UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
AIR AND RADIATION

Thomas E.Janeck
Vice President, Environment, Health & Safety
Horsehead Corporation
4955 Steubenville Pike
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Pittsburgh, PA 15205

Re: CAIR Applicability Determination for the Horsehead Corporation's Monaca, Pennsylvania Facility (Facility ID (ORISPL) 50130)

Dear Mr. Janeck:

This letter is EPA's determination of applicability, under the EPA-administered trading programs under the CAIR Federal Implementation Plan (FIP), for Horsehead Corporation's (Horsehead) facility located in Monaca, Pennsylvania. This determination is made in response to Horsehead's letter of May 29, 2008 requesting a determination by EPA under the trading programs under the Clean Air Interstate Rule (CAIR) and the CAIR FIP[1] and supplemental letter dated February 23, 2009. In its May 29, 2008 and February 23, 2009 letters, Horsehead stated that the units were non-utility units under, and not subject to, the Acid Rain Program and therefore should not be considered electric generating units under, and should not be subject to, the CAIR FIP trading programs. Horsehead claimed that the applicability provisions in the CAIR FIP trading programs do not address whether industrial sources not classified as "utility units" under the Acid Rain Program may be characterized as EGUs. Horsehead stated that EPA should look outside the CAIR FIP trading program rules, and in particular to the Acid Rain Program rules, to determine whether non-utility units are subject to the CAIR trading programs.

Background

Horsehead's zinc processing facility in Monaca, Pennsylvania manufactures zinc metal, dust, and powder, as well as zinc oxide, from recycled materials such as dust from electric arc furnaces and recycled zinc from galvanizers. The manufacturing process at the facility includes

[1] Sources in Pennsylvania are subject to the CAIR FIP, which provides that sources may request applicability determinations by EPA. The same applicability provisions apply in the trading programs under the CAIR FIP and under CAIR; in fact, Horsehead's May 29, 2008 letter uses the term "CAIR" to refer to both sets of trading programs. This letter sets forth EPA's position on the status of Horsehead's boilers under both the CAIR FIP trading programs and any trading programs that may be approved under CAIR in the future for inclusion in Pennsylvania's State Implementation Plan (SIP).

sintering performed in seven electrothermic furnaces, each of which consume significant amounts of electricity. At the facility, Horsehead also operates two pulverized-coal- and natural gas-fired 600 mmBtu/hr boilers, each serving a generator with a nameplate capacity of 60 MWe that produces electricity. According to Horsehead, the boilers do not produce process steam and so are not cogeneration units, and most of the electricity produced by the generators is used in the manufacturing process, including operation of the seven electrothermic furnaces. However, Horsehead stated that a portion (no more than 30%) of the electricity produced is transmitted to and sold on the grid. For example, according to Horsehead, in 2007 its facility sold on the grid 15.6% of the electricity generated on site.

Under the CAIR FIP trading programs for NOx annual and ozone season emissions and SO_2 emissions, a unit that is a stationary fossil-fuel-fired boiler serving at any time, since November 15, 1990, a generator with nameplate capacity of more than 25 MWe producing electricity for sale is generally a CAIR NOx, CAIR SO_2, and CAIR NOx Ozone Season unit and therefore subject to the requirements of the trading programs. 40 CFR 97.104(a)(1), 97.204(a)(1), and 97.304(a)(1). However, cogeneration units and solid waste incineration units that otherwise qualify as CAIR units are exempt from the CAIR trading programs if certain criteria are met. For example, a cogeneration unit may be exempt if it sells less than a specified amount of electricity, and a solid waste incineration unit may be exempt if its heat input from fossil fuel is less than 20%. 40 CFR 97.104(b), 97.204(b), and 97.304(b).

EPA's Determination

Based on the information provided in Horsehead's letters dated May 29, 2008 and February 23, 2009, each of the boilers at Horsehead's facility clearly qualifies as a CAIR NOx, CAIR SO_2, and CAIR NOx Ozone Season unit. Each of the boilers consumes a fossil fuel (here, coal and natural gas), serves a generator with nameplate capacity of more than 25 MWe (here, 60 MWe) producing some electricity for sale (here, up to 30% of generation). Further, on their face, the cogeneration unit and solid waste incineration unit exemptions are not applicable to the boilers. Horsehead stated that the boilers are not cogeneration units, which clearly is correct because the boilers produce only electricity and not useful thermal energy (e.g., process steam for the manufacturing process). Moreover, not only has Horsehead never claimed that the boilers are solid waste incineration units, but also fossil fuel accounts for 100% of the boilers' heat input.

