



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Ms. Heather L. Baladi
Environmental Protection Manager
Crane Naval Surface Warfare Center
300 U.S. Highway 361
Crane, Indiana 47522-5009
heather.baladi@navy.mil

Re: Notice of Potential Violation and Opportunity to Confer
Off-site Compliance Monitoring Report and Description of Areas of Concern
Crane Naval Surface Warfare Center
EPA I.D.: IN5170023498
Crane, Indiana

Dear Ms. Baladi:

On September 28 – September 30, 2020, the U.S. Environmental Protection Agency conducted an RCRA non-financial record review (NRR) of the Crane Naval Surface Warfare Center (“Crane,” “facility,” or “you”) located in Crane, Indiana. The purpose of the review was to evaluate Crane’s compliance with certain provisions of RCRA and its implementing regulations related to the generation, treatment and storage of hazardous waste; and Crane’s Hazardous Waste Management Permit (RCRA Permit) issued by the Indiana Department of Environmental Management (IDEM) on July 10, 2019. The NRR was conducted remotely and was based on documents and information collected by EPA during an on-site multi-media inspection September 22 – 24, 2020, and provided by Crane on October 9, 13, 19, November 3, 4, and 5, 2020. EPA’s RCRA inspector, Mr. Todd Brown, participated in a conference call with Crane representatives on November 5, 2020. We have enclosed a copy of the RCRA NRR report for your convenience.

Information currently available to EPA suggests that Crane may be in violation of RCRA. By this letter, EPA is extending to you an opportunity to advise the Agency, in person or in writing, of any further information EPA should consider with respect to the areas of concern.

During the NRR, EPA observed several areas of concern, described below. The description of the areas of concern is not a final determination regarding the Facility’s compliance with RCRA. EPA requests that you voluntarily submit a response in writing to us no later than 30 calendar days after receipt of this letter documenting the actions, if any, which you have taken since the

NRR to address the areas of concern described below or demonstrating why the areas should not be of concern. EPA will notify you of any further action after reviewing Crane's response.

Areas of Concern

During the NRR, EPA observed the following areas of concern:

1. General Waste Analysis (Permit Section II.C)

RCRA Permit Condition II.C. requires Crane to comply with the procedures in Section C, Waste Analysis Plan, Attachments 0, I, III, IV and V, which are incorporated by reference. Attachment IV, Section C-2a(2), describes the test parameters for (b) (6) Incinerator treatment residues, which include "APCS cyclone and baghouse" residues. The parameters to be evaluated are noted in Table C-4, and include arsenic, barium, cadmium, chromium, lead, mercury, selenium and 2,4-dinitrotoluene.

RCRA Permit Attachment IV, Section C-2d(2), states the following with respect to the frequency of analysis for treatment residues:

"(b) (6) Incinerator treatment residues consist of dusts and ash. The frequency of analysis for these residues will depend on the types of waste feed streams and the rate at which residue containers are filled. The composition and hazard characteristics of residues will depend on the composition of the waste feed streams. Therefore, treatment residues will be sampled on a regular basis to ensure a proper waste disposal characterization."

The last two analyses of "APCS cyclone and baghouse" residue are based on samples collected March 19, 2008, and January 15, 2015.

The 2008 sample of cyclone residue yielded a barium Toxicity Characteristic Leaching Procedure (TCLP) concentration of 181 mg/l, which exceeds the 100 mg/l threshold for barium toxicity. The lead TCLP concentration was below the reporting limit (RL). However, the 2015 sample of cyclone residue yielded a lead TCLP concentration of 7,770 mg/l, which exceeds the 5.0 mg/l threshold for lead toxicity.

According to the manifest records, prior to the 2015 sample results, Crane characterized its cyclone residue as characteristically hazardous for barium, but not lead. After the 2015 sample results, Crane characterized the waste as characteristically hazardous for cadmium and lead, but not barium.

