If this alternative option is chosen, a notification stating that a demonstration will be submitted to EPD within 90 days is required within 14 days of receipt of EPD's written confirmation, otherwise EPD will assume that public notification is being completed.

LOCAL GOVERNMENT AND PUBLIC NOTICE FORMAT

A notification per Rule 391-3-4-.17(6) should reference the facility name, permit number, address or location, and owner/operator, and reference the reporting requirement and the rule. The specific contaminant(s) does not need to be described in the notification, however a facility contact for further information should be provided, and the approved CAP for the facility must address all constituents where an exceedance over a GWPS exists. Reference to the CAP can be made in the notice.



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New guidance for 391-3-4-.17(6), effective 9/30/2018

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