BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

UNITED STATES STEEL CORPORATION, a Delaware corporation,	)	
Petitioner,	)	
v.	)	PCB 10-23 (CAAPP Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	
AMERICAN BOTTOM CONSERVANCY,	)	
Intervenor.	)	

NOTICE OF FILING

TO: Mr. John Therriault
Assistant Clerk of the Board
Illinois Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601
(VIA ELECTRONIC MAIL)

Carol Webb, Esq.
Hearing Officer
Illinois Pollution Control Board
1021 North Grand Avenue East
Post Office Box 19274
Springfield, Illinois 62794-9274
(VIA FIRST CLASS MAIL)

(SEE PERSONS ON ATTACHED SERVICE LIST)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board a copy of United States Steel Corporation's **MOTION TO STAY THE PROCEEDING,** a copy of which is hereby served upon you.

Respectfully submitted,

UNITED STATES STEEL CORPORATION,
Petitioner,

Dated: September 2, 2011

By:/s/ Monica T. Rios
Monica T. Rios

Katherine D. Hodge
Monica T. Rios
HODGE DWYER & DRIVER
3150 Roland Avenue
Post Office Box 5776
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(217) 523-4900

CERTIFICATE OF SERVICE

I, Monica T. Rios, the undersigned, certify that I have served the attached MOTION TO STAY THE PROCEEDING upon:

Mr. John Therriault
Assistant Clerk of the Board
Illinois Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601

via electronic mail on September 2, 2011; and upon:

Carol Webb, Esq.
Hearing Officer
Illinois Pollution Control Board
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by depositing said documents in the United States Mail, postage prepaid, in Springfield, Illinois, on September 2, 2011.

By: /s/ Monica T. Rios
Monica T. Rios

USSC:003/Fil/NOF-COS – Mtn to Stay PCB No. 10-23

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

UNITED STATES STEEL CORPORATION, a Delaware corporation,	)	
Petitioner,	)	
v.	)	PCB No. 10-23 (CAAPP Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	
AMERICAN BOTTOM CONSERVANCY,	)	
Intervenor.	)	

MOTION TO STAY THE PROCEEDING

NOW COMES Petitioner, UNITED STATES STEEL CORPORATION ("Petitioner" or "U.S. Steel"), by and through its attorneys, HODGE DWYER & DRIVER, pursuant to 35 Ill. Admin. Code § 101.514 and requests that the Illinois Pollution Control Board ("Board") grant this Motion to Stay the Proceeding. Petitioner provides as follows:

1. Section 101.514 of the Board's rules requires that requests to stay a proceeding must include information detailing why a stay is needed, be accompanied by a waiver of the decision deadline, and a status report. 35 Ill. Admin. Code § 101.514(a).

2. On August 23, 2011, U.S. Steel filed an open waiver of the decision deadline in this matter. Notice of Open Waiver of 120-Day Decision Deadline, *United States Steel Corporation v. Illinois EPA,* PCB No. 10-23 (Ill.Pol.Control.Bd. Aug. 23, 2011) (appeal hereafter cited as "PCB No. 10-23"). Accordingly, a waiver is not included with this filing since an open waiver has previously been submitted.

3. U.S. Steel submitted its last Status Report in this matter on June 16, 2011. Status Report, PCB No. 10-23 (Ill.Pol.Control.Bd. June 16, 2011). As required by Section 101.514(a), U.S. Steel is hereby updating the Board on the status of this matter. On May 2, 2011, Illinois Environmental Protection Agency ("Illinois EPA") issued a Revised Clean Air Act Permit Program ("CAAPP") Permit,[1] and U.S. Steel is currently operating under the conditions and requirements of the Revised CAAPP Permit. On August 16, 2011, the American Bottom Conservancy ("ABC") filed with the United States Environmental Protection Agency ("USEPA") a Petition Requesting That the Administrator Object to the Issuance of the Revised Title V/CAAPP Operating Permit for the U.S. Steel Granite City Works Facility, attached hereto as Exhibit 1 ("Petition to Object"). The Petition to Object creates uncertainty as to the impact of its filing, as well as USEPA's future response, on the Revised CAAPP Permit.

4. For the reasons discussed below, U.S. Steel requests that the Board stay this proceeding until such time that the pending matter with USEPA is resolved.

5. At this time, neither U.S. Steel nor Illinois EPA know how USEPA will respond to ABC's Petition to Object and how any response could impact the Revised CAAPP Permit. It is impossible for U.S. Steel to determine whether the status of the CAAPP permit that is the subject of this appeal could be meaningful until there is sufficient information to determine whether the Revised CAAPP Permit will withstand scrutiny by USEPA.

