



COMPLIANCE SECTION

Regulatory Guidance BUSTR Accepts the Installation of Pre-Packed Wells Using Direct-Push Technology

BACKGROUND

The State of Ohio Bureau of Underground Storage Tank Regulations (BUSTR) developed a Technical Guidance Manual in July 2001 for the 1999 Closure and Corrective Action Rules. Within the Guidance Manual, BUSTR lists various types of methods to collect environmental data (Appendix A).

Three types of drilling technologies are listed within the guidance document which can be utilized for the collection of soil and ground water samples during underground storage tanks (USTs) assessments. These technologies are:

- Hollow Stem Augers
- Direct Push Technology (Geoprobe)
- Air Rotary

Advances in the direct-push technology with respect to sample collection have improved over the last five years, to provide quantitative laboratory analytical results while lowering the overall cost for soil boring and monitoring well installation. Other advances in well construction materials (such as prepacked wells), have also benefited the owner/operators of USTs in considering site assessment options.

Previously, BUSTR would not accept laboratory analytical results from ground water samples collected via the Geoprobe, unless restricted access was involved. However, given recent technical advancements, BUSTR now accepts the use of a Geoprobe to install pre-packed monitoring wells greater than or equal to 1 inch in diameter. This approval will allow for less expensive assessments since direct-push borings and wells can be installed more quickly and in more restricted areas than conventional drilling methods.

BUSTR has limited the use of pre-packed wells for the collection of ground water samples, measurement of water levels, and as observation points for pump tests. BUSTR recommends however, that these pre-packed wells not be utilized to determine hydraulic conductivity via slug tests. BUSTR must also approve the use of pre-packed wells less than one inch in diameter on a case-by-case basis.

SUMMARY

BUSTR has approved the use of Geoprobe technology for the installation of pre-packed ground water monitoring wells. These wells can be utilized for ground water sampling, water level measurements, and as observation points for ground watering pump tests. This approval will reduce the time and expense associated with the collection of soil and ground water samples during UST site assessments and other subsurface investigations. The BUSTR Technical Guidance Manual is available at <http://www.com.state.oh.us/odoc/sfm/BUSTR>. If you would like assistance in determining how to incorporate this technology for BUSTR or other subsurface investigations, please contact Jim Wasserbauer or Bill Reid at (513) 489-2255 or at jaw@paynefirm.com or whr@paynefirm.com.