TRRP *Commander*™ QUARTERLY

Tools for Risk-Based Remediation 2nd Quarter 2011

Welcome back to TRRP *Commander* Quarterly, which provides technical insight into using TRRP *Commander* to develop Affected Property Assessment Reports (APARs) and optimal risk-based closure plans that comply with the Texas Risk Reduction Program (TRRP) rules. This newsletter provides answers to complex questions and offers other useful facts and tips to help you become a TRRP *Commander* power user.

Announcements

2011 Tier 1 PCL Tables for TRRP Commander

The TCEQ released updated TRRP Tier 1 Protective Concentration Level (PCL) tables in May 2011. The updated tables for TRRP *Commander* were sent out in June 2011. If you have not received your updated TRRP Tier 1 PCL tables for TRRP *Commander*, please contact us at support@h2altd.com.

Question of the Month

Why is a chemical of concern showing up as "detected" in TRRP Commander when the analytical results from the laboratory list it as being below the laboratory's detection levels?

In general, if the data imported into TRRP *Commander* has been flagged with a "U" qualifier, it means that it was not detected above the laboratory sample quantitation level (SQL) or sample detection level (SDL). If this qualifier is present, TRRP *Commander* assumes that the data is below the applicable SQL/SDL and reports it as such. However, after the lab data is imported and the maximum concentrations are calculated, the user has the option of having the program calculate the SQL/SDL, using the SQL/SDL reported by the laboratory, or using the minimum SQL established by the TCEQ. If the "minimum SQL" or "program calcuated SQL" is selected and it is lower than the laboratory SQL/SDL, TRRP *Commander* uses the lower detection limit, resulting in a detected concentration.

If you have a specific question you would like answered in the newsletter, please email us at support@h2altd.com.

Coming Up

The next newsletter will address PMZ size restrictions for Class 3 groundwater bearing units (GWBUs) under Remedy Standard B.

Related Links

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TRRP Topics:

Plume Management Zones - Size Restrictions: Offsite Alternate Points of Exposure in Class 2 groundwater

(Part 3 of a 4-part series)

As we discussed in the last two issues, a plume management zone (PMZ) is an exposure prevention tool, the primary function of which is to prevent exposure to groundwater within a protective concentration level exceedance (PCLE) zone. A PMZ achieves this by moving the point of exposure (POE) to the downgradient end of the PMZ. The farther you can move the POE from the source area the better, at least with respect to chemical of concern (COC) attenuation. A crucial question arises as to how far away one can establish the downgradient end of the PMZ, and this can be governed by whether the alternate POE is onsite versus offsite.

A PMZ is defined in 30 TAC §350.4(a)(65) as "*The area of the groundwater protective concentration level exceedence [PCLE] zone at the time of response action plan submittal, plus any additional area allowed in accordance with §350.33(f)(4) of this title (relating to Remedy Standard B).*" For this article we will assume that we are only dealing with human health POEs, and that human health protective concentration levels (PCLs) are more restrictive than ecological PCLs. 30 TAC §350.33(f)(4) references §350.37(l)(4) and §350.37(m) to establish PMZ size restrictions for Class 2 and Class 3 groundwater, respectively. Sites may be further subdivided into those where the alternate POE is onsite versus offsite. In this article we will limit our discussion to PMZ size limits (alternate POE placement) for offsite Class 2 groundwater.

Alternate POEs for offsite Class 2 groundwater can apply to properties that presently contain a residential-based groundwater PCLE zone and those that do not. If an offsite property contains a residential groundwater PCLE zone and a PMZ has been authorized, the maximum size of the PMZ may extend to the length of the PCLE zone plus the smaller of either 500 feet or 25% of the existing PCLE zone length ("existing" meaning at the time of RAP submittal). In addition, the alternate POE may be within two years groundwater travel time of the downgradient property limit if the owner of the offsite property has provided written approval of institutional control use on the offsite property and if there is not a potential beneficial use of groundwater on the offsite property. If the residential PCLE zone is already within two years hydraulic travel time of the downgradient property boundary, then the PCLE zone is the limit of the PMZ (i.e., no additional length beyond the PCLE zone is allowed). Finally, if a surface water POE is closer than any of the preceding limits, then that surface water POE is the extent of the PMZ.

Alternate POEs for offsite Class 2 groundwater may also apply for properties which presently do not contain a residential-based groundwater PCLE zone. A groundwater PCLE zone and the PMZ may be allowed to extend to offsite property as long as it can be demonstrated that the offsite landowner has provided written consent to an institutional control (or equivalent zone or governmental ordinance is in place) and the offsite groundwater has no reasonably anticipated future beneficial use. The determination of future beneficial use is based upon the existing quality of groundwater, considering nonpoint sources of COCs and their cumulative impact on the groundwater quality, the lack of use of the groundwater based on the presence of superior water supplies, proximity and withdrawal rates of groundwater users, or the property is subject to a zoning or governmental ordinance which is equivalent to the deed notice, VCP certificate of completion or restrictive covenant that otherwise would have been required. If the demonstration can be made that the groundwater has no reasonably anticipated future beneficial use and the authorization for the institutional control has been given, the maximum size of the PMZ is determined in accordance with §350.37(l)(4), as discussed in the previous paragraph.

Numerous other requirements and limitations may apply to size restrictions for PMZs. We strongly recommend that you review the applicable TRRP regulations and guidance (e.g., TRRP-21 Human Health Points of Exposure) and/or obtain the services of a qualified TRRP expert. A PMZ can be a powerful tool in reducing the extent of groundwater remediation that may be required, while still assuring protection of human health and the environment, as long as you meet all the restrictions for that PMZ.

Part 4 in the next newsletter will address PMZ size restrictions for Class 3 groundwater bearing units (GWBUs) under Remedy Standard B.

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