



**Environmental
Protection Agency**

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

June 21, 2011

**RE: DIAMOND HARD CHROME, INC.
CLOSED KINSMAN AVE. FACILITY
OHR 000 012 880
CUYAHOGA COUNTY
NOV**

CERTIFIED MAIL

Mr. Robert Tankovich
Diamond Hard Chrome, Inc.
6110 Grand Ave.
Cleveland, Ohio 44104

Dear Mr. Tankovich:

The Ohio EPA has reviewed the 2009 and 2010 Annual Reports submitted by Diamond Hard Chrome (DHC) and the associated Tier 1 data validations.

DHC's former Kinsman Ave. facility has been closed as a landfill with waste in place. Facilities closing as landfills are required to have and implement an approved post-closure plan including provisions for groundwater monitoring in accordance with OAC 3745-54-90 through 100. At this time DHC does not have an approved post-closure plan. The facility is conducting groundwater monitoring at the site and has submitted supplementary annual reports for groundwater monitoring. Ohio EPA has the following violations resulting from review of the 2009 and 2010 annual reports. Please submit a response with the required information within 30 days of receipt of this letter.

Violations

1. For both the 2009 and 2010 Supplementary Annual Reports, Diamond Hard Chrome is in violation of OAC Rule 3745-54-75, which requires that the reporting form and instructions supplied by the Director must be used for the annual report. A copy of the 2010 Final Standards Ground Water Monitoring Information Form and Instructions is enclosed. This document also can be accessed through the Ohio EPA website. Among the required information not submitted are:
 - A. Results of analysis for the site specific constituents of concern. Only the results for hexavalent chromium were reported. The site specific constituents of concern include dissolved chromium, hexavalent chromium, and dissolved lead.
 - B. The "Well.DBF" did not include the following required information: total depth, elevation of the top of the well screen, elevation of the bottom of the well screen, the geographical method used to determine elevations, the well use code, the well log type, the date of well installation, the depth of the well at installation, and the ground water level at installation.

- C. The signed certification statement required by OAC 3745-54-75 (J) and 3745-50-58 (K) as to DHC's legal responsibility for the accuracy of the data. This statement is to be submitted on paper and must include the language in Section 6, item 1 of the annual report instructions verifying that the information submitted is true, accurate, and complete.
- D. Results of ground water surface elevation measurements required under OAC Rule 3745-54-97(F). This must include a brief description of the ground water flow system and the annual ground water flow direction and rate in the uppermost aquifer as required under OAC Rule 3745-54-98(E), 99(E), and 54-100 (D).
- E. Sampling data including the names of the individual(s) who performed the sampling of measurement as per OAC Rule 3745-50-58(J)(3), copies of the chains of custody and sample receipt forms, documentation of sample preservation methods, the results of any field analyses, a description of problems encountered during sampling; and documentation of any deviations from SAP procedures.
- F. Laboratory data including laboratory data sheets, the names of the individual(s) who performed the analyses, the results of analyses including: laboratory data sheets for the primary and duplicate samples, trip, field, and equipment blank data; documentation of any dilutions; laboratory control samples, matrix spike, matrix spike duplicate and surrogate recovery data including control limits for these samples; RPD; lab/method blank; concentration limits for each parameter; and results of any data validations performed with discussion if any data validation issues (qualifiers) were such that the information provided may not be used for compliance requirements.
- G. In order to meet the requirements of OAC Rule 3745-54-97(J) for reporting results of ground water surface elevations under OAC Rule 3745-54-97(F), Ohio EPA requires that the owner/operator submit a map(s) for each sampling event indicating: position of the hazardous waste management unit in relation to the monitoring wells; potentiometric maps of all monitored zones for each sampling event, including arrow(s) marking flow direction(s) as evidence that the monitoring well samples are representative of the quality of ground water passing the point of compliance as required by OAC Rule 3745-54-97(A)(2), 98, and 99(B) and (E), and 54-100(D); and iso-concentration maps for contaminants if the facility is in either compliance or corrective action.
- H. Supporting calculations pertaining to the calculated or measured rates of migration of hazardous waste/constituents during the reporting period.