6. Further, granting a stay of this proceeding results in no harm to the parties. U.S. Steel has filed an open waiver of the statutory decision deadline, and thus, there is

[1] *See* USEPA, Region V, Illinois EPA Permit Database, available at http://yosemite.epa.gov/r5/in_permt.nsf/93a421690cb50df18625762300769ee3/b81830d11358ba8c862578f700742235/$FILE/96030056%20Final%20Revised%20CAAPP%20Permit.pdf (Aug. 29, 2011).

no immediate requirement to hold a hearing in this matter. Illinois EPA is not harmed by a stay of this proceeding since it has issued the Revised CAAPP Permit, and like U.S. Steel, does not yet know how USEPA's response to ABC's Petition to Object will impact this matter. Finally, neither ABC nor the public is harmed by a stay of the proceeding since U.S. Steel is currently operating under the Revised CAAPP Permit.

7. The Board has granted stays of proceedings in prior cases so there is precedent for doing so here. In PCB No. 04-216, Petitioner appealed Illinois EPA's trade secret determination, and the Board granted a stay while USEPA review of a similar determination was underway. *Midwest Generation EME, LLC v. Illinois EPA*, PCB No. 04-216 (Ill.Pol.Control.Bd. Apr. 6, 2006); *also see Commonwealth Edison Co. v. Illinois EPA,* PCB No. 04-25 (Ill.Pol.Control.Bd. Apr. 6, 2006). In addition, in a more recent matter, the Board granted a stay of a proceeding at the Petitioner's request, while a similar case on Petitioner's issue was pending in Circuit Court, until the Circuit Court action was resolved. *Chicago Coke Co. v Illinois EPA*, PCB No. 10-75 (Ill.Pol.Control.Bd. May 6, 2010); *see also Atkinson Landfill Company v. Village of Atkinson, et al.,* PCB No. 07-20 (Ill.Pol.Control.Bd. Jan. 10, 2008) (staying proceeding until two months prior to decision deadline).

8. Due to the uncertainty regarding the impact of ABC's Petition to Object on the Revised CAAPP Permit and because there is no harm to the parties resulting from granting a stay of the proceeding, U.S. Steel respectfully requests that the Board stay this proceeding until the proceeding currently pending before USEPA is resolved. U.S. Steel

commits to updating the Board when there has been final resolution of the proceeding before USEPA.

Respectfully submitted,

UNITED STATES STEEL CORPORATION,
Petitioner,

Dated: September 2, 2011

By: /s/ Monica T. Rios
Monica T. Rios

Katherine D. Hodge
Monica T. Rios
HODGE DWYER & DRIVER
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USSC:003/Fil/Motion to Stay PCB No. 10-23

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Revised Title V/CAAPP Permit for U.S. Steel Corporation Granite City Works in Granite City, IL

CAAPP Permit No. 96030056

Installation I.D. 119813AAI

Issued by the Illinois Environmental Protection Agency

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF THE REVISED TITLE V/CAAPP OPERATING PERMIT FOR THE U.S. STEEL GRANITE CITY WORKS FACILITY

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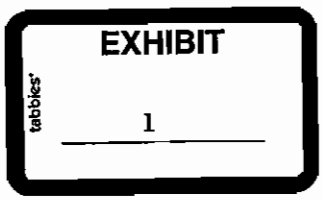
Filed: August 16, 2011



I. Introduction

A. Procedural Background

Pursuant to § 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), on behalf of the American Bottom Conservancy (ABC), the Interdisciplinary Environmental Clinic hereby petitions the Administrator of the United States Environmental Protection Agency (USEPA) to object to the revised Title V/CAAPP Operating Permit for the U.S. Steel Corporation Granite City Works Facility (USS-GCW), Permit No. 96030056, Installation I.D. 191813AAI.

USS-GCW first applied in March 1996 for a Title V/CAAPP permit, which the Illinois Environmental Protection Agency (IEPA) determined was complete in May 1996. [1] IEPA published a draft permit for USS-GCW in 2003, but took no further action on that draft. As a result, IEPA did not meet the statutory deadline for final action on the 1996 permit application.[2]

USS-GCW submitted a new permit application in 2007. After a public comment period and public hearing, on September 3, 2009, IEPA issued a first-ever Title V/CAAPP permit to the U.S. Steel Granite City Works facility on September 3, 2009. Submitted herewith as Exhibit 1. ABC timely filed a petition urging the USEPA Administrator to object to numerous provisions of that Title V permit. Petition Number V-2009-03.

On January 31, 2011, the Administrator issued an Order Granting in Part and Denying in Part Petition for Objection to Permit (USEPA Order). Submitted berewith as Exhibit 2. On or about March 15, 2011, IEPA issued a draft revised permit and an accompanying Statement of Basis, and provided the public with a 10-day period to comment on the draft revised permit. Submitted herewith as Exhibits 3 (draft revised permit) and 4 (Statement of Basis). ABC timely submitted comments on the draft revised permit. Submitted herewith as Exhibit 5. On May 2, 2011, IEPA issued the revised Title V/CAAPP permit that is the subject of this petition, together with a Response to Comments on the draft revised permit. Submitted herewith as Exhibits 6 (Revised Title V/CAAPP Permit) and 7 (Response to Comments). Notwithstanding the requirements in § 505(a)(1)(B) and (c) of the Clean Air Act, IEPA apparently did not provide the proposed final Title V permit, revised in light of USEPA's objection, to USEPA prior to issuing it in final form.

