



## **GROUP AGAINST SMOG & POLLUTION**

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December 19, 2017

### **VIA EMAIL**

Allegheny County Health Department  
Air Quality Program  
301 39th St., Bldg. 7  
Pittsburgh, PA 15201  
aqpermits@alleghenycounty.us

**Re: Comments of Group Against Smog and Pollution Regarding the draft  
Title V Operating Permit for Allegheny Ludlum, Inc.'s Brackenridge  
Works  
(Permit # 0059)**

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Dear Sir or Madam:

Please accept these comments regarding the draft Title V Operating Permit ((#0059) (the "Permit") for Allegheny Ludlum, Inc.'s, Brackenridge Works (the "Facility"), which I am submitting on behalf of the Group Against Smog and Pollution. According to the notice posted on its website, the Allegheny County Health Department is accepting comments on the Permit through December 19, 2017.

Very truly yours,

/s

John K. Baillie  
Senior Attorney

**COMMENTS OF THE GROUP AGAINST SMOG AND POLLUTION  
REGARDING THE DRAFT TITLE V OPERATING PERMIT FOR  
ALLEGHENY LUDLUM CORPORATION'S  
BRACKENRIDGE WORKS (#0059)**

**I. THE PERMIT SHOULD BE REVISED TO INCLUDE TESTING REQUIREMENTS SUFFICIENT TO ASSURE COMPLIANCE WITH ALL PERMIT TERMS AND CONDITIONS.**

**A. The Testing Requirements Relating to Emissions of SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOCs from Electric Arc Furnaces 1 and 2 Will Not Assure Compliance With Emission Limits.**

The Permit requires that at least once every five years, the Facility test the influent and effluent gas streams of the baghouses that control emissions from Electric Arc Furnaces 1 and 2 (“EAF 1” and “EAF 2”) for filterable PM and also test the effluent gas streams of those baghouses for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOCs to determine compliance with the lbs/heat and annual emission limits established for emissions of those pollutants by EAF 1 and EAF 2.<sup>1</sup> These tests are also to be used to develop parameters for “the fan motor amperes and all damper positions for the EAF 1 and EAF 2 emission control systems,”<sup>2</sup> which then must be maintained during the operation of those systems,<sup>3</sup> and checked once per shift.<sup>4</sup> The Permit requires daily observations of visible emissions (which are a surrogate for PM) from the baghouses<sup>5</sup> and EAF melt shop,<sup>6</sup> but does not require that the Facility monitor emissions of SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOCs from those sources.<sup>7</sup>

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<sup>1</sup> § V.A.2.a.

<sup>2</sup> §§ V.A.3.d; *see also* V.A.2.g.7) (requiring collection of data related to control device operation during performance testing).

<sup>3</sup> § V.A.3.d.

<sup>4</sup> § V.A.3.c.

<sup>5</sup> § V.A.3.a.

<sup>6</sup> § V.A.3.b.

<sup>7</sup> *See* § V.A.3.

A Title V Operating Permit must require “testing ... sufficient to assure compliance with the terms and conditions of the permit.”<sup>8</sup> A test that is performed once every five years may be sufficient to assure compliance with the terms and conditions of a Title V Operating Permit if the Permit requires that the test be used to establish operating parameters relating to the emissions of each pollutant, and also requires that those parameters be monitored on a basis sufficient to assure compliance.<sup>9</sup> However, in the absence of such monitoring, “infrequent testing” may not be sufficient to assure compliance with the Permit’s emission limits.<sup>10</sup>

The Permit record shows that DEC System and Canopy Baghouses associated with EAF 1 and EAF 2 are designed to control emissions of PM, PM10, and PM2.5 from EAF 1 and EAF 2, but does not show that they will control emissions of SO<sub>2</sub>, NO<sub>x</sub>, CO, or VOCs. Thus, the testing required by the Permit will not establish operating parameters relating to emissions of SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOCs from EAF 1 and EAF 2. The Permit only requires that emissions of those pollutants be tested once every five years, which is insufficient to assure compliance with the Permit’s lbs/heat and annual emission limits for the pollutants.<sup>11</sup> Accordingly, the Permit should be revised to require that emissions from EAF 1 and EAF 2 be tested on a basis sufficient to assure compliance with the lbs/heat and annual emission limits for SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOCs, or alternatively, to require testing to establish operating parameters relating to the emissions of those pollutants and monitoring of those parameters that is sufficient to assure compliance with those emission limits.

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<sup>8</sup> Art. XXI, §2103.12.h.1.

<sup>9</sup> See *In the Matter of Kentucky Syngas, LLC*, 2012 EPA CAA Title V LEXIS 4, \*165 (June 22, 2012).