The 2008 sample of bag house dust yielded a TCLP cadmium concentration of 8.21 mg/l, which exceeds the 1.0 mg/l threshold for cadmium toxicity. The lead TCLP concentration was below the reporting limit (RL). However, the 2015 sample yielded a lead TCLP concentration of 17,900 mg/l.

The March 19, 2008 samples were evaluated for 2,4-dinitrotoluene. The January 15, 2015 samples were not.

There are significant differences between the TCLP results for the 2008 and 2015 samples of cyclone residue and baghouse dust. The waste characterizations were separated by seven years. Also, Crane has not evaluated the wastes for 2,4-dinitrotoluene since March 2008. Crane does not appear to be evaluating (b) (6) incinerator residues on a regular basis to ensure a proper waste disposal characterization.

2. General Inspection Requirements and CSF Containment (Permit Sections II.E and III.F)

RCRA Permit Condition II.E requires Crane to follow the inspection schedule in Section F, Procedures to Prevent Hazards, Attachments 0 – V, and remedy any deterioration or malfunction discovered by an inspection.

RCRA Permit Condition III.F requires Crane to operate and maintain the containment system of the Container Storage Facility (CSF) as specified in Section D, Process Information, Attachment I, which is incorporated by reference. Attachment I, Section D-1a(3)(a) states any faults detected with the integrity of the HDPE liner or protective overlay (at the CSF) will be reported to Environmental Protection for immediate correction, and if any damage to the HDPE liner or protective overlay is observed necessary repairs will be completed as soon as possible.

Daily and weekly inspection records for the CSF reviewed during the NRR note damage to the epoxy coating of the floor in in (b) (6) beginning September 3, 2019. The damage had not been addressed as of November 5, 2020.

RCRA Permit Attachment I, Section F-2b(1) under the heading of “Monthly Inspections and Equipment Tests,” states Crane’s Fire Prevention/Protection Branch “periodically” tests and checks the radio-signal controlled fire alarm system at the CSF. Inspection records reviewed during the NRR reveal the periodic tests and checks of the radio-signal controlled fire alarm systems occur annually, not monthly, as described in the RCRA Permit.

3. Preparedness and Prevention (Permit Section II.H)

RCRA Permit Condition II.H. requires Crane to maintain access to communications or alarm systems. The daily inspection records for the DR note the telephones were not operational August 21 – August 29 and September 3 – November 12 of 2019. Therefore, Crane had not maintained access to communications during that time.

4. Open Burning/Open Detonation Design, Construction and Operation (Section VII.C)

RCRA Permit Condition VII.C.3 prohibits open burning activities, among other times: (a) during periods of precipitation, (b) when wind speed falls below 3 miles per hour, and (c) on overcast days (more than 80 percent cloud cover) with a cloud ceiling of less than 2,000 feet. Compliance with these conditions shall be documented in the operating record for each event.

EPA reviewed Ammunition Burning Grounds logbook entries for April 1 through September 14, 2020. The logbook records “burn time” and weather observations including temperature, pressure, wind direction, wind speed, humidity, visibility, and a general description of the weather (e.g., “clear,” “mostly sunny,” “partly cloudy,” etc.).

The weather entries are made once prior to, and twice after, the recorded burn time. There are several occasions in April, May, June, August and September where the wind speed is recorded as 0 mph prior to the recorded burn time.

On April 1, May 7, May 13, and June 10, burning commenced after the initial weather observation was recorded as either, “Mostly Cloudy,” “Cloudy” or “Overcast.” Subsequent weather entries those days were recorded as “Partly Cloudy,” “Cloudy,” and/or “Mostly Cloudy.”

On April 30, 2020, burning commenced at 0820 hours after recording the weather as, “Drizzle.” Subsequent weather entries that day were “Cloudy” and “Overcast.”

Therefore, Crane did not comply with the restrictions on open burning in Permit Condition VII.C.3.