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[1] All references to CAAPP permitting encompass both federal and Illinois statutes and regulations regarding Title V and CAAPP permits. The Illinois CAAPP requires adherence not only to state law and regulations regarding CAAPP permits, but also to the federal Clean Air Act Title V program, 42 U.S.C. §§7661 - 7661f and 40 C.F.R. Part 70, due to the Supremacy Clause of the U.S. Constitution and the Illinois statutory provision requiring permit provisions to comply with the Clean Air Act: "The [Illinois Environmental Protection] Agency shall issue CAAPP permits under this Section consistent with the Clean Air Act and regulations promulgated thereunder and this Act and regulations promulgated thereunder." 415 ILL. COMP. STAT. 5/39.5(3)(a). Furthermore, the Illinois statute requires air pollution operating permits to "[i]ncorporate and identify all applicable emissions monitoring and analysis procedures or test methods required under the Clean Air Act, regulations promulgated thereunder, this Act, and applicable Board regulations, including any procedures and methods promulgated by USEPA pursuant to Section 504(b) or Section 114(a)(3) of the Clean Air Act." *Id.* at 5/39.5(7(d)).

[2] 415 ILL. COMP. STAT. 5/39.5(j) (2005) ("The Agency shall issue or deny the CAAPP permit within 18 months after the date of receipt of the complete CAAPP application . . . . Where the Agency does not take final action on the permit within the required time period . . . the failure to act shall be treated as a final permit action.").

Upon request, USEPA informed counsel for ABC that the deadline for filing a petition urging the Administrator to object to the final Title V permit would be August 16, 2011. ABC timely files this petition.

ABC is pleased to note that IEPA made some revisions to the initial 2009 Title V permit in response to USEPA's objection. However, IEPA unfortunately failed to make meaningful revisions in response to several USEPA objections. As explained more fully below, ABC hereby petitions USEPA to object to the revised Title V/CAAPP permit for the following reasons:

- The revised permit's use of emission factors fails to provide periodic monitoring designed to ensure compliance with permit limits, and lacks practical enforceability.
    - IEPA has now explained that "emission factors" set forth in the permit are actually permit limits. The permit language, however, could compromise the practical enforceability of those limits.
    - As issued, the revised permit lacks periodic monitoring requirements to ensure compliance with the "emission factor" limits as well as many of the corresponding "maximum emission" limits in the permit. The permit anticipates that emission factors to be used for periodic monitoring will be set at a later date.
    - The permit authorizes USS-GCW to set – unilaterally, without IEPA review and approval and without notice to USEPA or the public – the emission factors that will be used to determine whether its operations comply with permit limits.
- Several additional permit limits lack adequate periodic monitoring requirements to ensure compliance with the limits.
- The revised final permit fails to respond to USEPA's Order with respect to excess emissions associated with startup, breakdown, and malfunctions.
- The revised final permit fails to respond to USEPA's Order to include applicable requirements from the related construction permit for a new Gateway Energy & Coke Company coke plant that IEPA considers to be part of the U.S. Steel facility.

B. ABC Has A Deep-Seated Interest In The Environmental Impacts Of The Facility.

ABC is a grassroots organization based in the Metro-East St. Louis region, with members residing and recreating in and around Granite City. USEPA reported that Madison County (in the Metro-East region), in which USS-GCW is located, has the highest population, second-most dense population, and highest percentage of urban land cover in the Metro-East region.[3] ABC's primary goal is to protect community members from air, water, and land pollution. This proves

[3] IEPA, *Technical Support Document for the Recommended Nonattainment Boundaries in Illinois for the 24-Hour $PM_{2.5}$ National Ambient Air Quality Standard*, Dec. 18, 2007, at 27, *available at* http://www.epa.state.il.us/public-notices/2007/pm25-standards/recommendations.pdf.

challenging in an air pollution nonattainment region for fine particulate matter ($PM_{2.5}$),[4] ground-level ozone,[5] and lead.[6]

USS-GCW, located in a residential community and adjacent to a state park, is a source of considerable fine particle and lead pollution in the area,[7] and emits substantial amounts of many other pollutants that threaten human health and the environment. In addition, USS-GCW has a history of air pollution violations. In September 2005, IEPA filed an air pollution complaint against USS-GCW. After two amended complaints adding further violations were filed, the matter was settled in December 2007.[8] As of the issuance of the revised final permit, IEPA stated that it has yet to verify USS-GCW's claim that it complied with its settlement obligations. However, IEPA issued new Violation Notices in January and March 2009 and November 2010, and USEPA issued a Notice of Violation in September 2009. Submitted herewith as Exhibits 8, 9, 10, and 11. USEPA identifies the facility as a High Priority Violator in Significant Non-Compliance with ongoing, unaddressed violations of the Clean Air Act.[9]

ABC appreciates the importance of the plant's jobs, payroll, and taxes for its employees and the community. Accordingly, ABC submits this petition in the spirit of ensuring that the facility operates in a manner that fully complies with the law and comprehensively protects the health of its neighbors.