<sup>10</sup> See *In the Matter of Luke Paper Co.*, 2010 EPA CAA Title V LEXIS 7, \*14-15 (Oct. 18, 2010).

<sup>11</sup> Cf. *id.* (determining that biannual stack tests were not sufficient to assure compliance with hourly emission limits in the absence of any monitoring requirement).

**B. The Permit’s Testing Requirements for the Argon-Oxygen Decarburization Vessel Are Not Sufficient to Assure Compliance with All Applicable Emission Limits.**

**1. The Testing Requirements Relating to Emissions of SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOCs from the Argon-Oxygen Decarburization Vessel Will Not Assure Compliance With Emission Limits.**

As with EAF 1 and EAF 2, the Permit requires that the exhaust gas of the baghouse that controls emissions from the Facility’s Argon-Oxygen Decarburization (“AOD”) Vessel be tested once every five years for PM, NO<sub>x</sub>, CO, and VOCs,<sup>12</sup> to demonstrate compliance with the Permit’s lbs/heat and annual emission limits. The Permit further requires daily observations of visible emissions (which are a surrogate for PM) from the C006 Canopy Baghouse,<sup>13</sup> but does not require that the Facility monitor emissions of NO<sub>x</sub>, CO, or VOCs from those sources.<sup>14</sup>

A Title V Operating Permit must require “testing ... sufficient to assure compliance with the terms and conditions of the permit.”<sup>15</sup> A test that is performed once every five years may be sufficient to assure compliance with the terms and conditions of a Title V Operating Permit if the Permit requires that the test be used to establish operating parameters relating to the emissions of each pollutant, and also requires that those parameters be monitored on a basis sufficient to assure compliance.<sup>16</sup> However, in the absence of such monitoring, “infrequent testing” may not be sufficient to assure compliance with the Permit’s emission limits.<sup>17</sup>

The Permit record shows that Baghouse C006 is designed to control emissions of PM from the AOD Vessel, but does not show that Baghouse C006 will control emissions of NO<sub>x</sub>, CO, or VOCs. Thus, the testing required by the Permit will not establish operating parameters

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<sup>12</sup> § V.B.2.a.

<sup>13</sup> § V.B.3.a (referencing § V.A.3).

<sup>14</sup> *See id.*

<sup>15</sup> Art. XXI, §2103.12.h.1.

<sup>16</sup> *See In the Matter of Kentucky Syngas, LLC*, 2012 EPA CAA Title V LEXIS 4, \*165.

<sup>17</sup> *See In the Matter of Luke Paper Co.*, 2010 EPA CAA Title V LEXIS 7, \*14-15.

relating to emissions of NO<sub>x</sub>, CO, or VOCs from the AOD Vessel. The Permit only requires that emissions of those pollutants be tested once every five years, which is insufficient to assure compliance with the Permit's lbs/heat and annual emission limits for the pollutants.<sup>18</sup>

Accordingly, the Permit should be revised to require that emissions from the AOD Vessel be tested on a basis sufficient to assure compliance with the Permit's lbs/heat and annual emission limits for NO<sub>x</sub>, CO, and VOCs, or alternatively, to require testing to establish operating parameters relating to the emissions of those pollutants and monitoring of those parameters that is sufficient to assure compliance with those emission limits.

## **2. Testing Requirements Relating to SO<sub>2</sub> Emissions from the AOD Vessel Have Been Omitted From the Permit and Must be Specified.**

The Permit limits SO<sub>2</sub> emissions from the AOD Vessel, to 0.82 pounds per hour and 3.57 tons per year,<sup>19</sup> but completely omits any requirement that such emissions be tested for compliance with the SO<sub>2</sub> limits.<sup>20</sup>

A Title V Operating Permit must require "testing ... sufficient to assure compliance with the terms and conditions of the permit."<sup>21</sup> The Permit should be revised to require that emissions from the AOD Vessel be tested on a basis sufficient to assure compliance with the hourly and annual emission limits for SO<sub>2</sub> that are established by the Permit, or alternatively to require testing to establish operating parameters relating to SO<sub>2</sub> emissions and monitoring of those parameters that is sufficient to assure compliance with those emission limits.

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<sup>18</sup> *Cf. id.* (determining that biannual stack tests were not sufficient to assure compliance with hourly emission limits in the absence of any monitoring requirement).

<sup>19</sup> § V.B.1.d.

<sup>20</sup> *See* § V.B.2.

<sup>21</sup> Art. XXI, §2103.12.h.1.

