

REV_4

Department:

Subdepartment:

DERR

NULL

DERR

<NONE>

Program:

RCRA_C_UNIT_CLOSURE

DERR - RCRA C Unit Closure

Office Location:

Medium:

NEDO

WATER

NEDO

WATER

Doc Type:

Doc Subtype:

NOV

NULL

NOV

<NONE>

Facility County:

Facility ID:

18

218002939002

18 - CUYAHOGA

218002939002

Date:

20130826

8/26/2013

Facility/Site/Location/Regulated Entity Name:

DIAMOND_HARD_CHROME_INC

Diamond Hard Chrome Inc

Your input is 23 characters long (Max 40).

Facility Address 1:

NULL

Your input is 0 characters long (Max 40).

Facility Address 2:

NULL

Your input is 0 characters long (Max 40).

Facility City:

NULL

Facility State:

Facility ZIP: {00000 or 00000-0000}

NULL

NULL

<NONE>

Mailing Name:

NULL

Your input is 0 characters long (Max 40).

Mailing Address 1:

NULL

Your input is 0 characters long (Max 40).

Mailing Address 2:

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Your input is 0 characters long (Max 40).

Mailing City:

NULL

Mailing State/Province:

Mailing ZIP: {00000 or 00000-0000 or X0X0X0}

NULL

NULL

<NONE>

Project Name:

Project Type:

NULL

NULL

Latitude:

Longitude:

NULL

NULL



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

August 26, 2013

CERTIFIED MAIL
7012 1010 0002 2260 4855

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

Re: Notice of Violation, Ground Water Monitoring 2012 and 2013, Diamond Hard Chrome, Inc., OHR 000 012 880

Dear Mr. Tankovich:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed several documents from Diamond Hard Chrome. They are the June 2012 Ground Water Monitoring Event Report; a December 12, 2012 Ground Water Monitoring Report; 2012 Annual Supplemental Report; and a June 2013 Ground Water Monitoring Event Report. The review of this data is the topic of this Notice of Violation (NOV).

Ohio EPA requests this information be submitted within 30 days of receipt of this letter in order for DHC to return to compliance.

Violations—2012 Annual Report

Diamond Hard Chrome is in violation of Ohio Administrative Code (OAC) Rule 3745-54-75, which requires that the reporting form and instructions supplied by the Director must be used for the annual report. The following information, required to be submitted as per the supplementary annual report form and instructions, was not included in the 2012 Supplementary Annual Report. In order to return to compliance, corrected databases and the additional information required on the form and in the instructions should be submitted to Ohio EPA for review within 30 days of receipt of this letter.

A. Section 2, WELL.DBF did not include the following required information:

- The well log type;
- The date of well installation;

- The depth of the well at installation; and
- The ground water level at installation.

In addition, the well use was incorrectly identified as "8C, Other Ground Water Observation." The correct well use designation is "8A, RCRA Monitoring." This same comment was included in the review of the 2011 Supplementary Annual Report. **Please correct and submit the revised page to Ohio EPA within 30 days of receipt of this letter.**

- B. With regard to the codes used for parameters in Section 5, the duplicate samples were to be designated in the "dup_code" column. The method code used in this section, "SW2010," should be "SW6010." **Please correct and submit the revised page to Ohio EPA within 30 days of receipt of this letter.**
- C. In the directions for Section 5, it states, "In addition to all parameters sampled, the facility is required to submit the water level measurements for each well for each sampling event." DHC did not submit this information as part of the annual report. If this information is available, **please submit the information to Ohio EPA within 30 days of receipt of this letter.**
- D. Directions included in Section 6 of the annual report require additional information be submitted with the electronic databases. The following additional information was not submitted. **Please submit within 30 days of receipt of this letter.**
- i. The signed certification statement required by OAC Rules 3745-54-75(J) and 3745-50-58(K) documents the facility's and consultant's legal responsibility for the accuracy of the data. As per the instructions, this statement is to be submitted on paper and is to read as follows: "I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." **This statement is to be signed by the company representative and submitted to Ohio EPA within 30 days of receipt of this letter.**
 - ii. Ground water surface elevation measurements are required under OAC Rule 3745-54-97(F). **A brief description of the ground water flow system, the annual ground water flow direction, and rate in the uppermost aquifer as required under OAC Rules 3745-54-98(E), 99(E) and 54-100 (D), must be included in the report. This comment and the next four items (iii, iv, v, and vi) were also included in the review of the 2011 Supplementary Annual Report. Please submit within 30 days of receipt of this letter.**

- iii. According to the directions for filling out Annual Reports, **the following information should be included, but was omitted:**
- Sampling data, including the time of sampling and the names of the individual(s) who performed the sampling, 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;
 - Descriptions of problems encountered during sampling; and
 - Documentation of any deviations from SAP procedures. **Please submit within 30 days of receipt of this letter.**
- iv. As required by OAC Rule 3745-50-58(J)(3), **the following information should have been included, but was omitted from the 2012 Annual Report:**
- Laboratory data, including dates the analyses were performed, the names of the individual(s) who performed the analyses, and 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. **Please submit within 30 days of receipt of this letter.**
- v. 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 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 Rules 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. **Please submit the required information within 30 days of receipt of this letter.**

- vi. Supporting calculations pertaining to the calculated or measured rates of migration of hazardous waste/constituents during the reporting period. **Please submit this information within 30 days of receipt of this letter.**

This ends the section dealing with violations. The next section includes comments.