However, despite this clear application of the applicability provisions of the CAIR FIP trading programs to Horsehead's facility, Horsehead claimed that "the language of CAIR is ambiguous, to the extent that it does not address whether non-utility units under the Acid Rain Program are EGUs under CAIR." According to Horsehead, since the boilers are not utility units under the Acid Rain Program, they should not be treated as CAIR units in the CAIR FIP trading programs.

EPA maintains that Horsehead's claim that the applicability provisions of the CAIR FIP trading programs are ambiguous when applied to Horsehead's boilers has no basis. Not only are the criteria for being a CAIR unit, on their face, easily applied to Horsehead's boilers as

demonstrated above, but also the status of Horsehead's boilers under a different trading program with different definitions of terms and different applicability criteria, i.e., the Acid Rain Program, is not relevant to application of the CAIR trading program applicability provisions.

Horsehead claimed, and EPA assumes arguendo solely for purposes of this CAIR FIP applicability determination, that the two boilers are not subject to the Acid Rain Program. With certain exceptions, an existing unit that serves a generator with a nameplate capacity exceeding 25 MWe producing electricity for sale is an Acid Rain unit and subject to the Acid Rain Program. See 40 CFR 72.2 (definition of "utility unit") and 72.6(a). The basis for Horsehead's claim that its boilers are not Acid Rain units is that, while each of the boilers is a "unit" as defined in the Acid Rain Program rules (i.e., "fossil fuel-fired combustion device" (40 CFR 72.2 (definition of "unit")), the electricity generating equipment that each boiler serves is not a "generator" as defined in the Acid Rain Program rules (i.e., "a device that produces electricity and was or would have been required to be reported as a generating unit pursuant to the United States Department of Energy Form 860 (1990 edition)" (40 CFR 72.2 (definition of "generator")). Horsehead noted that only electricity generating equipment owned or operated by an "electric utility" was required to be reported on the Form 860 referenced in the Acid Rain rules and that this form defined "electric utility" as a legal entity that "owns and/or operates facilities within the United States for the generation, transmission, distribution, or sale of electric energy primarily for use by the public." Form EIA-860 at 1 (1990). According to Horsehead, because production of electricity for on-site use was the primary purpose of the Horsehead's electricity generating equipment, none of that equipment was a "generator" that had to be reported on the Form 860, and so none of it was a "generator" under the Acid Rain Program. Horsehead asserted that its boilers therefore do not serve "generators" and so are not Acid Rain units.

Even assuming arguendo solely for purposes of this CAIR FIP applicability determination that Horsehead's boilers are not Acid Rain units because of the definition of "generator" in the Acid Rain Program regulations and Form 860, this does not mean these boilers are not CAIR units or that there is any ambiguity as to whether they are CAIR units. In contrast with the definition of "generator" in the Acid Rain Program regulations, the "generator" definition in the CAIR FIP trading program regulations does not reference or incorporate the "generator" definition in Form 860. On the contrary, under definitions applicable to the CAIR FIP trading programs, a "generator" is simply "a device that produces electricity". See Corrected Response to Significant Public Comments on the Proposed Clean Air Interstate Rule at 871-72 (April 2005) (explaining that there are differences between applicability provisions of Acid Rain Program and CAIR trading programs, such as the lack -- in the CAIR trading program provisions -- of any use of the Form 860 with regard to generators).

Ignoring this important difference between "generator" definitions, Horsehead attempts to create ambiguity where there is none. On its face, the equipment served by each of Horsehead's boilers meets the CAIR FIP definition of "generator" regardless of what portion of the electricity produced by that equipment is sold, instead of being used on-site. Not only is the term "generator" applied independently of the purpose for which the equipment produces electricity,

but also the CAIR trading program applicability provisions that use the term "generator" do not make applicability of the programs contingent on the sale of any minimum amount of electricity, except where the unit involved is a cogeneration unit (which, as discussed above, is not the case here). Moreover, EPA never purported to adopt, for the CAIR FIP trading programs, the same applicability provisions as those for the Acid Rain Program. On the contrary, while in some instances, EPA adopted the same applicability criteria and definitions for all these programs, in other instances EPA adopted different CAIR FIP applicability criteria and definitions. See, e.g., 70 Fed. Reg. 25162, 25276-78 (May 15, 2005) (discussing differences between the 25 MWe nameplate cut-off and cogeneration unit provisions in the CAIR FIPs and the Acid Rain Program and similarities between the "fossil-fuel-fired" definition and the interpretation of the term "for sale" in these programs).[2]