**C. The Permit’s Testing Requirements for the HRPF Slab Grinders May Not be Sufficient to Assure Compliance With Emission Limits.**

Similarly, the Permit requires that the Facility continuously monitor pressure drop across compartments of the baghouses that control emissions from the HRPF Slab Grinders,<sup>22</sup> but does not require that the Facility determine the amount of pressure drop that is consistent with the baghouses’ proper functioning during the required performance test.<sup>23</sup> Further, the Permit establishes hourly and annual emission limits for the HRPF Slab Grinders,<sup>24</sup> but requires the Facility to conduct a performance test on them only once every five years.<sup>25</sup>

If the Permit authorizes the collection and use of operations data to be used to determine compliance with emission limits, it must use a performance test to establish parameters for that data that assure compliance with the Permit’s terms and conditions.<sup>26</sup> It is not clear from the Permit record that data relating to pressure drop across the HRPF Slab Grinders’ baghouse compartments that the Facility is required to monitor will be sufficient to assure compliance with the Permit’s emission limits for the HRPF Slab Grinders, or that the required performance test will develop operating parameters for the baghouses that will assure compliance with those emission limits. If the monitoring and testing required by the Permit for the HRPF Slab Grinders is not sufficient to assure compliance with their emission limits, the Permit should be revised to

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<sup>22</sup> § V.G.3.a.

<sup>23</sup> See V.G.2.

<sup>24</sup> § V.G.1.d

<sup>25</sup> See § V.G.2.d.

<sup>26</sup> See *In the Matter of Kentucky Syngas, LLC*, 2012 EPA CAA Title V LEXIS 4, \*165.

require more frequent emission testing<sup>27</sup> or the development of sound operating parameters for the baghouses (and appropriate monitoring of such parameters).<sup>28</sup>

**D. The Permit’s Testing and Monitoring Requirements for the Walking Beam Furnaces May Not be Sufficient to Assure Compliance with Applicable Emission Limits for SO<sub>2</sub>**

The Permit limits SO<sub>2</sub> emissions from the Walking Beam Furnaces,<sup>29</sup> but does not require testing or monitoring that would assure compliance with those limits.<sup>30</sup> A Title V Operating Permit must require “testing [and] monitoring ... sufficient to assure compliance with the terms and conditions of the permit.”<sup>31</sup> The Permit should be revised to require periodic testing of SO<sub>2</sub> emissions from the Walking Beam Furnaces, and, if necessary, monitoring of such emission or operating parameters that such testing establishes to assure compliance with limits on emissions of SO<sub>2</sub>.

**E. The Permit’s Testing Requirements for the Reversing Roughing Mill and 7-Stand Hot Finishing Mill May Not be Sufficient to Assure Compliance with Applicable Emission Limits.**

The Permit requires that the Facility “continuously monitor the primary and secondary voltages and currents of the Transformer-Rectifier (T-R) sets” for the wet electrostatic

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<sup>27</sup> See *In the Matter of Luke Paper Co.*, 2010 EPA CAA Title V LEXIS 7, \*14-15.

<sup>28</sup> See *In the Matter of Kentucky Syngas, LLC*, 2012 EPA CAA Title V LEXIS 4, \*165 (determining that infrequent testing of a source is permissible when the Title V Operating Permit required that operating parameters be established for the source and frequently monitored).

<sup>29</sup> See § V.L.1.i.

<sup>30</sup> See §§ V.L.2 and V.L.3.

<sup>31</sup> Art. XXI, § 2013.12.h.1; accord *Sierra Club v. Environmental Prot. Agency*, 536 F.3d 673, 677 (D.C. Cir. 2008)(finding that 42 U.S.C. § 7661c(c) requires all Title V Operating Permits to include monitoring requirements sufficient to assure compliance with permit terms).

precipitators that are used to control emissions from the Reversing Roughing Mill<sup>32</sup> and 7-Stand Hot Finishing Mill.<sup>33</sup> However, the Permit does not require the Facility to determine the voltage and current ranges that are consistent with proper functioning of the wet electrostatic precipitators (the “Wet ESPs”) during the required performance tests of those sources.<sup>34</sup> Further, the Permit establishes hourly and annual emission limits for the sources,<sup>35</sup> but requires the Facility to conduct a performance test on them only once every five years.<sup>36</sup>

If the Permit authorizes the collection and use of operations data to be used to determine compliance with emission limits, it must use a performance test to establish parameters for that data that assure compliance with the Permit’s terms and conditions.<sup>37</sup> It is not clear from the Permit record that the electrical data relating to the wet ESPs that the Facility is required to monitor will be sufficient to assure compliance with the Permit’s emission limits for the Reversing Roughing Mill and 7-Stand Hot Finishing Mill, or that the required performance test will develop operating parameters for the wet ESPs that will assure compliance with those emission limits. If the monitoring and testing required by the Permit for the Reversing Roughing Mill and 7-Stand Hot Finishing Mill is not sufficient to assure compliance with the emission limits for those sources, the Permit should be revised to require more frequent emission testing<sup>38</sup>

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<sup>32</sup> § V.M.3.a.

