

Minnesota Pollution Control Agency

April 15, 1982

Mr. William Bronner
Office of General Counsel
NL Industries, Inc.
1230 Avenue of the Americas
New York, New York 10020

Mr. Stanton Sobel
Executive Vice President
Taracorp, Inc.
1401 West Paces Ferry Road
Suite D-211
Atlanta, Georgia 30327

Dear Gentlemen:

This letter is written in response to the joint NL Industries, Incorporated and Taracorp, Incorporated letter dated March 18, 1982 and received by the Minnesota Pollution Control Agency (MPCA) on March 22, 1982. In the March 18, 1982 letter, NL Industries and Taracorp agreed to conduct a phase I soil and ground water study on Taracorp's St. Louis Park, Minnesota property and proposed a phase I investigation that would identify and quantify any "releases" from the site via either ground water, surface water or ambient air.

Before providing comments on the phase I investigation work plan, the MPCA would like to respond to questions raised regarding the MPCA intentions toward this investigation. First, you asked if the MPCA would make a commitment to receive the investigation results with an open mind. The MPCA intends to review the results of the NL Industries/Taracorp phase I investigation with an open mind regarding the issues presented.

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Second, you asked if the MPCA cleanup standards are more stringent than applicable federal standards. Currently, the MPCA is unaware of any federal cleanup standards except for cleanup requirements provided in the latest draft of the National Contingency Plan (NCP). The federal NCP considers each site to be unique so that cleanup requirements would be established on a case-by-case basis. The MPCA agrees with this approach and believes that our cleanup requirements for any given site would be comparable to those required by the U.S. Environmental Protection Agency (EPA).

Finally, you asked that the MPCA deal directly and exclusively with Golden Auto Parts on any investigation on Golden's property. Golden has indicated its willingness to conduct a study on its property. The MPCA will attempt to coordinate your study and theirs by reviewing work plans for each investigation and splitting water samples from monitoring wells on both properties to ensure as much continuity between the investigations as possible.

With these matters resolved, the following is the MPCA's discussion of the NL Industries/Taracorp phase I investigation work plan.

Ground Water

The NL Industries/Taracorp work plan proposes installation of three surficial aquifer monitoring wells around the perimeter of the Taracorp property. It is proposed to install at least one of the wells to a 50 foot depth and to screen all three wells through the entire saturated depth of the bore hole regardless of drift units encountered during drilling. This approach to monitoring well installation is unacceptable to the MPCA for several reasons:

1. These wells alone will not provide an accurate representation of ground water quality data on specific drift aquifers. Therefore, if contamination is found, it will be difficult to evaluate the extent of the contamination (i.e. is contamination confined to the Upper Drift aquifer, is contamination present in the Middle Drift aquifer, etc.).
2. These wells may mask a ground water contamination problem by diluting contamination that may be present in one of the drift aquifers.

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3. These wells will not provide reliable water level measurements to determine ground water flow directions.
4. At least one of the three wells will be drilled and screened through a till layer that may be separating two drift aquifers. This well could act as a conduit for deeper ground water contamination. Also, the Minnesota Department of Health (MDH) prohibits installation of multiaquifer wells.

The hydrogeology of the drift in the St. Louis Park area has been studied by the U.S. Geological Survey (USGS) and has been found to be complex. Although two drift aquifers have been identified, the Upper Drift aquifer and the Middle Drift aquifer, there is no specific drift unit that can be considered the water table aquifer. The reason for this is partially due to the irregularities in the drift units (see enclosed cross-sectional map) and partially to seasonal fluctuations of up to five feet in the water table. Therefore, the water table in the St. Louis Park area can be located in and/or fluctuate between the Upper Drift aquifer, the till layer between the Upper and Middle Drift aquifers and the Middle Drift aquifer. In addition, the lateral gradient in the Upper Drift aquifer, where present near the Taracorp property, is low and is comparable to the vertical gradient between the Upper and Middle Drift aquifers. The Middle Drift aquifer is the surficial aquifer of major concern to the MPCA since it is a regional aquifer that has been used for ground water supply in the past.

Based upon discussion with the USGS on the hydrogeology of the drift and upon what the MPCA believes is necessary to determine if there is a ground water contamination problem resulting from Taracorp's property, the MPCA requests modification of the ground water investigation as follows:

1. Installation of three small diameter monitoring wells in the Middle Drift aquifer (approximately 30 feet deep). The monitoring wells should be screened at the top three to five feet of the coarse deposits of the Middle Drift aquifer. Well construction specifications should provide for sealing the annular space above the till layer with bentonite grout or cement as required by the MDH Well Code (Minn. Rule 7 MCAR §1.220C). A copy of the MDH Well Code is enclosed for your information.