More Information Needed To Determine Compliance

1. Compliance with OAC 3745-54-97 (E), which requires determining the ground water surface elevation each time ground water is sampled, cannot be verified for the December 2009 sampling event because the only data submitted for this sampling event was for hexavalent chromium. The water level elevation data for the December 2009 sampling event must be submitted for review if available.
2. Compliance with OAC 3745-54-97 (G) and OAC 3745-54-99 (C)(1), which requires the collection of data on site specific contaminants of concern, cannot be determined because data for only one of the site specific contaminants of concern (hexavalent chromium) was submitted for the December 2009 sampling event. The data for total chromium and lead for the December 2009 sampling event must be submitted to Ohio EPA for review if available.
3. Compliance with OAC 3745-54-97 (D) and (E), which require the ground water monitoring program to include procedures and techniques that ensure monitoring results that are reliable and accurate, cannot be determined. The following items document problems with the laboratory QA/QC data that has been submitted with the June and December 2010 data packages. The lack of appropriate and complete laboratory QA/QC information has been an ongoing problem. At this point in time, none of the ground water data submitted to Ohio EPA for review since at least 1994 has included the laboratory QA/QC information needed to verify the accuracy and reliability of the data.
 - A. Neither data package included a signed statement from the laboratory attesting to the accuracy of the data. Such statements should be obtained from the laboratory for each of these sampling events and submitted to Ohio EPA for review.
 - B. Neither data package includes a case narrative summarizing QA/QC discrepancies or other problems. Case narratives should be obtained from the laboratory for each of these sampling events and submitted to Ohio EPA for review.
 - C. Neither data package includes a sample receipt form documenting the condition of the samples upon arrival at the laboratory. The sample receipt form should document the condition of the sample containers, whether the samples were properly preserved, the temperature of the cooler and samples, and any problems that might affect the quality of the data. Sample receipt forms for these data packages should be obtained from the laboratory and submitted to Ohio EPA for review.

- D. Although there is a place on the chain-of-custody (COC) form to document the preservatives added to the samples, this information is not included on the COC form for the June 2010 data. There also is no sample receipt form for these samples, so it cannot be determined if the samples were properly preserved. Because it is unknown whether the samples were properly preserved, all positive sample results from this sampling event are considered to be estimated (J-flagged) values. This information should be obtained from the laboratory and submitted to Ohio EPA for review.
- E. The analysis date for the December 2010 samples is listed as June 17 and June 21, 2010. These are invalid analysis dates for the December 2010 samples. Therefore, it is impossible to determine if the samples were analyzed within their maximum holding times. Therefore, the data from the December 2010 sampling event are rejected. The company should obtain the correct date of analysis for the December 2010 samples and submit this information to the Ohio EPA for review.
- F. According to the report text, a sample was spiked in the field with hexavalent chromium during the June 2010 sampling event. It is unclear if this sample was made with ground water from one of the site monitoring wells or with laboratory grade water supplied by the laboratory. In the laboratory report, this same sample is used as the duplicate and spike sample for not only the hexavalent chromium, but for the total chromium and lead analyses, too. Clarify how this spiked sample was made and why it is a valid duplicate and spike for total chromium and lead if it was spiked with only hexavalent chromium.
- G. For the December 2010 data, there are results for a check spike. Clarify if this is a prep spike or a matrix spike.
- H. The units for the detection limits for the June samples are listed as "pg/L" on the table summarizing the results of the analyses. Define the "pg/L" abbreviation.
- I. No laboratory data sheets were submitted with the data packages. Therefore, it is not possible for Ohio EPA to verify that the tabulated data submitted are accurate. This is particularly important since there was a mistake made with respect to the analysis date reported on this table for December 2010. Such mistakes lead to uncertainty as to whether the rest of the data included on these tables are accurate. To facilitate verifying the accuracy of the data reported on the tables in the laboratory reports, obtain all laboratory data sheets sampling events, and submit them to Ohio EPA for review. In the future, submit laboratory data sheets for all primary and QA/QC samples analyzed.