<sup>33</sup> § V.N.3.a.

<sup>34</sup> *See* § V.M.2 and § V.N.2.

<sup>35</sup> § V.M.1.d and § V.N.1.d.

<sup>36</sup> *See* § V.M.2.c and § V.N.2.c.

<sup>37</sup> *See In the Matter of Kentucky Syngas, LLC*, 2012 EPA CAA Title V LEXIS 4, \*165.

<sup>38</sup> *See In the Matter of Luke Paper Co.*, 2010 EPA CAA Title V LEXIS 7, \*14-15.



or the development of sound operating parameters for the wet ESPs (and appropriate monitoring of such parameters).<sup>39</sup>

**F. The Permit Must Require Testing of the Continuous Caster: Tundish Pre-heaters No. 1 and No. 2; the Plasma Torch Cutting Operation; the No. 2 A & P Line Kolene Heater; the 56” Tandem Mill, the Lewis Temper Mill; the Space Heaters; and Lime Silos Nos. 1 – 5.**

For a number of sources within the Facility, the Permit establishes emission limits but does not require testing to assure the Facility’s compliance with those limits. Rather, with respect to each such source, the Permit reserves ACHD’s “right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit.”

A Title V Operating Permit must require “testing ... sufficient to assure compliance with the terms and conditions of the permit.”<sup>40</sup> That ACHD may require testing of those sources at some unspecified time in the future does not assure that the sources are complying with the Permit’s terms and conditions in the present. Accordingly, the Permit must be revised to require periodic testing of the following sources that would not otherwise be subject to any testing requirement, and such testing must be sufficient to establish that the sources are operating in compliance with the Permit:

- § V.D: Continuous Caster: Tundish Pre-heaters No. 1 and No. 2
- § V.O: Plasma Torch Cutting Operation
- § V.U: No.2 A & P Line, Kolene Heater
- § V.Z: 56” Tandem Mill

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<sup>39</sup> See *In the Matter of Kentucky Syngas, LLC*, 2012 EPA CAA Title V LEXIS 4, \*165 (determining that infrequent testing of a source is permissible when the Title V Operating Permit required that operating parameters be established for the source and frequently monitored).

<sup>40</sup> Art. XXI, §2103.12.h.1.

- § V.CC: Lewis Temper Mill
- § V.JJ: Space Heaters
- § VI.A: Lime Silos Nos. 1 – 5

**G. The Permit Must Require Testing of the Loftus Soaking Pits Nos. 9 – 23; the No.1 A & P Line, Annealing Furnace; the No.2 A & P Line, Annealing Furnace; and Department 3, Boilers Nos. 1 and 2.**

Several other sources within the Facility are similarly subject to emission limits but not to a testing requirement. However, unlike the sources above, these sources are subject to an annual “tune-up” requirement that is intended to ensure that they are repaired, maintained, calibrated, and operating properly, and that their emission of oxides of nitrogen and carbon monoxide are minimized.

The testing requirement for these sources also falls short of the standards for a Title V Operating Permit. A source is not assured to be operating in compliance with the Permit’s terms and conditions merely because it has been “tuned up” – there is no way to ensure that a “tune up” is sufficient to assure compliance with Permit terms and conditions unless the source is actually tested after the “tune up.”<sup>41</sup> Accordingly, the Permit must be revised to require periodic testing of the following sources that are subject to a “tune up” requirement, but are not subject to any other testing requirement, and such testing must be sufficient to establish that the sources are operating in compliance with the Permit:

- § V.K: Loftus Soaking Pits Nos. 9 - 23
- § V.P: No.1 A & P Line, Annealing Furnace

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<sup>41</sup> Cf. *In the Matter of Premcor Ref. Group, Inc.*, 2009 EPA CAA Title V LEXIS 2, \* 25 (May 28, 2009) (determining that a permit that established control efficiencies for a flare and incinerator required testing to verify that the flare and incinerator actually operated at those efficiencies).

- § V.T: No.2 A & P Line, Annealing Furnace
- § V.EE: Boilers Nos. 1 and 2

## **II. THE PERMIT SHOULD BE REVISED TO INCLUDE MONITORING AND RECORDKEEPING REQUIREMENTS SUFFICIENT TO ASSURE COMPLIANCE WITH THE PERMIT'S TERMS AND CONDITIONS.**

A Title V Operating Permit must include testing, monitoring, and reporting requirements “sufficient to assure compliance with the terms and conditions of the permit.”<sup>42</sup> “[I]f there is some periodic monitoring in the applicable requirement, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance.”<sup>43</sup> Accordingly, a Title V Operating Permit that establishes hourly emission limits must include monitoring requirements to assure compliance with those limits.<sup>44</sup>

As explained below, the Permit establishes numerous emission limits that lack corresponding monitoring and recordkeeping requirements that are sufficient to assure compliance with the emission limits. The Permit should be revised to include such monitoring and recordkeeping requirements.

