

MUNICIPAL SETTING DESIGNATIONS



Overview

In June 2003, the Texas Legislature passed H.B. 3152, providing the Texas Commission on Environmental Quality (TCEQ) with the authority to establish Municipal Setting Designations (MSDs), i.e., properties within which the production of groundwater for potable use (e.g., drinking, showering, bathing, cooking, or food crop irrigation) will be restricted and environmental response actions for protection of potential potable water use will no longer be required. The goal of this law is to reduce corrective action requirements and associated costs for groundwater-bearing units that are not presently used as a potable supply and are not likely to be used as a potable supply in the future. This law took effect September 1, 2003.

Draft rules for implementation of the MSD process are targeted for release by TCEQ in February 2004, with final rules likely to be issued in the third quarter of 2004. Prior to final rule promulgation, the scope and impact of this new law will be difficult to predict. However, to support early planning efforts, key features of the MSD application process, as specified in H.B. 3152, are summarized below.

Eligibility

Corrective action sites subject to TCEQ jurisdiction can apply for an MSD subject to the following requirements:

- **Urban Area Location:** The corrective action site is located within the corporate limits or extra-territorial jurisdiction (ETJ) of a municipality with a population of 20,000 or more.
- **Public Water Supply Available:** A public drinking water supply is presently provided or could be provided to the proposed MSD property and to properties within 0.5 miles of the MSD property.
- **Groundwater Use Restriction:** Potable use of groundwater within the proposed MSD will be restricted subject to an ordinance issued by the local municipality or subject to a restrictive covenant that is supported by a resolution passed by the local city council.

Corrective action sites subject to the jurisdiction of the Texas Railroad Commission (e.g., upstream oil and gas properties) are not eligible for an MSD under this law.

MSD Application and Review Process

The party applying for an MSD must complete the following tasks:

- **MSD Application Forms:** On TCEQ forms, provide applicant identification and legal property description, documentation of eligibility, information on type of known groundwater contamination present on property, proof of notice to specified parties, statement indicating support of relevant municipalities and public utilities for MSD and (if available) a copy of the associated municipal ordinance or resolutions, and a \$1000 application fee.
- **Notification of Concerned Parties:** On or before the date of submittal of the MSD application, the applicant must notify the following parties of the proposed MSD and their opportunity to provide comments to TCEQ within 60 days: i) each municipality within 0.5 miles of subject property or owning a water supply well within 5 miles of the subject property; ii) each owner of a private water supply well registered with the state and located within 5 miles of the subject property; and iii) each retail public utility (e.g., municipal utility district, water service corporation, etc.) with a water supply well located within 5 miles of the subject property.
- **Supporting Resolutions and Groundwater Use Restrictions:** Before the TCEQ can certify the MSD, the applicant must also provide documentation showing that: i) the MSD is supported by resolutions passed by the local city council of any municipality located within 0.5 miles or owning a water supply well within 5 miles of the subject property *and* the governing body of any retail public utility with a water supply well within 5 miles of the property *and* ii) the subject property is subject to either a restrictive covenant enforceable by the city or a municipal ordinance that serves to prohibit potable use of the affected groundwater and restrict other activities that could result in unsafe contact with the affected groundwater.

The TCEQ will consider all comments from the notified parties that are received within 60 days of the application submittal. Within 90 days of receiving the MSD application, the law requires TCEQ to certify the MSD, deny the MSD application, or request that additional information be provided. The application may also be conditionally approved, pending receipt of documentation regarding the required supporting resolutions and/or municipal ordinance. The TCEQ will deny the application if eligibility criteria are not met, the application is incomplete, or the TCEQ determines that the MSD would negatively impact the existing or future water resource needs or obligations of a municipality, retail public utility, or private well owner. If TCEQ approves the MSD, copies of the MSD certificate will be provided to the applicant; each concerned municipality, retail public utility, or private well owner; and to all parties that submitted comments on the MSD application or otherwise requested a copy of the MSD certificate.

