

Groundwater Institutional Controls

Proposed Policy Changes

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What is a Groundwater Management Zone ?

- A GMZ is a Memorandum of Agreement (MOA) between two DNREC Sections (SIRS and WSS) for notification of well permit activity near a suspected or known source of groundwater impact.

Improper Application of GMZs

- GMZs are being used as a remedial action.
- GMZs are being established without monitoring plans or remediation goals. 
- GMZs are not being removed rarely if ever !
- Future use of resource is not often considered in cleanup objectives.
- Permanent Environmental Covenants (ECs) are referencing temporary GMZs.

Noted Changes to Policy/Practice

- Establishment of Groundwater Exclusion Zone (GEZ).
- Refined definition of Groundwater Management Zone.
- Sites with GMZs will no longer be “grouped” into one large GMZ.
- New simplified format for GMZ/GEZ.

GEZ Defined

- A GEZ will consist of those areas where *multiple* source properties exist, and where there is no area-wide monitoring or remedial goal established, and/or where municipal ordinances prohibit the installation and use of potable wells. In addition, these areas will contain an alternate source of drinking water other than groundwater. GEZs will mainly consist of municipalities where public water is available, or areas where active facilities and multiple groundwater contaminant sources exist that are not likely to be cleaned to drinkable standards without tens of years of remediation. GEZs will contain areas/properties that do not have impacted groundwater in addition to those that do. Implementation of a GEZ does not preclude the establishment of site-specific groundwater remedial goals.

GMZ Re-Defined

- A GMZ will consists of those areas where a *single* source property exists, or where multiple source areas associated with the same facility exist, **and where offsite migration of contaminants has occurred**. Remedial goals and monitoring plans, including GMZ review timeframes, should be established and noted in the GMZ document and in the site Operation and Maintenance Plan/Long Term Stewardship Plan. A GMZ should not be established unless it is anticipated that it will be lifted on a measurable time frame, and where there are plans in place to achieve groundwater remedial goals.

Expected Result

- Increased number of true groundwater remediation projects.
- Cleanup of groundwater resource in more expeditious timeframe.
- Better coordination of expertise between SIRS and WSS.
- An end to using GMZs as a groundwater remedial alternative.
- Future use of GMZs to *support* groundwater remedial alternatives.



Which Programs Will Be Affected ?

- Federal Sites (NPL)
- Federal Sites (FUDS and other)
- HSCA Enforcement Sites
- State Lead HSCA Sites
- VCP Sites
- Brownfield Sites

..... But only if there is groundwater impact

Questions/Concerns

- We understand that there will be a potential financial impact to the Brownfield Program for the cleanup of impacted groundwater.
 - Following current practice, groundwater plumes will be delineated by RPs. We will not make BF developers chase plumes beyond property boundaries.
 - We do expect sources on BF sites to be cleaned sufficiently so as not to further impact groundwater.
 - We recommend that the BAC establish a subcommittee to recommend details related to cleaning up groundwater at Brownfield Sites.

Statistics for Brownfield Sites

- Approximately 170 Brownfield Sites
- 77 Sites have associated GMZs
- Of those, less than 16% (12 Sites) include a groundwater monitoring component.
- Approximately 60 of the 77 Sites are within the City of Wilmington GMZ.

