



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, MN 55155-4194 | 651-296-6300 | 800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us

April 19, 2011

Ms. Sarah M. Illi
Conestoga-Rovers & Associates
1801 Old Highway 8 Northwest
Suite 114
St. Paul, MN 55112

RE: Highway 96 Dump Superfund Site
2010 Annual Monitoring Report

Dear Ms. Illi:

On March , 2011, Conestoga-Rovers & Associates (CRA) submitted a report entitled "2010 Annual Monitoring Report Highway 96 Site, White Bear Township, Minnesota" (Report) to the Minnesota Pollution Control Agency (MPCA) on behalf of Reynolds Metals Company and Whirlpool Corporation, the Responsible Parties (RPs) for the Highway 96 Dump Superfund site (Site). In general, the Report does a thorough job of summarizing historical and recent activities, including remedial actions and residential well sampling.

MPCA staff has reviewed the report and has the following comments:

Table 3.3 shows the average monthly extraction rates for EW-1A/EW-1B, EW-2 and the Sump. The pumping rates for EW-2 declined from April to June, from approximately 16 gpm to approximately 10 gpm. We request that you explain the figures in the Table and clarify whether the reduced pumping rates in EW-2 were due to decreased well performance or were by design (e.g., part of a plan to phase-in EW-1B).

Attached you will also find comments submitted by Keith Benker, Wenck Associates on behalf of the City of North Oaks. We request that you respond to these comments at the same time you respond to the MPCA comments.

Ms. Sarah M. Illi
Page 2
April 19, 2011

The MPCA requests a written response addressing the comments noted above. The response is due within thirty (30) days receipt of this letter. If you have any further questions in this matter, please feel free to call Nile Fellows at 651-757-2352 or Fred Campbell at 651-757-2260.

Sincerely,



Nile R. Fellows
Project Leader
Closed Landfill and Superfund Section
Remediation Division



Frederick K. Campbell
Hydrologist 3
Closed Landfill and Superfund Section
Remediation Division

NRF/FKC:csa

Enclosure

cc: K. Thomas Vogt, North Oaks Resident
Mark Eisenschenk, North Oaks Resident
Lugene Olson, North Oaks Home Owners' Association
Mayor John Schaaf, City of North Oaks
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
Keith Benker, Wenck Associates
Carmen Netten, Attorney General's Office
James Kelly, Minnesota Department of Health

**Wenck Associates Comments Regarding
2010 Annual Monitoring Report, Highway 96 Site
Prepared by CRA, March 2011**

March 31, 2011

Wenck Associates reviewed the 2010 Annual Monitoring Report on behalf of the City of North Oaks. Overall, we concur with the conclusions and recommendations. The primary follow-up actions are 1) tracking repair of the discharge line for the sump at the dump site, and 2) review of on-going groundwater monitoring.

Last year, Wenck provided comments/suggestions intended to improve future reports from the perspective of the City (and perhaps others). The suggested changes were incorporated, which is appreciated as it made the report more transparent.

We have one comment regarding the report:

Page 26, last paragraph: The report states *"the presence of vinyl chloride in the St. Peter Sandstone aquifer on the east side of Gilfillan Lake, as represented by MW17A and MW17B, is consistent with historical sampling results from 1993/1994 in the 15 Gilfillan Road/17 Gilfillan Road/8 Edgewater Lane area. However, vinyl chloride concentrations east of the lake of decreased since 1993. The decreasing vinyl chloride concentrations are attributed to the Highway 96 groundwater extraction system and natural attenuation."*

A review of the data in Appendix E shows that the vinyl chloride concentrations in 1993 were:

- 15 Gilfillan Road: 1.9 µg/L
- 17 Gilfillan Road: 2.5 µg/L
- 8 Edgewater Lane: 0.05 µg/L

The graphs in Appendix G show the vinyl chloride concentrations between 2005 and 2010 were:

- MW17A: approximately between 0.4 and 1.2 µg/L
- MW17B: approximately between non-detect and 0.3 µg/L

While the overall concentrations are "consistent with historical sampling results" and the maximum concentrations are generally lower now than in 1993, caution should be used when speaking of trends. First, the residential wells only have one testing result, and there was no data between 1993 and 2005 in this geographic area. Second, the graph for MW17B in Appendix G shows an increasing trend in vinyl chloride concentration since 2007.

We suggest revising the paragraph as follows: *the concentrations of vinyl chloride in the St. Peter Sandstone aquifer on the east side of Gilfillan Lake, as represented by MW17A and MW17B, are generally lower compared with historical sampling results from 1993/1994 in the 15 Gilfillan Road/17 Gilfillan Road/8 Edgewater Lane area. The lower vinyl chloride concentrations are attributed to the Highway 96 groundwater extraction system and natural attenuation.*

Because groundwater flows from east to west beneath Gilfillan Lake, the vinyl chloride concentrations on the east side indicate potential concentrations that could affect residential wells on the west side. While natural attenuation would be expected to lower the vinyl chloride concentrations over this distance and time of groundwater travel, as long as there are concentrations above the Health Risk Limit of 0.2 µg/L on the east side of the lake, there is potential for these concentrations to arrive at residential homes sometime in the future. Granted, there is a remedy selected for the residential wells should this occur, but the trends on the east side of the lake affect how long there will be potential concern for the west side of the lake. The existing data, including the trend at MW17B, indicate that the concern will likely go on for many years. Hence, monitoring of residential wells will be a long-term activity.