C. Environmental Justice Considerations Underscore The Need For Clear, Enforceable Permit Conditions.

Due to the living conditions in and around Granite City, this permit must be reviewed in an environmental justice context. Environmental justice has been established as a key component of federal decision making. Under Presidential Executive Order 12898:

> [E]ach Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and

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[4] USEPA designated Madison County, Illinois a $PM_{2.5}$ nonattainment region on December 16, 2008. USEPA, Green Book, *Particulate Matter ($PM_{2.5}$) Nonattainment Area/State/County Report*, Dec. 16, 2008, *available at* http://www.epa.gov/oar/oaqps/greenbk/qnca.html#7040.

[5] USEPA designated Madison County, Illinois a ground-level ozone nonattainment region on December 16, 2008. USEPA, *8-Hour Ozone Nonattainment Area/State/County Report*, Dec. 16, 2008, *available at* http://www.epa.gov/oar/oaqps/greenbk/gnca.html#7040.

[6] USEPA designated Granite City as a nonattainment area for lead under the 2008 revised lead NAAQS effective December 31, 2010. Air Quality Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards, 75 Fed. Reg. 71033 (Nov. 22, 2010), available at http://www.gpo.gov/fdsys/pkg/FR-2010-11-22/pdf/2010-29405.pdf#page=1.

[7] The air monitor near USS-GCW has the highest annual mean values of $PM_{2.5}$ emissions. *Id.* at 9, table 2. IEPA, *Technical Support Document for the Recommended Nonattainment Boundaries in Illinois for the 24-Hour $PM_{2.5}$ National Ambient Air Quality Standard*, Dec. 18 2007, *available at* http://www.epa.state.il.us/public-notices/2007/pm25-standards/recommendations.pdf.

[8] *See* Consent Order, *Illinois ex rel Madigan v. U.S. Steel Corporation, Inc.*, No. 05-CH-750 (Dec. 18, 2007, Circuit Court, Third Judicial Circuit, Madison County, Ill.).

[9] See the Detailed Facility Report for the USS-GCW facility at USEPA's Enforcement & Compliance History Online (ECHO) site: http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?tool=echo&IDNumber=1711900153.

activities on minority populations and low-income populations in the United States.[10]

Environmental justice considerations heighten the already strong legal requirements of public notice regarding the permit and its requirements, meaningful statements that fully set forth the bases for permit conditions, and emissions monitoring requirements sufficient to ensure that USS-GCW is operating within its permit limits. Where the law provides for judgment in permit decisions, environmental justice considerations favor the most protective permit possible in this case. While ABC appreciates that environmental justice considerations do not provide a basis for creating new emission limits in the context of this Title V/CAAPP permit, the compelling environmental justice circumstances inform the necessity for adequate periodic monitoring and practical enforceability to ensure that USS-GCW actually complies with all applicable emission limits.

The population around this facility demonstrates the need for a particularly close look at this permit. More than 98,000 people live within five miles of the facility, of whom 50.4% are minority and 23.6% live below the poverty level.[11] The area around USS-GCW contrasts starkly with Madison County as a whole, where only 13.3% of the population is minority and 13.1% live below the poverty level.[12]

Within five miles of the facility, the Granite City School District has 10 schools and the city of Venice has an elementary school and an Early Childhood Center.[13] Within just one mile, the city of Madison has five schools, which overwhelmingly serve minority and low-income students.[14] Of the students attending Madison City schools, 95% are minority, and 81% qualify for free and reduced lunch, compared to Madison County schools as a whole where 20% of the students are minority and 42% qualify for free and reduced lunch.[15] Moreover, Granite City's Early Childcare Center, which serves the youngest and most vulnerable demographic, is directly across the street from the coal processing area for the facility's coke production unit. Granite City's hospital - Gateway Regional Medical Center - and a low-income public housing project operated by the Granite City Housing Authority are also located within a few blocks of USS-GCW.[16] Many popular recreation facilities are also near the facility. Horseshoe Lake State Park borders the coke plant and is visited annually by 365,000 people. The park is used for picnicking, bird watching, soccer games, camping, boating, hunting, fishing, hiking, biking, nature observation, and trail-walking. People also subsistence fish at the lake.[17] The Madison County Transit Schoolhouse Trail goes through USS-GCW facility grounds behind the coke plant.[18]