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<sup>42</sup> Art. XXI, § 2103.12.h.1; accord *Sierra Club v. Environmental Prot. Agency*, 536 F.3d 673, 677 (D.C. Cir. 2008)(finding that 42 U.S.C. § 7661c(c) requires all Title V Operating Permits to include monitoring requirements sufficient to assure compliance with permit terms).

<sup>43</sup> *In the Matter of CITGO Ref. and Chems. Co.*, Petition V1-2007-01 (May 28, 2009), at 6-7, quoted by *In the Matter of Luke Paper Co.*, 2010 EPA CAA Title V LEXIS 7, \*13 (Oct. 18, 2010).

<sup>44</sup> See *In the Matter of Luke Paper Co.*, 2010 EPA CAA Title V LEXIS at \*15.

**A. The Permit Should be Revised to Require the Facility to Monitor and Record Hourly Natural Gas Consumption by Sources that Create Emissions Solely by Combusting Natural Gas.**

The Facility includes several sources that create emissions solely by combusting natural gas to produce heat; emissions from those sources for any given time period will thus be determined in large part by the amounts of natural gas that they consume in that time period. The Permit establishes an hourly emission limit for each such source, but does not require that the Facility monitor and record the amounts of natural gas that the sources consume on an hourly basis. Further, the Permit record does not establish that natural gas consumption by the sources remains constant from hour to hour. Accordingly, without hourly monitoring and reporting, it will be impossible to determine whether the sources have been operated to comply with their hourly emission limits. The Permit should be revised so that the Facility is required to monitor and record such sources' consumption of natural gas on an hourly basis.<sup>45</sup>

The sources in the Facility that create emissions solely by combusting natural gas for which the Permit establishes hourly emission limits without requiring hourly monitoring and recording of natural gas consumption include:

- **§ V.C: Melt Shop Ladle, AOD Vessel, and AOD Mold Pre-heaters.** The Permit establishes hourly emission limits,<sup>46</sup> but requires that the Facility record natural gas consumption on only a monthly basis.<sup>47</sup>
- **§ V.D: Continuous Caster: Tundish Pre-heaters Nos. 1 and 2.** The Permit establishes hourly emission limits,<sup>48</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>49</sup>

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<sup>45</sup> See *In the Matter of United States Steel Corp.—Graite City Works*, 2011 EPA CAA Title V LEXIS 2, \*77-78 (Jan. 31, 2011) (determining that monthly logs of fuel usage were not sufficient to assure compliance with hourly emission limits).

<sup>46</sup> §§ V.C.1.e – V.C.1.j

<sup>47</sup> § V.C.4.a.2.

- **§ V.I. Active Hot Boxes.** The Permit establishes an hourly heat input limit<sup>50</sup> and hourly emission limits,<sup>51</sup> but requires that the Facility record fuel consumption on a monthly basis only.<sup>52</sup>
- **§ V.J: Four Car Bottom Furnaces.** The Permit establishes an hourly heat input limit<sup>53</sup> and hourly emission limits,<sup>54</sup> but requires that the Facility record fuel consumption on a monthly basis only.<sup>55</sup>
- **§ V.K: Loftus Soaking Pits Nos. 9 – 23.** The Permit establishes hourly emission limits,<sup>56</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>57</sup>
- **§ V.P: No. 1 A & P Line, Annealing Furnace.** The Permit establishes hourly emission limits,<sup>58</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>59</sup>
- **§ V.T: No.2 A & P Line, Annealing Furnace.** The Permit establishes hourly emission limits,<sup>60</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>61</sup>
- **§ V.U: No. 2 A & P Line, Kolene Heater.** The Permit establishes hourly emission limits,<sup>62</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>63</sup>

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48	§§ V.D.1.c
49	§§ V.D.3.a.1 and V.D.4.a.1.
50	§ V.I.1.b.
51	§ V.I.1.k.
52	§ V.I.4.a.
53	§ V.J.1.b.
54	§ V.J.1.k.
55	§ V.J.4.a.
56	§ V.K.1.c.
57	§§ V.K.3.b and V.K.4.a.1.
58	§ V.P.1.c.
59	§§ V.P.3.b.1 and V.P.4.a.1.
60	§V.T.1.c.
61	§§ V.T.3.b.1. and V.T.4.a.1.
62	§V.U.1.c.
63	§§ V.U.3.b.1. and V.U.4.a.1.