Site Investigations and Response Actions for MSD

Once an MSD certificate has been issued, site investigation and response actions may or may not be required by TCEQ, as follows:

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- 1) **If No Potable Water Supply Wells Are Located Within 0.5 Miles**, the TCEQ will not require the applicant to conduct site investigations or response actions related to protection of human exposure via potable water use. Under the Texas Risk Reduction Program (TRRP) rule, this would exempt the property from compliance with Protective Concentration Levels (PCLs) for ingestion of Class 1 or Class 2 groundwater (i.e., ^{GW}GW_{ing}). However, other PCLs associated with non-consumptive groundwater use, inadvertent contact with affected groundwater, or other human or ecological exposure pathways could still apply (e.g., ^{Tot}SOIL_{Comb}, ^{Air}Soil_{InhV}, ^{Air}GW_{InhV}, or ecological PCLs).
- 2) **If Potable Water Supply Wells Are Located Within 0.5 Miles**, the TCEQ can require the person responsible for the corrective action in the MSD to determine if contamination emanating from the subject property could cause applicable human health and ecological protection standards to be exceeded within an area located within 0.5 miles *outside* of the MSD. If this evaluation shows no present or reasonably anticipated exceedance of these standards, then no further response actions will be required within the MSD, except as otherwise needed to protect human health or ecological receptors not related to groundwater ingestion (see above). However, if this evaluation indicates that human health or ecological standards are presently exceeded or could reasonably be exceeded in the future within a 0.5 mile distance *outside* the MSD, then the TCEQ can require additional response actions entailing either:
 - i) Removal, decontamination, and/or control of groundwater impacts inside the MSD to meet all applicable human health or ecological standards outside the MSD, including groundwater ingestion; or
 - ii) Removal, decontamination, and control measures inside the MSD as needed to address exposures not related to groundwater consumption both inside and outside the MSD *and* either a) replacement of impacted potable water wells with a satisfactory alternative water supply, in conjunction with restrictive covenants protecting against future unsafe groundwater use, or b) expansion of the MSD area to incorporate the properties on which impacted water supply wells are located.

Regardless of any exclusions provided for the MSD, the law specifies that nothing in the statute or rule is intended to i) affect the right of any person to pursue claims with regard to personal injury or property damage or ii) relieve the person responsible for the corrective action from other requirements that may apply under a federally authorized environmental program administered by the state of Texas (e.g., RCRA or CERCLA regulations).