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[10] Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994).
[11] USEPA, EJ View (identifying the demographic profile within 5 miles of the USS-GCW facility) *available at* http://epamap14.epa.gov/ejmap/entry.html
[12] U.S. Census Bureau, *State & County Quick Facts: Madison County, IL, available at* http://quickfacts.census.gov/qfd/states/17/17119.html
[13] http://www.venice.k12.il.us/index.php?Itemid=1; http://www.granitecityschools.org/schools/index.html.
[14] http://www.madisoncusd12.org/
[15] National Center for Education Statistics, *Common Core of Data,* 2009-2010, *available at* http://nces.ed.gov/ccd/.
[16] http://www.nls.gov/offices/pih/pha/contacts/states/il.cfm.
[17] http://www.dnr.state.il.us/lands/Landmgt/PARKS/R4/HORSESP.HTM.
[18] http://www.mcttrails.org/viewer.htm; http://www.trailnet.org/trail_main.php.

Sadly, Madison County also is home to some of the worst air quality in the nation, and USS-GCW plays a major role in contributing to this poor air quality. The amount of air pollution emitted from USS-GCW in 2007, before steel production decreased in 2008 and 2009, is staggering: 1,102.81 tons per year of particulate matter (including 918.62 and 569.60 tons per year of PM_{10} and $PM_{2.5}$, respectively); 16,410.52 tons per year of ozone precursors (CO, NO_x, and VOCs); and 1.33 tons per year of lead.[19] The American Lung Association has given Madison County grades of "F" for high ozone days and "D" for 24-hour particle pollution.[20] In 2011, Madison County was twenty-first in the American Lung Association's nationwide rankings of counties at risk from year-round particle pollution (annual $PM_{2.5}$).[21]

The poor air quality in Madison County is especially disturbing considering the large numbers of people with pre-existing medical conditions that put them at a higher risk for air pollution induced health effects. Out of a total county population of 268,457, it is estimated that 5,720 children suffer from pediatric asthma; 18,600 from adult asthma; 9,147 from chronic bronchitis; 4,681 from emphysema; 77,902 from cardiovascular disease; and 17,531 from diabetes. Furthermore, the county has 61,590 people under the age of 18 and 38,074 over the age of 65, two age groups that are at a higher risk of air pollution-induced health effects.[22]

Because of the above described demographic and health information, there is a compelling need for full public disclosure, detailed statements of the legal and factual bases for all permit conditions, and careful, extensive monitoring of USS-GCW's air pollution emissions. As detailed below, IEPA has failed to do so and has issued USS-GCW a Title V permit that does not comply with many provisions of the CAA.

The Title V program plays a critical role in enabling an industrial facility, government regulators, and the public to identify all requirements applicable to a facility's air pollution emissions and to determine whether the facility is complying with those requirements. "One purpose of the title V program is to enable the source, EPA, states, and the public to better understand the applicable requirements to which the source is subject and whether the source is meeting them."[23]

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[19] Specifically, USS-GCW emits: 12,503.40 tons/yr of carbon monoxide; 3,676.49 tons/yr of nitrogen oxides; and 230.63 tons/yr of volatile organic compounds. United States Steel Corp. Granite City Works Annual Emissions Report, 2007 at 3 (IEPA, Mar. 28, 2008)("2007 Annual Emissions Report").

[20] American Lung Association, *State of the Air Report 2011*, Madison County, *available at* http://www.stateoftheair.org/2011/states/illinois/madison-17119.html.

[21] American Lung Association, *State of the Air Report 2011*, People at Risk in 25 Counties Most Polluted by Year-round Particle Pollution (Annual PM2.5), *available at* http://www.stateoftheair.org/2011/assets/SOTA2011.pdf (last accessed July 7, 2011)

[22] American Lung Association, *State of the Air Report 2011*), *available at* http://www.stateoftheair.org/2011/assets/SOTA2011.pdf

[23] *In the Matter of Pouch Terminal*, 2008 EPA CAA Title V Lexis *2; *see also Sierra Club v. Johnson*, 436 F.3d 1269, 1260 (11th Cir. 2006):

> The intent of Title V is to consolidate into a single document (the operating permit) all of the clean air requirements applicable to a particular source of air pollution." *Sierra Club v. Ga. Power Co.*, 443 F.3d 1346, 1348-49 (11th Cir. 2006). In this way, clarity and transpareney were added to the regulatory process to help eitizens, regulators, and polluters themselves understand which clean air requirements apply to a particular source of air pollution.

A Title V/CAAPP permit that fulfills this objective is particularly important in this case, as USS-GCW is a large, complex, high-polluting facility with impacts on immediate neighbors as well as a sizeable metropolitan community and a history of air pollution violations. However, the revised permit falls short of fulfilling its legal requirements and policy purposes. The revised permit fails to require USS-GCW to conduct monitoring sufficient to determine whether it is complying with its emission limitations, contains compliance loopholes regarding excess emissions, and fails to include all applicable requirements.