- **§ V.Y: 56” Tandem Mill Pre-heater.** The Permit establishes hourly emission limits,<sup>64</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>65</sup>
- **§ V.EE: Boilers Nos. 1 and 2.** The Permit establishes hourly emission limits,<sup>66</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>67</sup>
- **§ V.JJ: Space Heaters.** The Permit establishes hourly emission limits,<sup>68</sup> but requires that the Facility monitor and record natural gas consumption on monthly and annual bases only.<sup>69</sup>

**B. The Permit Should be Revised to Require the Facility to Monitor and Record Hourly Natural Gas Consumption and Steel Throughput by Sources Whose Emissions Depend on the Amounts of Natural Gas They Combust and Steel They Process.**

The Facility includes several sources whose emissions for any given time period depend on the amounts of natural gas they combust and by the amounts of steel they process or produce during that time period. The Permit establishes an hourly emission limit for each such source, but does not require that the Facility monitor and record the amounts of natural gas that the sources consume, or they amounts of steel that they process or produce, on an hourly basis. Further, the Permit record does not establish that natural gas consumption or steel throughput by the sources remains constant from hour to hour. Accordingly, without hourly monitoring and reporting, it will be impossible to determine whether the sources have been operated to comply with their hourly emission limits. The Permit should be revised so that the Facility is required to

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<sup>64</sup> § V.Y.1.c.

<sup>65</sup> §§ V.Y.3.b.1 and V.Y.4.a.1.

<sup>66</sup> § V.EE.1.c.

<sup>67</sup> §§ V.EE.3.b.1 and V.EE.4.a.1.

<sup>68</sup> § V.JJ.1.c.

<sup>69</sup> §§ V.JJ.3.a.1 and V.JJ.4.a.1.

monitor and record the amounts of natural gas such combust and the amounts of steel that they process or produce on an hourly basis.<sup>70</sup>

The sources in the Facility whose emissions depend on both the amounts of natural gas that they combust and the amounts of steel that they process include:

- **§ V.E: Continuous Caster: Torch Cutters Nos. 1 – 3.** The Permit establishes hourly emission limits,<sup>71</sup> but does not require that the Facility monitor steel throughput,<sup>72</sup> and only requires the Facility to keep records of monthly and annual natural gas consumption<sup>73</sup> and steel throughput.<sup>74</sup>
- **§ V.H: Plate Torch Burners/Slab Cutters Nos. 1 and 2.** The Permit establishes hourly emission limits,<sup>75</sup> but does not require that the Facility monitor steel throughput,<sup>76</sup> and only requires the Facility to keep records on monthly and annual natural gas consumption<sup>77</sup> and steel throughput.<sup>78</sup>
- **§ V.L: Walking Beam Furnaces.** The Permit establishes hourly emission limits,<sup>79</sup> but does not require that the Facility monitor steel throughput, and only requires that the Facility keep records of its monthly fuel consumption.<sup>80</sup>

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<sup>70</sup> See *In the Matter of United States Steel Corp.—Graite City Works*, 2011 EPA CAA Title V LEXIS 2, \*77-78 and \*85-86 (Jan. 31, 2011) (determining that monthly logs of fuel usage and monthly records of material throughput were not sufficient to assure compliance with hourly emission limits).

<sup>71</sup> § V.E.1.b.

<sup>72</sup> See § V.E.3.

<sup>73</sup> § V.E.4.a.1

<sup>74</sup> § V.E.4.a.2.

<sup>75</sup> § V.H.1.d.

<sup>76</sup> See § V.H.3.

<sup>77</sup> § V.H.4.a.1.

<sup>78</sup> § V.H.4.a.2.

<sup>79</sup> § V.L.1.1.

<sup>80</sup> § V.L.4.g.

**C. The Permit Should be Revised to Require the Facility to Monitor and Record Hourly Steel Production or Throughput by Sources Whose Emissions Depend on the Amounts of Steel They Process.**

The Facility includes several sources whose emissions for any given time period depend on the amounts of steel they process or produce during that period. The Permit establishes an hourly emission limit for each such source, but does not require that the Facility monitor and record the amounts of steel that the sources process or produce on an hourly basis. Further, the Permit record does not establish that steel throughput by the sources remains constant from hour to hour. Accordingly, without hourly monitoring and reporting, it will be impossible to determine whether the sources have been operated to comply with their hourly emission limits. The Permit should be revised so that the Facility is required to monitor and record the amounts of steel that they process or produce on an hourly basis.<sup>81</sup>

The sources in the Facility whose emissions depend on the amounts of steel that they process or produce include:

- **§ V.F: Centro-Maskin Slab Grinders Nos. 23 and 24.** The Permit establishes hourly emission limits,<sup>82</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>83</sup>
- **§ V.G: Slab Grinders.** The Permit establishes hourly and annual emission limits,<sup>84</sup> but does not require that the Facility monitor or record steel throughput or production.<sup>85</sup>
- **§ V.M: Reversing Roughing Mill.** The Permit establishes hourly and annual emission limits,<sup>86</sup> but does not require that the Facility monitor or record steel throughput or production.<sup>87</sup>

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<sup>81</sup> See *In the Matter of United States Steel Corp.—Graite City Works*, 2011 EPA CAA Title V LEXIS 2, \*77-78 and \*85-86 (Jan. 31, 2011) (determining that monthly records of material throughput were not sufficient to assure compliance with hourly emission limits).