5. Ground Water Monitoring Conditions – Demolition Range (Permit Section VIII)

Section VIII of Crane’s RCRA Permit includes ground water monitoring conditions specific to the Demolition Range. Section VIII.L.1 of the RCRA Permit states that if upon completion of sampling, the analytical results at any compliance point monitoring well(s) exceed the statistical criteria or the Ground Water Protection Standard, the Permittee must: (a) notify the Commissioner of IDEM of this finding within seven (7) days; and (b) submit to the Commissioner an application for a permit modification to establish a corrective action program meeting the requirements of 40 C.F.R. § 264.100 within 180 days.

On October 9, 2020, Crane provided EPA with an “Executive Summary” regarding the “first semi-annual 2020 Demo Range sampling program” conducted during April 2020. According to the Executive Summary, two wells yielded manganese results above the Risk Based Target Level (RBTL). The Executive Summary further states that “[t]he results of the first semi-annual 2020 Demo Range sampling program showed that Big Clifty/Beech Creek well CO3 had a statistically significant increase in manganese, and Pennsylvanian well C06P2 showed a significant increase in both barium and copper.”

Crane did not notify the Commissioner of IDEM of this finding within seven (7) days or submit to the Commissioner an application for a permit modification to establish a corrective action program meeting the requirements of 40 C.F.R. § 264.100 within 180 days.

6. Ground Water Monitoring Conditions – Ammunition Burning Grounds, Old Jeep Trail, and Old Rifle Range (Permit Section IX)

Section IX of Crane’s RCRA Permit includes ground water monitoring conditions specific to the Ammunition Burning Grounds and Old Rifle Range. Section IX.E states that the Permittee must determine whether there is statistically significant evidence of increased contamination for each hazardous constituent that exceeds the relevant ground water protection standards as identified in Section VIII.D.1 for that constituent in each monitoring location. Section IX.F states that if the Permittee determines that there is an increasing trend in the concentration of any constituent the Permittee must: (1) notify the Commissioner of this finding within 14 days and (2) submit a corrective action plan to address the increase within 60 days of discovery of the exceedance.

Crane’s “2019 Annual Ground Water Monitoring Report” identified an increasing trend in the concentration of cis-1,2,-dichloroethene at monitoring well 03C20. The concentration of the contaminant had exceeded the RBTL for several quarters. Crane did not submit a corrective action plan to IDEM to address the increase in contamination.

Actions Requested

By no later than 30 calendar days from the date of this letter, please provide information documenting the actions, if any, which you have taken since the inspection to address the identified areas of concern.

Please send all documents, information, and/or reports requested by this letter by electronic mail to:

r5lecab@epa.gov

and

brown.todd@epa.gov

The subject line of all email correspondence must include, “IN5170023498.” All electronically submitted materials must be in final and searchable format, such as Portable Document Format (PDF) with Optical Character Recognition (OCR) applied. If you are unable to send a response to these email addresses due to email size restrictions or other problems, contact Todd Brown, of my staff, to make additional arrangements for transmission of the response.

This letter is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks information from specific individuals or entities as part of an administrative investigation.

If you are unable to respond to this letter in a timely fashion because of issues related to the COVID-19 pandemic, please submit a written request for an extension of time to respond via email to Todd Brown, explaining the specific reasons why the pandemic has affected your ability to respond.

You may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to EPA in response to this letter. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice.

The EPA contact in this matter is Todd Brown. You may call him at (312) 886-6091 if you have additional questions. Thank you for your prompt attention to these concerns and your efforts to protect human health and the environment.

Sincerely,

MICHAEL
HARRIS

 Digitally signed by
MICHAEL HARRIS
Date: 2021.01.26
15:16:18 -06'00'

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division

Enclosure

cc: Jennifer Reno, IDEM (jreno@idem.in.gov)
Scott Draschil, IDEM (sdraschi@idem.in.gov)