COMMENTS:

General Comments:

1. Based upon the available data from the site, it appears that most of the chromium in the ground water is hexavalent chromium. In addition, from the results of Ohio EPA split samples collected in December 2012, the chromium in the ground water is mostly dissolved. Ohio EPA collected both total and dissolved chromium samples, and the concentrations detected were very similar.
2. The highest concentrations of dissolved chromium and hexavalent chromium are detected in the monitoring wells located immediately downgradient of the landfill at MW-12 and downgradient of MW-12 at the property boundary, MW-10. Based upon the concentrations of chromium and hexavalent chromium detected in the downgradient and property boundary wells, it appears that contaminated ground water is *moving* offsite. Preliminary Ohio EPA risk calculations indicate that the concentration of hexavalent chromium in the ground water on the site and leaving the site poses an unacceptable risk for invasive workers. Therefore, Ohio EPA considers **Diamond Hard Chrome to be in the corrective action (OAC 3745-54-100) phase of ground water monitoring.**

Comments Concerning the June 2012, December 2012, and June 2013 Ground Water Monitoring Reports:

1. The ground water flow maps submitted with the reports do not include an arrow(s) showing the direction(s) of ground water flow. In the future, all ground water flow maps must include an arrow(s) showing the estimated direction(s) of ground water flow.
2. In the "Recommendations" sections of the three reports, DHC requests that:
 - The focus of the post-closure sampling be on hexavalent chromium;
 - MW-9 be removed from the list of wells sampled semiannually; and
 - No additional Appendix IX constituents be added to the sampling and analysis plan for this site.

Ohio EPA agrees that, at this time, there is no need to add additional Appendix IX constituents to the list of analytes for this site in the future; total chromium (unfiltered) and hexavalent chromium remain the chemicals of concern (COCs) at the site.

Ohio EPA does not agree that MW-9 should be completely dropped from the monitoring program, but does recommend the company sample this well on an annual basis, rather than on a semiannual basis. In addition, although not requested by DHC, Ohio EPA

recommends DHC reduce the sampling frequency for lead in all wells from semiannually to annually. Lead has rarely been detected in the ground water at the site, since ground water monitoring resumed in 2008. Ohio EPA requests that the annual analysis for lead be conducted during the same sampling event in which MW-9 is sampled. **Ohio EPA recommends that MW-9 and lead be included in the first semiannual sampling event each year.**

3. A well construction log for MW-12 was submitted with the December 2012 report. A geologic log of this well was not submitted. **Please submit a geologic log** for this well to document the materials that were encountered during drilling and the depths at which the materials were encountered. **Please submit within 30 days of receipt of this letter.**
4. In Section 2.2 of the report, DHC states that the concentration of hexavalent chromium decreased in MW-6, MW-10 and MW-12 during the May 2013 sampling event. However, in looking at the chain of custody forms and the laboratory reports, the hexavalent chromium samples were not analyzed within 24 hours. Typically, the hexavalent chromium samples are not chemically preserved in the field, but they are analyzed within 24 hours of collection. Depending on the ground water conditions, hexavalent chromium can be quickly reduced to trivalent chromium in unpreserved samples. The May 2013 samples were collected on May 25, but were not received by the laboratory until May 28. The laboratory analyzed the samples on May 28. In addition, it is unclear whether the samples were kept at 4° C during the period between collection and submittal to the laboratory. Therefore, the decrease in the concentration of hexavalent chromium observed in the samples may have been due to hexavalent chromium being reduced to trivalent chromium while the samples sat for several days before being analyzed.

DHC should confirm that the samples were kept cool during the period between sample collection and analysis. In the future, if the hexavalent chromium samples will not be analyzed within 24 hours of collection, then DHC must ensure the samples are kept cool (less than or equal to 4 degrees Celsius). In the case of total chromium being the analyte, preservatives (such as nitric acid) are specified for the chosen method of analysis. DHC should obtain pre-preserved containers (if necessary) from the laboratory for the samples.

The company should ensure all of the information required by the instructions is fully addressed, accurately reported, and in the submittal of each annual report. The form and directions for each year's annual report are available on Ohio EPA's website. **It is expected that these issues will not be repeated on the 2013 Supplementary Annual Report.**

In order to return to compliance with the violations included in this NOV, please submit the requested/omitted information within 30 days of receipt of this letter.

DIAMOND HARD CHROME
NOTICE OF VIOLATION
AUGUST 26, 2013
PAGE 6

If you have any questions regarding this letter, do not hesitate to contact me at (330) 963.1279.

Sincerely,



Patricia M. Natali, Environmental Specialist
Division of Environmental Response and Revitalization

PN/kss

cc: Diane Kurlich, Ohio EPA, NEDO, DDAGW
Joe O'Brien, O'Brien Technical Services, Inc.

ec: Marlene Kinney, Ohio EPA, NEDO, DMWM
Mike Allen, Ohio EPA, CO, DERR
John Palmer, Ohio EPA, NEDO, DERR
Rod Beals, Ohio EPA, NEDO, DERR
Harry Courtright, Ohio EPA, NEDO, DERR Ed Lim, Ohio EPA, CO, DERR
EDOC in CO

NOTICE: Ohio EPA's failure to list specific deficiencies or violations in this letter does not relieve your company from having to comply with applicable regulations.