<sup>82</sup> § V.F.1.c.

<sup>83</sup> See §§ V.F.3.d and V.F.4.a.1.

<sup>84</sup> § V.G.1.d.

<sup>85</sup> See V.G.



- **§ V.N: 7-Stand Hot Finishing Mill.** The Permit establishes hourly and annual emission limits,<sup>88</sup> but does not require that the Facility monitor or record steel throughput or production.<sup>89</sup>
- **§ V.O: Plasma Torch Cutting Operations.** The Permit establishes hourly and annual emission limits,<sup>90</sup> but does not require that the Facility monitor or record steel throughput or production.<sup>91</sup>
- **§ V.Q: No.1 A&P Line, Wheelabrator Shotblast.** The Permit establishes hourly emission limits,<sup>92</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>93</sup>
- **§ V.R: No.1 A&P Line H<sub>2</sub>SO<sub>4</sub> – HNO<sub>3</sub>/HF Pickling.** The Permit establishes hourly emission limits,<sup>94</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>95</sup>
- **§ V.V: No.2 A&P Line, Kolene Descaling.** The Permit establishes hourly emission limits,<sup>96</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>97</sup>
- **§ V.W: No.2 A&P Line, H<sub>2</sub>SO<sub>4</sub> – HNO<sub>3</sub>/HF Pickling.** The Permit establishes hourly emission limits,<sup>98</sup> but requires that the Facility monitor and record the amounts of steel produced on daily, monthly, and annual bases only.<sup>99</sup>
- **§ V.Z: 56” Tandem Mill.** The Permit establishes hourly emission limits,<sup>100</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>101</sup>

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<sup>86</sup> § V.M.1.d.

<sup>87</sup> See V.MM.

<sup>88</sup> § V.N.1.d.

<sup>89</sup> See V.N.

<sup>90</sup> § V.O.1.g.

<sup>91</sup> See V.O.

<sup>92</sup> § V.Q.1.c.

<sup>93</sup> See §§ V.Q.3.c.1 and V.Q.4.a.1.

<sup>94</sup> § V.R.1.d

<sup>95</sup> See §§ V.R.3.e.1 and V.R.4.a.1.

<sup>96</sup> § V.V.1.c.

<sup>97</sup> See §§ V.V.3.b.1 and V.V.4.a.1.

<sup>98</sup> § V.WW.1.d.

<sup>99</sup> See §§ V.WW.3.d.1 and V.WW.4.a.1.

- **§ V.AA: United Mill.** The Permit establishes hourly emission limits,<sup>102</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>103</sup>
- **§ V.BB: Z Mill.** The Permit establishes hourly emission limits,<sup>104</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>105</sup>
- **§ V.CC: Lewis Temper Mill.** The Permit establishes hourly emission limits,<sup>106</sup> but requires that the Facility monitor and record the amounts of steel produced on monthly and annual bases only.<sup>107</sup>

**D. The Permit Should be Revised to Require Monitoring of Visible Emissions from the Melt Shop Ladle, AOD Vessel, and AOD Mold Pre-heaters.**

The Permit limits the opacity of visible emissions from the Facility’s Melt Shop Ladle, AOD Vessel, and AOD Mold Pre-heaters,<sup>108</sup> but does not require any monitoring of visible emissions from those sources.<sup>109</sup>

A Title V Operating Permit must require “monitoring ... sufficient to assure compliance with the terms and conditions of the permit.”<sup>110</sup> The Facility’s compliance with limits on the opacity of visible emissions from the Facility’s Melt Shop Ladle, AOD Vessel, and AOD Mold Preheaters cannot be assured unless such emissions are periodically monitored. Accordingly, the

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<sup>100</sup> § V.Z.1.c.

<sup>101</sup> See §§ V.Z.3.b and V.Z.4.a.1.

<sup>102</sup> § V.AA.1.c.

<sup>103</sup> See §§ V.AA.3.b and V.AA.4.a.1.

<sup>104</sup> § V.BB.1.c.

<sup>105</sup> See §§ V.BB.3.b and V.BB.4.a.1.