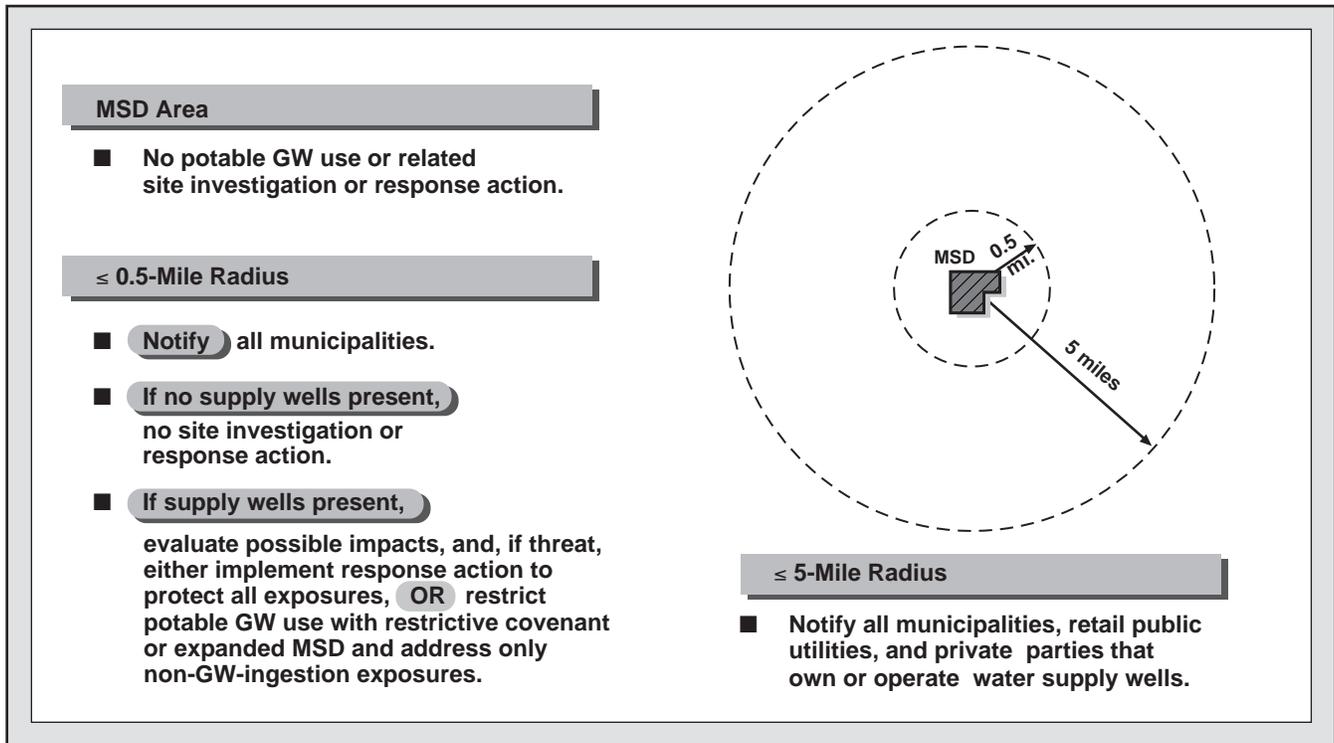
MSD Reality Check

The MSD could offer significant benefits in terms of reducing unnecessary expenditures on groundwater cleanup efforts for sites where the affected groundwater-bearing unit is not presently used and is not likely to be used as a potable

resource in the foreseeable future. However, the practical hurdles to obtaining an MSD certificate for your site are not insignificant. To assess the feasibility of an MSD application, the following key points should be considered:

- **Wonderful World of Politics:** Unlike the TCEQ administrative process (e.g., TRRP rule), the MSD will always entail involvement of the local city council to issue a supporting resolution in all cases and possibly to establish a municipal ordinance restricting potable groundwater use. In addition, the governing board of any retail public utility with a supply well within 5 miles must also pass a resolution favoring the MSD. Depending on the site location, this could involve multiple municipalities and public utilities (e.g., a preliminary search for a central Houston site identified 7 municipalities with wells and over 600 registered private wells within 5 miles). In some cases, sufficient support may exist to achieve these government actions, but, in others, the political effort and the associated site publicity may prove problematic. In general, the MSD will likely prove most feasible in communities that have passed municipal ordinances supporting such measures.
- **Country Living in the City:** Many industrial facilities, such as a number of those located on the Houston Ship Channel, are located *outside* the corporate boundaries of their adjacent cities. In such case, an MSD could only apply if the industrial facility were determined to lie within the ETJ of the local municipality.
- **No Free Ride, Depending:** MSDs with no water supply wells located within 0.5 miles are the most likely to win a free pass with regard to site investigation and response actions. However, if water supply wells *are* located within 0.5 miles and it cannot be demonstrated that the affected property in the MSD will not impact these wells, the TCEQ will impose remediation requirements on the subject property, as needed to protect neighboring wells. Given the limited information likely to be available regarding site conditions within the MSD, the response actions imposed by TCEQ may lean to the conservative side, possibly resulting in requirements that could be more stringent and less flexible than those that might otherwise have been developed by the responsible party under a conventional TRRP response action plan, in the absence of an MSD.
- **Non-Groundwater-Ingestion Cleanups:** The MSD only relieves the applicant of responsibility for site investigation and remediation activities related to groundwater ingestion exposures. Corrective action requirements related to exposure pathways other than groundwater ingestion will still apply within the MSD. Consequently, the relative benefits of an MSD should be evaluated on a case-by-case basis to determine the relative scope of activities to be completed with and without the MSD.
- **MSD vs. PMZ:** An MSD is comparable to the Plume Management Zone (PMZ) concept in the TRRP rule, with two key differences: i) the MSD does not need to cover the affected groundwater zone and ii) no site investigation or groundwater monitoring is required to support the MSD.

FIGURE 1. The MSD Universe



Consequently, if no water supply wells are within 0.5 miles of the MSD and no other potential human or ecological exposures are likely to occur, an affected groundwater zone could potentially extend beyond the MSD area but not require off-site investigation or response. A TRRP PMZ at this same site would entail plume delineation and landowner approval over the full area of the PMZ.