Statements

1. In the text of both the June and December sampling reports, DHC states that hexavalent chromium is the only "hazardous constituent detected in any significant concentration in the wells." Ohio EPA disagrees with this statement. Total chromium is also detected in significant concentrations in the wells at the site. In addition, there is enough of a difference between the concentrations of hexavalent chromium and total chromium to indicate that all of the chromium detected in the ground water at the site is not hexavalent chromium.
2. The text of the reports for both of the sampling events states that the results do not indicate the detection of any analytes of concern in any samples with the exception of hexavalent chromium in wells MW-6, MW-10 and MW-11. Ohio EPA does not agree with this statement for the same reasons as presented in the comment above.

Recommendations

1. It is unclear whether the chromium and lead samples were field filtered, and thus, it is unclear whether these samples were for dissolved or total metals. Clarify whether the chromium and lead samples were field filtered.
2. In the text of the June 2010 report, it indicates that trip, field, and equipment blanks, duplicates, and a spiked sample were also obtained for chemical analysis. It further states that the trip blank was compromised in transit and was not submitted for analysis. Provide additional information documenting what happened to the trip blank. In addition, considering the purpose of the trip blank is to demonstrate that nothing affected the validity of the primary samples during shipment, document why the primary samples were considered to be valid even though the trip blank was compromised during shipment.

In addition, the text indicates that there were field and equipment blanks and a duplicate sample submitted for analysis. However, the COC does not include these samples, nor are they reported on the laboratory results table. Explain why there are no field or equipment blanks or duplicate samples entered on the COC or the laboratory data table if such samples were actually collected and submitted for analysis.

3. The text of the June 2010 report indicates that a sample was spiked in the field with hexavalent chromium. Submit details of how this sample was created and also why a sample was spiked in the field rather than in the laboratory.

4. In the "Recommendations" sections of both the June 2010 report and the December 2010 report, DHC requests that the focus of the post-closure sampling should be on hexavalent chromium; that MW-9 be removed from the list of wells sampled semi-annually; and that there is no need for additional Appendix IX constituents to be added to the sampling program.

At this time, Ohio EPA must deny these requests. DHC has not submitted data that can be evaluated for accuracy, validity, and appropriateness. Sufficient laboratory QA/QC information has not been submitted for a Tier 1 data validation. Therefore, all concentrations of contaminants collected to date are considered estimated values or have been rejected. In order for DHC's requests to be evaluated, DHC must include the laboratory QA/QC information that has been requested. After a sufficient number of sampling events have been completed, and the required information submitted to verify the accuracy and validity of the data, Ohio EPA will be willing to evaluate DHC's request to modify the parameters analyzed, the wells sampled, and whether or not an exemption from additional sampling for the contaminants included in the Appendix to OAC 3745-54-98 (as required by OAC 3745-54-99 (G)) should be granted.

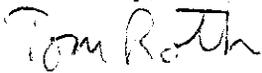
5. The COC and the laboratory results table include a sample for MW-1. It is the understanding of Ohio EPA that MW-1 can no longer be located. Ohio EPA requests an explanation of where the sample labeled MW-1 originated. If this sample is not from MW-1, Ohio EPA recommends that in the future DHC refrain from labeling other samples (e.g., QA/QC samples) with an identification that corresponds to one already used for one of the wells at the site.
6. To increase clarity, Ohio EPA recommends that DHC include an arrow(s) showing the estimated ground water flow direction on all potentiometric maps submitted.
7. The tables included in Section 2.1 in both the June and December 2010 reports include a post-sample depth to water. However, the field data sheets for these sampling events do not include this information. Explain why this information is not included on the field data sheets. Also, explain where this data was recorded when it was collected in the field.

Should you have any questions regarding this letter, please feel free to call me at (330) 963-1231.

Mr. Robert Tankovich
Diamond Hard Chrome, Inc.
June 21, 2011
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You can find copies of the rules and other information on the Division's web page at:
<http://www.epa.state.oh.us/dhwm/>.

Sincerely,



Tom Roth
District Representative
Division of Materials and Waste Management

TR/cl
Enclosure

ec: Michael Allen, DERR, CO
Niall McKenna, DMWM, NEDO
Natalie Oryshkewych, DMWM, NEDO

cc: Diane Kurlich, DDAGW, NEDO
Marlene Kinney, DMWM, NEDO