

### **Petition Summary and Background Information**

On March 16, 2011, McGuireWoods, on behalf of Rhodia Inc., filed a petition for rulemaking to the Division of Water Quality Director (DWQ), Coleen Sullins. The petition requests an amendment of the groundwater quality standard for 1,1-dichloroethylene (1,1-DCE) contained in 15A NCAC 2L .0202(g)(59) from 7 ug/L to 350 ug/L.

By regulation, groundwater standards are established as the lower of the six criteria contained in 15A NCAC 2L .0202(d) (1) – (6). Based on these criteria, the current standard for 1,1-DCE is the maximum contaminant level (MCL) of 7 ug/L. MCLs are federal drinking water standards established by the USEPA Office of Water and are applicable to public water supply systems regulated under the Federal Safe Drinking Water Act.

The petitioner seeks to amend the groundwater standard because the federal MCL for 1,1-DCE was calculated using outdated health effects data. The DWQ and the USEPA acknowledge that updated health effects data support calculation of a less stringent MCL. However, EPA does not plan to update the MCL because any potential revision is not likely to provide a meaningful opportunity for cost-savings or health risk reduction to public water systems and their customers. A revised standard of 350 ug/L would reduce cleanup costs for Rhodia and other sites.

The petitioner provided a legal opinion that 15A NCAC 2L .0202(d) and (e), in tandem, are sufficiently broad to establish the groundwater standard at 350 ug/L under 2L .0202(d)(1), based on the current toxicity data published in the USEPA's Integrated Risk Information System (IRIS) database, rather than the federal MCL, which was calculated prior to the updated toxicity data being published.

The 1,1-DCE standard issue was first brought forth by Rhodia and others during the Groundwater Triennial Review (GWTR) that ended in 2005 and again during the GWTR that ended in 2010. Both times the Environmental Management Committee (EMC) approved a 1,1-DCE groundwater standard of 7 ug/L. After consultation with its legal counsel, Frank Crawley, the EMC determined that 2L .0202(d) and (e) were not sufficiently broad to allow a change to the 1,1-DCE standard from 7 ug/L to 350 ug/L as requested.

In May 2005, the EMC Groundwater Committee (GWC) directed the DWQ to establish a Groundwater Stakeholder Group (GWSG) to discuss ways to amend the groundwater rules to ensure the use of the most recent toxicity information when developing groundwater standards. The GWSG consisted of representatives from various stakeholder groups, such as, Department of Environment and Natural Resources (DENR) regulatory agencies, city and county governments, major industries, environmental groups, agricultural interests, and public health. After much discussion, the GWSG could not reach consensus on how to amend the groundwater regulations and ultimately, the DWQ recommended to the GWC that the issue be dealt with by the variance process in 2L .0113. At its July 12, 2006 meeting, the GWC unanimously accepted and concurred with the DWQ recommendation that in individual site-specific cases, a variance under 2L .0113 could be approved that would allow less restrictive Groundwater Quality Standards while providing the site specific requirements necessary to protect public water supplies.

In November 2010, Rhodia submitted a site-specific variance request for a 1,1-DCE standard of 350 ug/L. The Division of Waste Management (DWM), the regulatory authority over the site, reviewed the request and determined it to be incomplete based on the requirements in 2L .0113. Rhodia withdrew the variance request, stating that the variance approach was not an appropriate mechanism for seeking relief from a standard that was not based on current health effects information. Subsequently, Rhodia submitted the rulemaking petition.

At its May 2011 meeting, the GWC heard presentations on the rulemaking petition from the petitioner and DWQ staff. DWQ staff recommended that the petition be denied and that Rhodia work with DWM staff to address the deficiencies identified in their variance request.

After discussion, the GWC passed a motion to recommend that the full EMC proceed with rulemaking as proposed by the petitioner to amend the 1,1-DCE standard from 7 ug/L to 350 ug/L. The Committee acknowledged that, according to legal counsel, rule language is needed to allow deviation from 2L .0202(d), which requires that the groundwater standard be established at the lowest of the six criteria.