- **Effect of Groundwater Resource Classification:** Most commonly, the affected groundwater-bearing units underlying a corrective action site are either Class 2 (potential) or Class 3 (unusable) groundwater resources. For a Class 2 unit, an MSD would relieve the responsible party of the obligation to remediate to groundwater ingestion standards. However, for a Class 3 groundwater resource, the groundwater ingestion pathway does not apply under TRRP, and the benefits of an MSD are less clear.
- **“Between-the-Lines” Application Requirements:** Preparation of an MSD application will require a water well survey over a 5-mile distance surrounding the proposed MSD and identification of registered water well owners. In addition, TCEQ is required to evaluate the vulnerability of the local water resource to impacts from the MSD. Consequently, to support a favorable determination by TCEQ, the applicant may wish to provide this additional information in the MSD application. Although the MSD law

requires the applicant only to identify the “type” of groundwater contamination present at the site, more complete information may be needed to support a meaningful evaluation of the water resource threat.

- **Possible Bummer for RCRA, CERCLA, or Municipal Landfill Sites:** The MSD will not relieve the applicant of corrective action obligations imposed under federal environmental laws or regulations enforced by the state of Texas. Therefore, at RCRA Corrective Action sites and Superfund sites, site investigations will still likely be required to meet federal requirements; however, an MSD could potentially serve to limit the scope of associated groundwater corrective actions. Under RCRA Subtitle D rules, requirements for municipal landfills are closely prescribed, and an MSD may prove applicable only for site-specific, risk-based assessments and associated response actions.
- **Watch Outs:** Other issues not addressed in the MSD law could prove problematic. For example, the applicant is required to notify only **registered** well owners, when, in fact, many private wells are not registered with the state. Also, the applicant need not notify a neighboring property if there is no supply well on that property. Finally, the law doesn’t address the possible installation of future supply wells in proximity to the MSD.

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BOTTOM LINE: An MSD certificate is likely to prove most feasible and beneficial for properties for which **i)** an MSD is supported by a municipal ordinance, **ii)** multiple municipalities or public utilities are not involved, **iii)** the impacted groundwater-bearing unit is a Class 2 resource not presently used by water supply wells, **iv)** sufficient data are presently available to support the TCEQ evaluation of the potential effect of the MSD on current and future water resource needs, and **v)** site investigation and response actions are not otherwise imposed under federal regulations.

- **TCEQ MSD Regulations:** TCEQ is presently developing regulations for implementation of MSDs subject to H.B. 3152, with a target date of February 2004 for publication of draft rules for public comment. Watch the Texas Register or keep in touch with the TCEQ Remediation Division (512-239-4150) to track the status of these draft rules.
- **GSI Groundwater Sensitivity Toolkit:** To anticipate the scope of the evaluation to be conducted by TCEQ, groundwater resource vulnerability at your proposed MSD site can be evaluated using the *Groundwater Sensitivity Toolkit* developed by GSI for the California MTBE Research Partnership and the American Petroleum Institute. A free copy of the Toolkit software may be downloaded at <http://groundwater.api.org/toolkit/>. The Tool Kit provides a step-by-step approach for evaluating the potential impacts of chemical release sites on water supply wells and groundwater resources.

For More Information

Further detailed information regarding MSDs can be found at the following sources:

- **H.B. 3152 Municipal Setting Designations:** You can view a copy of the state law authorizing MSDs at <http://www.capitol.state.tx.us/tlo/78R/billtext/HB03152F.htm>.

Also, please feel free to contact us at Groundwater Services, Inc. (GSI) with any questions you may have regarding establishment of an MSD for your corrective action project.

GLOSSARY OF ABBREVIATIONS:

ETJ	Extra Territorial Jurisdiction	PCL	Protective Concentration Level	TCEQ	Texas Commission on Environmental Quality
MSD	Municipal Setting Designations	PMZ	Plume Management Zone	TRRP	Texas Risk Reduction Program



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■ *GSI WILL CONTINUE TO PROVIDE periodic updates regarding important regulatory developments in Texas. Should you have any questions regarding these or other upcoming issues, please feel free to contact us at 713-522-6300.*

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About GSI

Groundwater Services, Inc., (GSI), is an environmental engineering consulting company located in Houston, Texas, which specializes in the management of environmental risk. Since 1986, GSI, has been providing industry with innovative solutions to soil, groundwater, surface water, and air pollution problems.

G S I R e g u l a t o r y U p d a t e B u l l e t i n

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