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2. If the Upper Drift aquifer is encountered during the installation of Middle Drift aquifer wells, three small diameter monitoring wells should be installed and screened from the top of the Upper Drift aquifer to the till layer. Upper Drift monitoring wells should be placed next to Middle Drift wells.
3. An additional downgradient monitoring well will need to be installed in each aquifer if triangulation of the water levels in the monitoring wells indicate that none of those wells represent the downgradient water quality for each aquifer.
4. A monitoring well will need to be installed in the first bedrock aquifer underneath the Taracorp property (Platteville aquifer) and next to one of the Middle Drift aquifer wells, if the Middle Drift aquifer is contaminated. The purpose of the Platteville well would be to determine the distribution of the hydraulic head between the Middle Drift and Platteville aquifers.

The location of the three Middle Drift wells can be determined by discussion between NL Industries, Taracorp and the MPCA. The MPCA believes the location should be based upon obtaining good triangulation of the monitoring wells and upon existing data which indicates ground water flow to be in an east-southeasterly direction.

The MDH Well Code specifies acceptable types of protection for plastic well casings (Minn. Rule 7 MCAR §1.224F). The work plan proposes the use of collars to protect the exposed monitoring well casings. If collars refer to oversized steel casings, then this type of protection would be acceptable. In addition, locking caps are needed for each well.

Well development should consist of removal of at least ten volumes of water from each well or until the water is clear of construction debris. Water resulting from the well development can be discharged onto the ground as long as no discharge occurs near soil borings.

Monitoring well installation shall proceed in accordance with the MDH Well Code. Monitoring well plans and specifications must be submitted to the MPCA for review and approval by the MPCA and MDH prior to well installation.

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Analytical parameters and procedures described in the work plan are acceptable to the MPCA. Enclosed please find the MPCA's requirements for quality assurance in sampling and analytical procedures. Please adhere to these requirements during the phase I investigation.

Surface Water

The elevation of the surface water at the proposed surface water sampling point should be obtained at the same time ground water levels are obtained so that a comparison can be made between surface water elevation and water levels in the monitoring wells.

Air

Ambient air quality data can be obtained from John Seltz of MPCA's Air Quality Division. Mr. Seltz's phone number is (612) 296-7282.

Soil Borings

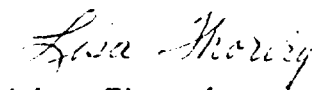
The MPCA indicated in the February 24, 1982 letter to NL Industries and Taracorp that 10 to 15 soil borings would be expected in order to determine the extent of soil contamination seen in surface soil samples collected from around the ball field area and analyzed by the MDH in 1979 and also to determine the presence or absence of buried wastes on the Taracorp property. The phase I work plan proposes analyses of soil samples from soil cores taken during monitoring well installation. While locating three of the soil test areas at monitoring well locations is acceptable to the MPCA, additional soil borings in the interior of the Taracorp property is necessary to evaluate the extent of surface soil contamination found by the MPCA in 1979. In addition, Golden Auto Parts has submitted soil boring information to the MPCA which indicates the presence of lead slag underneath Golden's property. Interior soil borings on the Taracorp property are needed to determine the presence or absence of lead waste disposal on the property. The MPCA believes an additional five soil borings to a six foot depth or the water table, whichever is first, would be sufficient to characterize soil contamination and waste disposal in the phase I investigation. Again, the five additional soil boring locations can be determined by discussions between NL Industries, Taracorp and the MPCA.

The proposed soil compositing scheme and analysis for lead using EPA's EP Toxicity Test is acceptable to the MPCA as long as the MPCA's quality assurance requirements are adhered to.

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The above comments respond to the NL Industries/Taracorp phase I investigation proposal. I would suggest meeting within 30 days of receipt of this letter to finalize the phase I investigation work plan. It would probably be beneficial to meet at Taracorp's St. Louis Park property so that monitoring well, soil boring and surface water monitoring locations can be agreed upon. Please contact me at (612) 297-3360 to arrange for a meeting date or to discuss any questions you may have regarding this letter. Thank you for your cooperation in this matter.

Sincerely,



Lisa Thorvig
Soil Scientist
Regulatory Compliance Section
Solid and Hazardous Waste Division

LJT/dc

Enclosure

cc: Mr. Fred Baser, NL Industries, Highstown, New Jersey
Mr. John Wentz, Taracorp, Inc. Granite City, Illinois
Mr. Herbert C. Davis, Davis & Racette
Ms. Marion Neudel, EPA, Region V
Mr. Ed Monteleone, Hennepin Co. Dept. of Public Works
Mr. James L. Brimeyer, City of St. Louis Park
Mr. Michael O'Toole, EPA, Region V
Mr. Roger DeRoos, MDH
Ms. Barbara Lindsey Sims, Special Assistant Attorney General