2012 APC QA/QC Checklist

Virginia Department of Environmental Quality Division of Land Protection and Revitalization

Administrative Items	Present?
Applicant Name and Address [760.A.1.a.]	
Description of Requested Action [760.A.1.b-c.]	
Duration of Variance [760.A.1.e.]	
Certification Statement [760.A.1.h.]	
Fee [9 VAC 20-90-120]	

Technical Basis Topics	Included?
Detailed discussion of which wells the APC will be applied to and reference to regulatory citation owner/operator is seeking variance from [760.A.1.c]. This likely will be the requirement to have wells at the waste mass edge.	
Surveyed demonstration that the proposed alternate groundwater point of compliance monitoring well is located no further than 492 feet (150 meters) from the edge of the waste disposal unit boundary and lies within the permitted facility boundary [740.A]. If the owner/operator fails to demonstrate either of these required conditions, stop reviewing the variance and proceed to issue tentative denial or choose to withdraw letter.	
Discussion of the site hydrology including groundwater flow rate and direction [740.B.1 & 3]. This information should be consistent with what is presented in the Annual reports. If the presented flow rate or direction has changed, you must investigate the reason for the sudden change.	
Demonstration that the landfill-derived contaminants observed to exceed GPS (or BKG) in the well seeking to be replaced by the APC well will be detectable in the APC well because the APC well(s) location is demonstrably downgradient from the current well [740.B.3] and the APC well will be screened at a depth appropriate to intercept the contaminant flow path. The Department will not accept an APC well screened at the top of the water table since the majority of LF-derived CoCs do not float on the top of the aquifer.	
Demonstration that the owner/operator has the practical capability to complete any required groundwater corrective actions if GPS is exceeded at the requested APC well, recognizing that the areal extent of the plume will be much larger than if GPS had been exceeded at the original compliance well [760.B.7]. Note that EPA guidance did not further spell out what was to be provided to meet this requirement. On the DEQ side, the most important thing is that there remains a sufficient buffer to the property line such that the plume will not quickly go off site (which limits the practical capability of the owner/operator to remediate in a simple manner.	

Site Risk Screen Topics	Included?
Description of the landfill design type (lined, unlined, trench fill, area fill, etc.), the type of waste accepted, and the current (or final) estimated volume of waste disposed and (if available) a discussion of the history of leachate analytical results [740.B.2]. For many of the older sites, leachate data will not be available but lack of data will not be considered a defect toward APC approval.	
Review of the available groundwater quality data on site and a review of any known alternate sources of groundwater impact in the site vicinity [740.B.6]. Other sources of potential GW impact can be gathered from existing Phase-1 type environmental databases.	
Linear distance to the nearest current users of groundwater (including potable and non-potable use), regardless of their hydrologic setting with respect to the landfill property and an estimation of the groundwater travel time separation of these users from the edge of waste [740.B.4].	
Discussion of whether the site or any surrounding properties can be reasonably expected to be future users of groundwater for any purpose [740.B.6]. The default presumption is future unrestricted GW use unless there is a legal mechanism or ordinance in place which prevents such use on the surrounding properties.	
The availability of alternate drinking water supplies to adjacent landowners in the event of a groundwater contamination problem [740.B.5]. If municipal water lines are not in place then no alternate supplies are available. APC approval cannot hinge upon future potential options like replacing the current well with a deeper well isolated by a confining unit from any LF-derived impacts, or providing an alternate water source via delivery unless a binding legal requirement is in place.	
Distance to the nearest potentially affected surface water [740.C.1]. Within EPA's Subtitle D rule, GW remediation was required if the plume was to be found to discharge to, or likely discharge to surface water at concentrations which would exceed the groundwater MCL. Use of an APC cannot be a mechanism to circumvent this provision.	
APC will result in a facility that is equally protective of human health and the environment [720.A.1.a & b]. If the owner/operator cannot satisfactorily demonstrate this, APC approval would not be warranted.	