

3. Republic Steel owns and operates a steel mill at 2633 8th Street NE in Canton, Ohio.
4. At the Facility, Republic Steel operates the Flexcast Vacuum Tank Degasser (VTD), where lead alloy is added to molten steel and a steam ejector system is used to capture and control emissions from the VTD.
5. Emissions from Republic Steel's Flexcast VTD are subject to the requirement to employ best available technology in the Ohio SIP at OAC Rule 3745-31-05(A)(3).
6. Ohio EPA issued to the Facility a Permit to Install (No. 15-01578) effective December 10, 2004 (2004 PTI), pursuant to Ohio's SIP-approved permit program, which established conditions for the Flexcast VTD, emission unit P152.

7. Condition I.A.11. of the 2004 PTI states: “As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.”
8. Condition P152.III.A.I.1. of the 2004 PTI states that emissions from the Flexcast VTD shall not exceed 0.09 pounds of lead per hour (lead limit), and lists OAC Rule 3745-31-05(A)(3) as corresponding to this emissions limit.
9. Condition P152.III.E.1.a. of the 2004 PTI requires Republic Steel to have determined compliance with the lead limit for the Flexcast VTD in accordance with EPA Method 12 or an approved alternative.
10. Condition P152.III.E.2.a. of the 2004 PTI requires Republic Steel to have conducted emission testing for the Flexcast VTD within six months after the start of lead inoculation in this emissions unit and approximately every five years thereafter.
11. Condition I.A.1.c.i of the 2004 PTI requires Republic Steel to submit reports of any required monitoring and recordkeeping of federally enforceable information to the appropriate Ohio EPA District Office or local air agency.
12. Condition P152.III.C.1 of the 2004 PTI states that “[t]he permittee shall develop a Parametric Monitoring and Record keeping plan in order to confirm that the condenser servicing this emissions unit is operating properly and to demonstrate continued operation at or above the overall control efficiency of the condenser. This plan shall be developed prior to the start of the lead inoculation in this emissions unit. The monitoring equipment, if required, shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, instructions, and O&M manuals and consistent with good engineering practices. This plan, once approved by the Canton local air agency, shall be part of this permit.”
13. Condition P152.III.C.2 of the 2004 PTI states that “[t]he permittee shall perform the appropriate parametric monitoring and record keeping as identified in the approved plan established in condition C. 1.”
14. On September 20, 2021, EPA conducted an inspection of the Facility.
15. During the September 20, 2021 inspection, EPA observed an inoculation of lead alloy into a ladle of molten steel, at the Flexcast VTD. The ladle was removed from the VTD but could not proceed to the caster due to an equipment failure at the caster. As a result, Facility staff stated that the ladle would be returned to the VTD in order to “degas” or vaporize the lead.
16. On September 30, 2021, EPA was informed by Ohio EPA that since September 10, 2021, the Facility had degassed lead from a ladle of molten steel six times.
17. Since the 2004 PTI was issued, no emissions testing of the Flexcast VTD is known to have occurred.

18. During the September 20, 2021 inspection, EPA was informed that condensed steam from the Flexcast VTD steam injector, which contains lead particles removed from the VTD exhaust stream, is eventually recirculated back to the Flexcast VTD steam injector, resulting in additional lead emissions.
19. Republic Steel submitted to Ohio EPA a quarterly report for the period of January 1 to March 31, 2021, which states that for the Flexcast VTD, no parametric monitoring records were collected for the first quarter of 2021, a period of over 91 days.

Violations

20. Based on available information, Republic Steel is exceeding its limit of 0.09 pounds of lead per hour from the Flexcast VTD, at a minimum each time it performs lead degassing at the Flexcast VTD, in violation of Condition P152.III.A.I.1. of the 2004 PTI.
21. By failing to perform an emissions test for lead or any other pollutant from the Flexcast VTD, Republic Steel is in violation of Conditions P152.III.E.1.a. and P152.III.E.2.a. of the 2004 PTI.
22. By failing to perform parametric monitoring and record keeping at the Flexcast VTD from January 1 until March 31, 2021, Republic Steel has violated condition P152.III.C.2 of the 2004 PTI.

Environmental Impact of Violations

23. The national ambient air quality standard (NAAQS) for lead is 0.15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) on a three-month average. This standard was established to provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Air monitors located near Republic Steel recorded the three-month rolling lead NAAQS average was exceeded between March 1, 2018 and July 31, 2018; January 1 through May 31, 2019; and March 1 through at least July 31, 2021. May 2021 and July 2021 recorded the highest monthly averages of lead emissions, at 0.62 $\mu\text{g}/\text{m}^3$ and 0.49 $\mu\text{g}/\text{m}^3$, respectively, with recordings of over 2 $\mu\text{g}/\text{m}^3$ on multiple days in May and July, 2021.
24. Lead can affect almost every organ and system in your body. Children six years old and younger are most susceptible to the effects of lead. Even low levels of lead in the blood of children can result in behavior and learning problems, lower IQ and hyperactivity, slowed growth, hearing problems and anemia, and in rare cases, ingestion of lead can cause seizures, coma and even death. Lead can accumulate in our bodies over time, where it is stored in bones along with calcium. During pregnancy, lead is released from the mother's bones along with calcium and can pass from the mother exposing the fetus or the breastfeeding infant to lead. This can result in serious effects to the developing fetus and infant, including cause the baby to be born too early or too small, hurt the baby's brain, kidney's, and nervous system, increase the likelihood of learning or behavioral problems, and put the mother at risk for miscarriage. See <https://www.epa.gov/lead/learn-about-lead>.

25. Republic Steel is located in a community that has environmental justice concerns.

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