



GROUP AGAINST SMOG & POLLUTION

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VIA EMAIL

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October 10, 2016

Comments Regarding Proposed Installation Permit: No. 0052-I015 - U. S. Steel Clairton Works Coal Tar Processing and Loading Facility

Please accept the enclosed comments regarding Proposed Installation Permit: No. 0052-I015 for the U. S. Steel Clairton Works Coal Tar Processing and Loading Facility on behalf of the Group Against Smog & Pollution.

If you have any questions or require any additional information please do not hesitate to contact me.

Sincerely,

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**GASP COMMENTS RE: PROPOSED INSTALLATION PERMIT: NO. 0052-I015
- U. S. STEEL CLAIRTON WORKS COAL TAR PROCESSING AND LOADING
FACILITY**

1. The BACT analysis for railcar and truck loading operations is inadequate.

Estimated uncontrolled VOC emissions from railcar and truck loading operations are 8.67 TPY.¹ However, the proposed permit would require no pollution controls to reduce VOC emissions from loading operations.² ACHD's review memo provides the following rationale for requiring no controls:

U. S. Steel performed a BACT analysis for the railcar and truck loading using the RACT/BACT/LAER Clearinghouse and only detected a loading rack vapor combustor for volatile organic compounds, with a vapor pressure greater than 1.5 psia. For U. S. Steel's crude tar railcar and truck loading, the vapor pressure will only be 0.12 psia. The facility also investigated taking the vapor recovery from the loading of railcar and trucks and putting it back into the gas main, similar to the natural gas blanketing system described above, but it was discovered that there was potential to create an explosive environment due to the excess oxygen that would be recovered into the gas main. Thermal Oxidizer Control System was also evaluated and it was estimated that the cost per ton of VOC removed would be \$47,361.³

This BACT analysis is inadequate for several reasons detailed below.

a. The BACT analysis for railcar and truck loading operations fails to consider controls applied to similar source categories.

According to EPA's NSR Workshop Manual, a proper BACT analysis "should include not only existing controls for the source category in question, but also (through technology transfer) controls applied to similar source categories and gas streams"⁴ However, there is no indication the permittee considered potential control options applied to other source categories. In fact, U.S. Steel's description of its BACT analysis suggests its RBLC search considered only tar loading operations: "An examination of the RBLC database Process Type list from 1/1/1990 to present did not yield any descriptions that

¹ ACHD Review Memo, U. S. Steel Clairton Works Coal Tar Processing and Loading Facility IP# 0052-I015 (Sep. 9, 2016) at 6 [hereinafter ACHD IP15 Review Memo].

² *Id.* at 7-8.

³ *Id.* at 7.

⁴ USEPA, Draft NSR Workshop Manual (Oct. 1990) at b.5, available at <http://www.epa.gov/region07/air/nsr/nsrmemos/1990wman.pdf>; Courts have accepted the BACT analysis procedure described by the NSR Workshop Manual as definitive. *See, e.g., Alaska v. Environmental Prot. Agency*, 540 U.S. 461, 475-76 (2004); *Citizens for Clean Air v. Environmental Prot. Agency*, 959 F.2d 839, 845 (9th Cir. 1992).

were applicable to a tar (benzene) loading facility.”⁵ This exceedingly narrow analysis improperly excludes potentially applicable controls from numerous similar source categories, such as ethanol, petroleum, natural gas, and organic chemical storage, marketing, and production operations.

b. ACHD has failed to demonstrate that control via vapor combustion is technically or economically infeasible.

Further, even if the permittee’s RBCL search had considered source categories beyond “tar (benzene) loading facilities,” a finding that the permittee “only detected a loading rack vapor combustor for volatile organic compounds, with a vapor pressure greater than 1.5 psia,”⁶ is insufficient to demonstrate that vapor combustion of compounds with a vapor pressure <1.5 psia is technically or economically infeasible.

c. ACHD has failed to demonstrate that control via vapor recovery is technically or economically infeasible.

The permittee also rejected VOC control via vapor recovery without adequate justification: “We also investigated taking the vapor recovery from the loading of railcar and trucks and putting it back into the gas main, [. . .] but it was discovered that there was potential to create an explosive environment due to the excess oxygen that would be recovered into the gas main.”⁷ However, there is nothing in the permit materials provided to GASP to indicate U.S. Steel or ACHD considered other methods to dispose of recovered vapors, such as flaring, carbon adsorption, catalytic incineration, refrigerated condensation, or routing vapors to specific fuel-burning emission units.

2. Neither the permittee nor ACHD have quantified emissions from equipment leaks associated with the proposed installation.

According to Article XXI, ACHD “shall not issue any Installation Permit unless it has [. . .] received a complete application meeting the requirements of this Part, which application includes, [. . .] The nature and amounts of emissions from the sources affected.”⁸ However, neither the permittee nor ACHD have quantified emissions from equipment leaks associated with the proposed installation.

⁵ U.S. Steel, Revised TSD for Tar Processing and Loading Facility - Clairton Plant (Apr. 19, 2016) at 5.

⁶ ACHD IP15 Review Memo *supra* note 1 at 7.

⁷ Email from Brett J. Tunno, U.S. Steel to Hafeez Ajenifuja, ACHD, Re: Fw: [External]-USS Clairton-Draft IP15 (Aug. 26, 2016, 3:44 pm).

⁸ Article XXI §2102.04.b.2.

3. Neither the permittee nor ACHD have conducted a comprehensive review of potentially applicable requirements.

According to Article XXI, ACHD “shall not issue any Installation Permit unless it has [. . .] received a complete application” which demonstrates that “[t]he proposed source or modification will comply with all applicable NSPS requirements, existing and new source MACT standards, Generally Achievable Control Technology (GACT) standards, and NESHAP requirements established by the EPA.”⁹ However, neither the permittee nor ACHD appears to have conducted a comprehensive review of such potentially applicable requirements. For example, the installation appears to be subject to 40 C.F.R. Part 63 Subpart EEEE,¹⁰ yet no Subpart EEEE requirement are listed in the draft installation permit and neither the permittee nor ACHD addressed Subpart EEEE applicability in their review of applicable regulations.

⁹ Article XXI §2102.04.b.8.

¹⁰ 40 C.F.R. §63.2334.