In summary, the status of Horsehead's boilers under the Acid Rain Program is not relevant to, much less determinative of, the status of these boilers under the CAIR FIP trading programs because the Acid Rain Program rules and the CAIR FIP trading program rules use different definitions of the key term "generator". Using the "generator" definition in the CAIR FIP trading programs, the application of the CAIR FIP trading program applicability provisions to Horsehead's boilers is unambiguous, i.e., under those provisions these boilers clearly qualify as CAIR units. Horsehead's units are CAIR units and subject to the CAIR trading programs under the CAIR FIP, regardless of the status of these units under the Acid Rain Program.

Although this means that Horsehead's boilers are CAIR units without any currently allocated SO_2 allowances under the Acid Rain Program and thus without allocated allowances under the CAIR FIP SO_2 trading program, this provides no basis for ignoring the applicability provisions of the CAIR FIP trading programs or concluding that these provisions are somehow ambiguous. Other types of units can be subject to the CAIR FIP SO_2 program and have no allowance allocations. In fact, in promulgating the CAIR FIP trading program rules, EPA expressly recognized that some types of units covered by the applicability provisions of the CAIR FIP rules are subject to, but do not have any allowance allocations under, the Acid Rain Program and thus do not have any allocations under the CAIR FIP SO_2 trading program. Moreover, EPA recognized that some other types of units covered by the CAIR FIP rules are not subject to the Acid Rain Program and thus also do not have any allocations under either program. EPA indicated that these latter types of units could opt into the Acid Rain Program in order to obtain allowances. See, e.g., 71 Fed. Reg. 25328, 25348-51 and 25359 (Apr. 28, 2006) (discussing waste coal units, new units, independent power production units, and other types of units that did not receive allocated allowances under the Acid Rain Program).

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[2] The general statements (cited by Horsehead) in CAIR that the CAIR SO_2 trading program "builds off the Acid Rain Program" (69 Fed. Reg. 4566, 4574 (Jan. 30, 2004)) and uses "title IV SO_2 allowances" and on-line systems for emissions and allowance tracking "similar to those currently used" in the Acid Rain Program (70 Fed. Reg. 25274) do not change the fact that EPA expressly stated (as discussed above) that the applicability criteria for the two trading programs are substantively different and that, for example, the "generator" definition in the Acid Rain Program, but not in the CAIR trading program, uses the Form 860 definition.

The lack of SO_2 allowances allocations for CAIR units that are not covered by the Acid Rain Program is the direct consequence of EPA's decision to adopt somewhat different applicability provisions in the CAIR FIP than those in the Acid Rain Program. Horsehead attempted to distinguish between some of these types of CAIR units (e.g., certain cogeneration units and certain waste-coal-fired units) and its boilers, claiming these types of units are "exempt" from the Acid Rain Program while Horsehead's boilers are "not subject to" the Acid Rain Program. Under Horsehead's analysis, its boilers would be subject to the Acid Rain Program but for certain aspects of their operations, i.e., that most of the electricity generated by Horsehead is produced for on-site use. However, the cogeneration units and waste-coal-fired units referred to by Horsehead would similarly be subject to the Acid Rain Program but for certain aspects of their operations (e.g., that they cogenerate and sell less than a specified amount of electricity or had power purchase contracts setting purchase prices as of November 15, 1990). Therefore, it is difficult to see any basis for the distinction between "not subject" units and "exempt" units, much less how such a distinction would be relevant to application of the applicability provisions of the CAIR FIP trading programs.

For the reasons discussed above, EPA concludes that Horsehead's two 600 mmBtu/hour boilers at its facility in Monaca, Pennsylvania are CAIR NOx, CAIR SO_2, and CAIR NOx Ozone Season units and subject to the CAIR FIP trading programs.

EPA's applicability determination in this letter relies on the accuracy and completeness of the information provided by Horsehead in the May 29, 2008 and February 23, 2009 letters and is appealable under 40 CFR Part 78. If you have any questions regarding this determination, please contact Charles Frushour at (202) 343-9847. Thank you for your continued cooperation.

Sincerely,

Larry F. Kertcher, for

Sam Napolitano, Director
Clean Air Markets Division

cc: Marilyn Powers, EPA Region III