



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, MN 55155-4194 | 651-296-6300 | 800-675-3843 | 651-282-5332 TTY | www.pca.state.mn.us

August 26, 2009

The Honorable John Schaaf
Mayor, City of North Oaks
100 Village Center Drive
Suite 250
North Oaks, MN 55127

Dear Mayor Schaaf:

As you are aware, Wenck Associates (Wenck) reviewed the Highway 96 Dump site (Site) 2008 Annual Monitoring Report (2008 AMR) on behalf of the city of North Oaks (City), and submitted comments on the 2008 AMR to the Minnesota Pollution Control Agency (MPCA) via email on May 11, 2009. The MPCA also reviewed the 2008 AMR and sent its comments to Whirlpool Corporation and Reynolds Metals Company (Responsible Parties or RPs) in a letter dated May 26, 2009; the MPCA attached Wenck's comments to the letter.

In a letter dated June 26, 2009, Conestoga-Rovers & Associates, Inc. (CRA), on behalf of the RPs, submitted responses to both the MPCA's and Wenck's comments. CRA acknowledged that some of Wenck's comments were more appropriately addressed by the MPCA.

As such, with this letter the MPCA provides its responses for the AMR comments submitted by Wenck (or portions thereof) that appear to be specifically directed toward the MPCA:

Comment #1: Please explain how or where the different cleanup levels apply for vinyl chloride. With a lack of historical knowledge, it is unknown why the 1993 Minnesota Decision Document (MDD), and Amended Table 1, October 1994, selected a cleanup level of 2 µg/L for vinyl chloride versus the Health Risk Limit (HRL) of 0.2 µg/L. The MDD does not explain and Amended Table 1 merely notes that "the cleanup level for vinyl chloride was adjusted for Site specific reasons. It is not MCL based." The "Site specific reasons" are not explained. The MDD Amendment (2008) states that the "HRL is the cleanup standard used by the MPCA for vinyl chloride for OU4," which is defined by Figure 1 of the MDD Amendment as residential areas without municipal water.

MPCA Response: Groundwater cleanup levels in the original Table 1 of the October 7, 1993 MDD included the Minnesota Department of Health (MDH) Recommended Allowable Limit (RAL) for vinyl chloride of 0.1 ug/L. After submitting a Response Action Plan on January 26, 1994, the RPs took the position that the cleanup level for vinyl chloride was unattainable using a groundwater extraction/containment-type technology.

On March 25, 1994, MPCA staff met with the RPs, and agreed to re-examine the cleanup level for vinyl chloride. On April 13, 1994, Whirlpool and Reynolds proposed an amended cleanup level for vinyl chloride of 2 ug/L that was based on a technical rationale (i.e., Site-specific information). The technical rationale was based, in part, on the observed attenuation of 1,1,-dichloroethane (1,1-DCA), another contaminant of concern at the Site, versus migration distance from the Site and on the assumption that the attenuation of vinyl chloride would parallel that of 1,1-DCA. This rationale predicted that a vinyl chloride concentration of 2 ug/L at the Site would attenuate to less than 0.03 ug/L at the west shore of Gilfillan Lake. On October 3, 1994, after several meetings and discussions with the RPs, the MPCA concluded that a cleanup level of 2 ug/L for vinyl chloride “[was] protective of human health, welfare and the environment, and [did] not allow for further degradation of the groundwater resources of the area.” The MPCA agreed to change the Site cleanup level for vinyl chloride to 2 ug/L, following the execution of the Consent Order (CO). The CO, which included the MDD with amended Table 1 as Exhibit A, was executed on January 9, 1995. As seen in the comment, the 2008 MDD Amendment bases its cleanup standard on the MDH HRL for vinyl chloride.

Comment #1 (continued): If it is not already the case, it is recommended that the MPCA clarify (and enforce) that the HRL for vinyl chloride applies to the dump site groundwater extraction wells and compliance monitoring wells. Furthermore, it is recommended that the vinyl chloride analytical method be revised for the compliance wells to lower the reporting limit from 1 µg/L to 0.2 µg/L in order to demonstrate that vinyl chloride is not being allowed to migrate beyond the Groundwater System at concentrations above the HRL.

MPCA Response: The 1993 MDD, which applies to extraction wells and compliance monitoring wells (i.e., Operable Unit 1 (Source Control), and Operable Unit 2 (Groundwater), was not modified by the MDD Amendment dated August 26, 2008, and remains in effect. Therefore, the cleanup levels in Amended Table 1, including a cleanup level of 2 ug/L for vinyl chloride, remain in effect for “all current and future groundwater monitoring points at the Site.” The 1993 MDD defined Site monitoring and extraction wells as “all wells east of Robb Farm Road.”

The RPs June 26, 2009 response to comments on the 2008 AMR stated that “As for changing the groundwater analytical method for vinyl chloride to a lower detection limit, this can be done if so directed by the MPCA. However, it should be noted that while the Reporting Limit (RL) for on-site monitoring well samples was 1.0 ug/L, the Method Detection Limit (MDL) was 0.22 ug/L, which (is) just above the HRL value of 0.2 ug/L. Hence, any vinyl chloride detection between the RL and MDL would have been reported by the laboratory as an estimated (J) value. This analytical information shows that the Highway 96 groundwater extraction system is capturing vinyl chloride prior to leaving the site.”

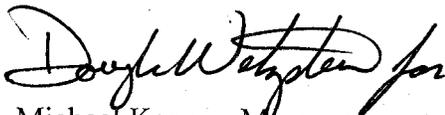
August 26, 2009

Comment #3: It is recommended that future AMRs include a brief discussion explaining the cleanup levels and where they apply, especially for vinyl chloride since there are two different cleanup levels and this contaminant represents the biggest concern to North Oaks residents (see Comment #1 above).

MPCA Response: The MPCA will request that the RPs utilize language from the 1993 MDD and the 2008 MDD Amendment in future AMRs in order to explain (vinyl chloride) cleanup levels and where they apply. For example, the MPCA will request that the RPs use the response to Comment #1 above to explain vinyl chloride cleanup levels for Operable Units 1 and 2. Additionally, the MPCA will request that the RPs quote the vinyl chloride cleanup level for Operable Unit 4 directly from the 2008 MDD Amendment: "(the) HRL is the cleanup standard used by the MPCA for vinyl chloride for OU4," and illustrate the cleanup levels by using Figure 1 of the MDD Amendment.

The MPCA appreciates the city's active role in the Site cleanup process. If you have any further questions about these comments/responses, please contact Nile Fellows at 651-757-2352, or Fred Campbell at 651-757-2260 of my staff.

Sincerely,



Michael Kanner, Manager
Superfund, RCRA, and Voluntary Cleanup Section
Remediation Division

MK:csa

cc: K. Thomas Vogt, North Oaks Resident
James Kelly, Minnesota Department of Health
I. Dan Colton, Leonard, Street and Deinard
Carmen Netten, Attorney General's Office
Mark Eisenschenk, North Oaks Resident
Lugene Olson, North Oaks Home Owners' Association
Donald and Margaret Wiley, North Oaks Residents
Keith Benker, Wenck Associates
Sarah Illi, Connestoga-Rovers & Associates
Beth Cliffe, City of North Oaks Council Member
Marty Long, City of North Oaks Council Member
Gregg Nelson, City of North Oaks Council Member
Tim Dunleavy, City of North Oaks Council Member