<sup>106</sup> § V.CC.1.b.

<sup>107</sup> See §§ V.CC.3.a and V.CC.4.a.1.

<sup>108</sup> § V.C.1.a.

<sup>109</sup> See § V.C.3.

<sup>110</sup> Art. XXI, § 2103.12.h.1; accord *Sierra Club v. Environmental Prot. Agency*, 536 F.3d 673, 677 (D.C. Cir. 2008)(finding that 42 U.S.C. § 7661c(c) requires all Title V Operating Permits to include monitoring requirements sufficient to assure compliance with permit terms).

Permit should be revised to require periodic monitoring of visible emissions from the Facility's Melt Shop Ladle, AOD Vessel, and AOD Mold Pre-heaters.

**E. The Permit Should be Revised to Require Monitoring of Visible Emissions from the Stacks for the Walking Beam Furnaces, Reversing Roughing Mill, 7-Stand Hot Finishing Mill, and Plasma Torch Cutting Operation**

Similarly, the Permit limits the opacity of visible emissions from the stacks for Facility's Walking Beam Furnaces,<sup>111</sup> Reversing Roughing Mill,<sup>112</sup> 7-Stand Hot Finishing Mill,<sup>113</sup> and Plasma Torch Cutting Operation,<sup>114</sup> but does not require any monitoring of the visible emissions from those stacks.<sup>115</sup>

A Title V Operating Permit must require "monitoring ... sufficient to assure compliance with the terms and conditions of the permit."<sup>116</sup> The Facility's compliance with limits the opacity of visible emissions from the stacks for Facility's Walking Beam Furnaces, Reversing Roughing Mill, 7-Stand Hot Finishing Mill, and Plasma Torch Cutting Operation cannot be assured unless such emissions are monitored periodically. Accordingly, the Permit should be revised to require periodic monitoring of visible emissions from the stacks for Facility's Walking Beam Furnaces, Reversing Roughing Mill, 7-Stand Hot Finishing Mill, and Plasma Torch Cutting Operation.

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<sup>111</sup> See § V.L.1.h.

<sup>112</sup> See § V.M.1.c.

<sup>113</sup> See § V.N.1.c.

<sup>114</sup> See § V.O.1.e.

<sup>115</sup> See §§ V.L.3, V.M.3, V.N.3, and V.O.3.

<sup>116</sup> Art. XXI, § 2103.12.h.1; accord *Sierra Club v. Environmental Prot. Agency*, 536 F.3d 673, 677 (D.C. Cir. 2008)(finding that 42 U.S.C. § 7661c(c) requires all Title V Operating Permits to include monitoring requirements sufficient to assure compliance with permit terms).

**F. The Permit Should be Revised to Require the Facility to Monitor and Record the Amount of Slag it Processes on an Hourly Basis.**

The amount of emissions from the Facility’s Slag Handling operation depends in large part on the amount of slag that it processes. The Permit establishes an hourly emission limit for the Slag Handling operation,<sup>117</sup> but does not require that the Facility monitor and record the amounts of slag that is processed on an hourly basis.<sup>118</sup> Further, the Permit record does not establish that the amount of slag processed remains constant from hour to hour. Accordingly, without hourly monitoring and reporting, it will be impossible to determine whether the slag processing operation complies with its hourly emission limit. The Permit should be revised so that the Facility is required to monitor and record the amounts of slag that it processes on an hourly basis.<sup>119</sup>

**III. THE PERMIT SHOULD BE REVISED TO CLARIFY VAGUE TERMS AND CONDITIONS.**

Several of the Permit’s terms and conditions are vague and should be clarified:

- **§ V.A.3.e** requires “monthly operational inspections of the status of the equipment that is important to the performance of the total capture system and baghouses for EAF 1 and EAF 2.” This provision should be revised to identify the equipment that is important to the performance of the total capture system and baghouses and that must be inspected.
- **§ VI.B.1.a** requires the use of “treated river water” for cooling purposes, but does not specify how, or to what water quality standard, river water should be treated. The chemical properties of river water vary. This provision should be revised to

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<sup>117</sup> § V.HH.1.b.

<sup>118</sup> See § V.HH.3.a (requiring that the Facility monitor “the total number of tons of slag processed (monthly and 12-month)” and § V.HH.4.a.1 (requiring that the Facility record “[t]he total number of tons of slag processed (monthly and 12-month)”.

<sup>119</sup> See *In the Matter of United States Steel Corp.—Graite City Works*, 2011 EPA CAA Title V LEXIS 2, \*77-78 and \*85-86 (Jan. 31, 2011) (determining that monthly records of material throughput were not sufficient to assure compliance with hourly emission limits).

specify which treatment method should be used and the water quality standard that must be achieved.