II. The Revised Permit's Use Of Emission Factors Fails To Provide Periodic Monitoring Designed To Ensure Compliance With Permit Limits, And Lacks Practical Enforceability.

The revised permit changes, but fails to correct, the initial permit's use of emission factors for periodic monitoring purposes. The provisions in the revised permit fail to satisfy Title V requirements for both periodic monitoring and practical enforceability.

By way of background, many of the emission factors and limits at issue are based on the provisions of a Production Increase Permit (95010001) initially issued by IEPA in 1996.[24] Attached to the permit are several tables that set forth production and emission limits (containing both "emission factors" and "maximum emissions") for the blast furnace operations (Table 1), basic oxygen furnace operations (Table 2), continuous casting operations (Table 3), and fuel combustion limits (Table 4).[25] These tables are incorporated into various provisions of the initial 2009 and revised 2011 Title V/CAAPP permits. For illustrative purposes, set forth below are the emission limits pertaining to uncaptured fugitive emissions from blast furnace operations (condition 7.4.6.c of both the initial 2009 and revised 2011 Title V/CAAPP permits):

> Blast Furnace uncaptured fugitive emissions shall not exceed the following limits:

Pollutant	**Emission Factors** (Lbs/Ton Iron)	Maximum Emissions (Tons/Yr)
PM	0.031	49.06
PM_{10}	0.0155	24.53
SO_2	0.0104	21.94
NOx	0.0007	1.14
VOM	0.0047	7.42

The issue for purposes of this petition focuses on periodic monitoring for and enforceability of the limits stated as "emission factors" (emphasis added above) and the corresponding "maximum emissions" limits in this and numerous other similar permit conditions derived largely from permit 95010001. As set forth below, this petition urges the Administrator to object to the revised permit's use of emission factors as emission limits and as periodic monitoring for the following reasons:

[24] The 1996 Production Increase Permit is submitted herewith as Exhibit 12.

[25] The permit also includes tables, without references to emission factors, containing annual, pollutant-specific limits on emissions from major processes and activities (Table 5) and an annual emissions summary (Table 6).

- The use of the term "emission factor" in numerous permit conditions fails to make clear IEPA's view that the emission factors are enforceable emission limits.
- Many of the emission limits from permit 95010001 – both "emission factor" limits and "maximum emissions" limits – lack periodic monitoring requirements in the revised permit sufficient to ensure that USS-GCW complies with those limits.
- The revised permit gives USS-GCW unilateral authority to self-determine the methods for "ensuring" that it complies with the emission limits – both "emission factor" limits and "maximum emissions" limits – from permit 95010001.

A. IEPA States That "Emission Factors" Set Forth In The Permit Are Actually Permit Limits. The Permit Language Could Compromise The Practical Enforceability Of Those Limits.

ABC and USEPA assumed that the stated "emission factors" in the initial permit were to serve as periodic monitoring tools to determine whether USS-GCW was complying with various emission limits in the permit. ABC's prior petition challenged the initial permit's use of emission factors for periodic monitoring purposes in the following conditions of the initial permit:

- 7.4.6.b - g - blast furnace emissions; emission factors from underlying Production Increase Permit 95010001;
- 7.5.6.c - i - basic oxygen furnace emissions; emission factors from underlying Production Increase Permit 95010001;
- 7.6.7.a - e - continuous casting emissions; emission factors from underlying Production Increase Permit 95010001
- 7.11.7.b – internal combustion engine (emergency generator) emissions; emission factors from underlying permit 00060003;

USEPA's Order granted ABC's petition to object with respect to the permit's use of unsupported emission factors in each of the above-cited permit conditions. USEPA Order at 13 – 21 (regarding conditions 7.4.6.b - g), 22-28 (regarding conditions 7.5.6.c - i), 28-29 (regarding conditions 7.6.7.a - e), and 32-33 (regarding condition 7.11.7.b).

At the heart of USEPA's objections to the initial permit's use of emission factors was the following explanation, together with instructions to IEPA for revising the permit:

> The record for the USS permitting action does not specify the origin of the emission factors. It is not clear whether the emission factors used by IEPA are indicative of the emissions at USS's facility. IEPA has failed to provide an explanation why use of the emission factors is adequate to assure compliance. With a few exceptions, EPA does not recommend the use of emission factors to develop source-specific permits limits or to determine compliance with permit requirements. I grant the petition on the monitoring issues related to such use of emission factors. IEPA either must justify in the record why these emission factors are representative of USS's operations (i.e., representative to yield reliable data from the relevant time period representative of the sources compliance), and provide sufficient evidence to demonstrate that the emissions will not vary by a

> degree that would cause an exceedance of the standards, or IEPA must determine and adequately support another mechanism to assure compliance with the applicable emission limits from the underlying construction permit. Furthermore, if IEPA can adequately justify the use of emission factors as a compliance mechanism, it should also require USS to confirm the appropriateness of the emission factors such as through the use of stack testing using EPA-approved methods on a periodic basis, as operations and equipment change or deteriorate over time.

