



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

Re: **Worthington Steel Co**
OHR000017897
Fulton County
DMWM, NWDO
Notice of Violation/Partial Return
to Compliance

March 28, 2013

Ms. Elaine Veth
Worthington Steel Company
6303 County Road 10
Delta, Ohio 43515

Dear Ms. Veth:

Thank you for sending the response to my November 13, 2012, Notice of Violation (NOV). Your response was received by the Ohio Environmental Protection Agency (Ohio EPA) on February 25, 2013, and included a cover letter and tank assessment and certification documents.

All tank assessment and certification documentation for the three hazardous waste tanks was reviewed by Ohio EPA's Central Office. Worthington Steel Co's (WS's) compliance with Ohio's hazardous waste tank rules and regulations is described below. Please note that WS has not abated all originally listed violations and that WS has been found to be in violation of an additional citation that was not outlined in the November 13, 2012, NOV.

The following is a summary of the violations observed after review of WS's tank certification documentation and the facility's compliance with respect to each violation. In order to correct these violations you must do the following and send me the required information **within 14 days of your receipt of this letter**. Please note that any additional submitted documentation concerning the tank assessment must include the certification statement found in Ohio Administrative Code (OAC) rule 3745-50-42(D) as outlined below.

Violations:

1. **Ohio Administrative Code (OAC) rule 3745-66-92(A), Design and installation of new tank system or components:** "Owners or operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by a qualified, professional engineer in accordance with paragraph (D) of rule 3745-50-42 of the Administrative Code attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste."

WS failed to have the following tank assessment documentation as outlined in OAC rule 3745-66-92 (A):

- a. A written assessment reviewed and certified by a qualified professional engineer in accordance with paragraph (D) of rule 3745-50-42 of the Administrative Code attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste (WS needs to have a professional engineer review the drawings and calculations and certify the information is designed properly.) **Not abated, see below.**
- b. A certified assessment as described above which includes the hazardous characteristics of the waste handled in the tanks (WS needs to provide specifics on the waste stored in the tanks such as the flashpoint, pH, specific gravity, etc.) **Abated on February 25, 2013.**
- c. A certified assessment as described above which includes a determination by a corrosion expert concerning components in which the external shell of a metal tank or any external metal component of the tank system is or will be in contact with the soil or with water (WS failed to provide information regarding the ancillary structures (i.e. pipes) from the point of generation to the tank and from the tank to the disposal point.) **Not abated, see below.**
- d. A certified assessment as described above which includes a determination of design or operational measures that will protect the tank system against potential damage for underground tank system components that are likely to be affected by vehicular traffic (WS failed to provide information regarding the ancillary structures (i.e. pipes) from the point of generation to the tank and from the tank to the disposal point.) **Not abated, see below.**
- e. A certified assessment as described above which includes design considerations to ensure that tank foundations will maintain a full load of the tank (WS needs to provide design calculations for the tank foundation for full tanks.) **Abated on February 25, 2013.**
- f. A certified assessment as described above which includes design considerations to ensure that tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed in a saturated zone, or is located within a seismic fault zone (WS failed to provide this documentation.) **Abated on February 25, 2013.**
- g. A certified assessment as described above which includes design considerations to ensure tank systems will withstand the effects of frost heave (WS failed to provide this documentation.) **Abated on February 25, 2013.**

On February 25, 2013, Ohio EPA received documentation that described the hazardous characteristics of waste stored in the tanks, calculations of the tank foundations demonstrating sufficient design, a demonstration that indicated anchors are not necessary for these tanks, and a demonstration that frost heave is not applicable for these tanks. Therefore, portions b, e, f, and g of this violation are considered abated on February 25, 2013.

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Although the assessment submitted by WS on February 25, 2013, includes a stamp of approval by a professional engineer, this does not meet the certification requirements found in OAC rule 3745-66-92(A) and OAC rule 3745-50-42(D). In order to abate portion a of this violation, WS must submit a signed certification statement by a professional engineer that certifies the PE has reviewed and agrees with the tank assessments and documentation submitted by WS on August 7, 2012, and February 25, 2013. And, if WS submits additional tank documentation/assessment information, these additional submittals must also be certified by a PE as outlined in OAC rule 3745-66-92(A) and OAC rule 3745-50-42(D).