USEPA Order at 14.

In the revised permit, IEPA kept in place, without change, the same emission factor provisions as in the initial permit (except that some provisions were relocated (e.g., iron pellet screen emissions provision was moved from blast furnace section, condition 7.4.6.g, to material handling and processing section, 7.1.6.b.v), and continuous casting production and emission limits from underlying permit 95010001 were moved (from 7.6.7 to 7.6.6)). In addition, the revised permit contains new provisions – in some but not all of the relevant parts of the permit – requiring USS-GCW to maintain records documenting the basis for the emission factors it would be using, and to review and update those records "as necessary to assure that the emission factors that it uses to determine emissions of the affected operations do not understate actual emissions."[26]

Instead of changing the emission factor provisions, IEPA offered in its Response to Comments a different explanation of the intended function of those provisions. Whereas ABC and USEPA's Order had understood the permit's "emission factors" to be used for calculating whether USS-GCW was operating in compliance with stated emission limits, IEPA explained that the "emission factors" provisions in the permit were actually emission limits ("emission factor limits" or "factor limits" according to IEPA) rather than monitoring mechanisms.[27] IEPA discussed the role of the emission factor limits (expressed primarily as pounds per ton of production) in relation to the "maximum emissions" limits (expressed as tons per year):

> Since the source usually does not operate at its permitted production each year, as enforceable limits, the factors limit the emissions of the source in proportion to the actual level of production in each year. For example, if in a given year, the source actually produces only 80 percent of its maximum permitted production, the emission factor limits restrict the actual emissions in that year to no more than 80 percent of the maximum annual emissions. If the emission factors were traditional emission factors, rather than limits, the source's annual emissions in any year would not be limited in this manner, and would only be restricted to the maximum emissions, independent of the actual level of production in a year.

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[26] See, e.g., conditions 7.1.9.h, 7.3.10.e.vi, 7.4.9.i, 7.6.9.c, and 7.10. of the revised permit. See also Statement of Basis at 23-24. No comparable recordkeeping requirements exist in parts 7.5 (basic oxygen processes) and of the revised permit.

[27] Response to Comments at 4-7.

Response to Comments at 4, footnote 4. IEPA plainly stated that the revised permit employs the "emission factors" as enforceable emission limits:

> The revised CAAPP permit appropriately addresses these "emission factors" established by the Construction Permit 95010001, including the factors for uncaptured emissions now included in Conditions 7.4.6.c and 7.5.6.d of the CAAPP permit. This is because it addresses these factors as emission limits, which are directly applicable to subject operations.

Response to Comments at 7 (emphasis supplied).

ABC accepts IEPA's explanation, and agrees that the numerous permit conditions that set forth "emission factors" actually express enforceable emission limits. However, the permit lacks two key requirements of Title V permits – periodic monitoring and practical enforceability – with respect to these "emission factor limits."

Because what IEPA calls "traditional emission factors" are tools for calculating emissions rather than emission limits, and because the permit repeatedly uses the phrase "emission factor" without expressly indicating that they are indeed enforceable limits, the permit language could undermine the enforceability of the emission factor limits. While the revised permit adopts the "emission factor" language from the underlying production increase permit (95010001), that language is not dispositive and, indeed, is not adequate for Title V enforceability. In short, IEPA must incorporate the understanding expressed in the Response to Comments directly into the revised permit, which currently remains virtually unchanged from the initial version to which USEPA objected.

Given that it took the entire process set forth above – initial permit, USEPA objection, draft and final revised permit – before IEPA clarified that the "emission factors" are actually enforceable limits, it is quite possible that others – including a court adjudicating an enforcement action – could be confused by the permit language. To ensure that these permit limits are practically enforceable, USEPA should object to the revised permit and require IEPA to revise the permit language to indicate clearly in the permit – not just in the Response to Comments – that the "emissions factors" are enforceable emission limits.

B. As Issued, The Revised Permit Lacks Periodic Monitoring Requirements To Ensure Compliance With The "Emission Factor" Limits As Well As Many Of The Corresponding "Maximum Emission" Limits In The Permit.

Accepting IEPA's premise that the emission factors are enforceable limits, the revised permit lacks periodic monitoring requirements to ensure that USS-GCW is operating in compliance with many of the emission limits – both "emission factor" limits and maximum emission limits – from permit 95010001.