At this time, WS has not submitted sufficient documentation to abate portion c of this violation. In order to abate this portion of the violation, WS needs to provide documentation that indicates the material of the pipe leading from the production line to the containment area.

At this time, WS has not submitted sufficient documentation to abate portion d of this violation. WS states in the February 25, 2013, submittal that Bailey Oxides LLC owns a portion of the piping from these tanks and therefore, WS is not responsible for meeting the hazardous waste tank rules and regulations for the portions of the pipes that Bailey Oxides LLC owns. However, WS has not provided any documentation that shows these pipes are owned by Bailey Oxides LLC. In order to abate this portion of the violation, WS needs to provide documentation that indicates the actual point of ownership for these pipes.

2. OAC rule 3745-66-93(C)(1), Containment and detection of releases: "Secondary containment systems must be...constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure..."

WS failed to provide information on the secondary containment system which shows the system has sufficient strength and thickness to prevent failure.

On February 25, 2013, Ohio EPA received documentation that the concrete liner/sealant used in the secondary containment system for the three hazardous waste tanks is appropriate for wastes of up to 120 degrees Fahrenheit. However, additional documentation submitted by WS on the same day states that the waste stored in these tanks can be up to 190 degrees Fahrenheit. Therefore, the concrete liner/sealant utilized by WS is not sufficient.

In order to abate this violation, WS must utilize a concrete liner/sealant on the secondary containment for the three hazardous waste tanks which can accommodate wastes of at least 190 degrees Fahrenheit.

3. **OAC rule 3745-66-93(C)(2), Containment and detection of releases:** "Secondary containment systems must be ... placed on a foundation or base capable of providing support to the secondary containment system and resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift..."

WS failed to provide information on the secondary containment system which shows the system has been placed on a foundation or base capable of providing the needed support to prevent failure as described in OAC rule 3745-66-93(C)(2).

On February 25, 2013, Ohio EPA received documentation that demonstrated that WS has a sufficient foundation design for the three hazardous waste tanks.

Therefore, this violation is considered abated on February 25, 2013.

4. **OAC rule 3745-66-93(C)(4), Containment and detection of releases:** "Secondary containment systems must be ... sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation..."

WS failed to provide information on the secondary containment system which shows the slope of the secondary containment system.

On February 25, 2013, Ohio EPA received tank assessment documentation. Although this documentation did not state the pitch of the secondary containment system at WS, WS's procedures for handling moisture in the secondary containment system is sufficient to meet this rule citation.

Therefore, this violation is considered abated on February 25, 2013.

5. **OAC rule 3745-66-93(E)(1), Containment and detection of releases:** External liner systems must meet the requirements outlined in OAC rule 3745-66-93(E).

WS failed to provide documentation that the hazardous waste tanks secondary containment system meets the requirements outlined in OAC rule 3745-66-93(E) as described below:

- a. WS failed to provide documentation that the external liner system is designed to contain 100% capacity of the largest tank within its boundary. (WS needs to provide more information on the depth of foundation, height of curb above ground, etc.)
Abated on February 25, 2013.
- b. WS failed to provide documentation that the external liner is free of cracks or gaps.
Abated on February 25, 2013.
- c. WS failed to provide documentation that the external liner is constructed with chemical-resistant water stops at all joints. **Abated on February 25, 2013.**

- d. WS failed to provide documentation that the external liner is provided with an impermeable coating that is compatible with the stored waste. (WS has not provided enough information about the chemicals stored in the tank to determine if the Ceilcote 2500 is compatible with the stored waste.) **Not abated, see below.**

Ohio EPA received tank assessment documentation on February 25, 2013. This documentation shows that if catastrophic failure of all five tanks (three of which are hazardous waste tanks) located in this area occurs when the tanks are full, secondary containment will overflow and impact the environment. However, the documentation submitted also shows that the external liner system is designed to contain 100% of the largest tank, which meets the rule requirement. Therefore, a portion of this violation is considered abated on February 25, 2013.

On February 25, 2013, Ohio EPA received documentation that the external liner is free of gaps and that cracks appear to be superficial. Ohio EPA recommends that the daily inspection log and procedures of this area be updated to include a daily inspection of the liner to determine if additional cracks or gaps are present and if the current cracks deteriorate. Portion b of this violation is considered abated on February 25, 2013.

On February 25, 2013, Ohio EPA received documentation that WS has water stops in place. Therefore, portion c of this violation is considered abated on February 25, 2013.

On February 25, 2013, Ohio EPA received documentation that the concrete liner/sealant used in the secondary containment system for the three hazardous waste tanks is appropriate for wastes of up to 120 degrees Fahrenheit. However, additional documentation submitted by WS on the same day states that the waste stored in these tanks can be up to 190 degrees Fahrenheit. Therefore, the concrete liner/sealant utilized by WS is not sufficient.

In order to abate this violation, WS must utilize a concrete liner/sealant on the secondary containment for the three hazardous waste tanks which can accommodate wastes of at least 190 degrees Fahrenheit.

6. OAC rule 3745-66-93(F), Containment and detection of releases: "Ancillary equipment must be provided with full secondary containment..."

WS failed to have a certified written assessment of the ancillary equipment (piping from the point of generation to the tank and from the tank to the point of disposal).

Ohio EPA received documentation on February 25, 2013, that refers the reader/reviewer to design drawings that include information on the ancillary equipment. However, such design drawings were not submitted.

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In order to abate this violation, WS must submit to Ohio EPA a certified written assessment for the ancillary equipment which documents how WS is complying with this rule. Please submit the referenced drawings.

Additional Violation

After further review of WS's tank documentation submitted on February 25, 2013, an additional violation has been noted that was not listed in the previous NOV.

- 7. OAC rule 3745-66-93(C)(3), Containment and detection of releases:** "Secondary containment systems must be... Provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four hours..."

WS failed to provide documentation on the secondary containment system which shows it is provided with a leak detection system designed to detect a leak within 24 hours.

In order to abate this violation, WS must submit documentation showing that the secondary containment system for the three hazardous waste tanks are provided with leak detection systems capable of detecting a leak of hazardous waste within 24 hours as required in OAC rule 3745-66-93(C)(3).

Recommendation:

- 1. Tank Installation:** At this time it is unclear if WS met the requirements of OAC rule 3745-66-92(B) through OAC rule 3745-66-92(G) during the original installation of the hazardous waste tanks. Since WS will need to have the tank assessments certified by a professional engineer as outlined above, Ohio EPA suggests that WS has the professional engineer determine compliance with these rules during his/her review and inspection of the tank system.

WS needs to immediately take the necessary measures to return to compliance with Ohio's environmental laws. Within 14 days of receipt of this letter, WS is requested to provide documentation to this office including the steps taken to abate the violations cited above. Documentation of steps taken to return to compliance includes written correspondence, updated policies, and photographs, as appropriate, and may be submitted via the postal service or electronically to kara.reynolds@epa.state.oh.us.

Please be advised that violations cited above will continue until the violations have been properly abated. Failure to comply with Chapter 3734. of the Ohio Revised Code and rules promulgated thereunder may result in a civil penalty of up to \$10,000 per day for each violation. It is imperative that you return to compliance. If circumstances delay the abatement of violations, WS is requested to submit written correspondence of the steps that will be taken by date certain to attain compliance.

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Should you have any questions, please feel free to call me at (419) 373-3065. **Please send all correspondence within 14 days of receipt of this letter, to Ohio EPA, Northwest District Office, Attn: Kara Reynolds, 347 North Dunbridge Road, Bowling Green, Ohio 43402.**

Sincerely,

Kara Reynolds

Kara Reynolds
Environmental Specialist
Division of Materials and Waste Management

/lr

pc: Colleen Weaver, DMWM, NWDO
Kara Reynolds, DMWM, NWDO
Lisa Gifford, DMWM, NWDO

ec: Brad Mitchell, DMWM, CO
Colleen Weaver, DMWM, NWDO

NOTICE:

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