As of the issuance of the revised permit, neither IEPA nor USEPA nor the public knows what emission factors will be used to determine whether USS-GCW is complying with many of the emission limits from permit 95010001. All we know from the revised permit is that:

- Emission factors will be used to determine compliance with many of the emission limits from permit 95010001;[28]
- USS-GCW will determine and notify IEPA in the future - by no later than January 2012 (or 30 days after the effective date of the permit, whichever is later) - the emission factors that USS-GCW deems appropriate for determining compliance with the emission limits from permit 95010001;[29]
- There is no provision for IEPA to review and approve, or require USS-GCW to revise, the emission factors that USS-GCW chooses. Nor is there any role for USEPA or public comment on the emission factors that USS-GCW elects to use for periodic monitoring of the emission limits from permit 95010001;
- USS-GCW is required to maintain records documenting the emission factors it opts to use, and to update those records "as necessary to assure that the emission factors that it uses to determine emissions of the affected operations do not understate actual emissions;"[30] and
- The permit lacks any provision that specifically addresses compliance with the emission limits in conditions 7.5.6.c - g, governing basic oxygen furnace operations – one of the most problematic processes at the USS-GCW facility in terms of local air quality impacts and persistent compliance issues.

One of the central features of the Title V program is to enhance compliance with and enforceability of applicable emission limits.

> Title V did more than require the compilation in a single document of existing applicable emission limits and monitoring requirements. It also mandated that "[e]ach permit issued under [Title V] shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions." [42 U.S.C. § 7661c]
>
> * * *
>
> Fundamental to this scheme is the mandate that "[e]ach permit ... shall set forth ... monitoring ... requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirement insufficient "to assure compliance" with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards.

Sierra Club v. USEPA, 536 F.3d 673, 674-5, 677 (D.C.Cir. 2008) (emphasis supplied; some internal citations omitted).

As issued, the revised permit is utterly lacking in periodic monitoring provisions for many of the emission limits from permit 95010001. All that is known is that some emission factors will be used to determine compliance with some – but not all – of the applicable limits. What will those

[28] See condition 7.1.9.h for emission limits in 7.1.6.b, condition 7.4.9.i for emission limits in 7.4.6.b - g, and condition 7.6.9.c for emission limits in 7.6.6.a - e. See also condition 7.10.9.iv for emission limits based on a Title I permit added to the revised permit.

[29] Condition 5.9.6.c.

[30] See conditions cited in footnote 26.

emission factors be? Will they be representative of USS-GCW's operations? None of these questions is answered in the revised permit as issued. The revised permit's reliance solely on a "to be determined later" approach falls far short of the periodic monitoring requirements of Title V.

Furthermore, the permit does not even include the "to be determined later" provisions regarding the emission limits set forth in condition 7.5.6.c - g for the basic oxygen furnace operations. It is inconceivable that a complete absence of periodic monitoring for stated emission limits can satisfy Title V's periodic monitoring requirement.

ABC urges USEPA to object to the revised permit and require IEPA to include periodic monitoring provisions in the permit, rather than simply create a mechanism for them to be determined at a later date.

C. The Permit Authorizes USS-GCW To Set – Unilaterally, Without IEPA Review And Approval And Without Notice To Or Input From USEPA Or The Public – The Emission Factors That Will Be Used To Determine Whether Its Operations Comply With Permit Limits.

Compounding the lack of periodic monitoring requirements for many of the emission limits from permit 95010001 is the permit's authorization to USS-GCW to determine its own compliance test. As noted above, the revised permit's only provisions regarding USS-GCW's accountability for complying with the emission factor limits are the requirements that it maintain records indicating how it decides to calculate compliance with those limits, and update those records as necessary.[31]

This approach is akin to a driver telling the Highway Patrol that he was not really speeding because, according to the nifty odometer he installed in his car, he is actually traveling at a speed well below the speed limit. Except in USS-GCW's case, it cannot even be pulled over because there is no radar gun. The revised permit effectively enables USS-GCW to make its own emission calculations and just please let IEPA know how it decided to do the calculations. This scheme falls far short of any concept of practical enforceability. Rather, it all but ensures unenforceability.

ABC urges USEPA to object to the revised permit because it enables USS-GCW unilaterally to determine the emission factors it will use for periodic monitoring to "ensure compliance" with the emission limits in permit 95010001.

D. The Permit Is Entirely Silent On Periodic Monitoring To Ensure Compliance With The Emission Limits In Conditions 7.5.6.c - g, Governing Basic Oxygen Furnace Operations.

The permit contains emission factor limits and corresponding maximum emission limits for the basic oxygen furnace operations in conditions 7.5.6.c – g. However, even the unacceptable provisions described in paragraphs B and C above – requiring USS-GCW to set emission factors

[31] See conditions cited in footnote 26.

at a later date and update them when necessary – are absent from the revised permit's basic oxygen furnace provisions. This omission is particularly glaring in light of the significant emissions associated with, and spotty compliance history of, the facility's basic oxygen furnace operations.

This omission may be an oversight. In any event, ABC urges USEPA to object to the revised permit because it lacks sufficient periodic monitoring to ensure compliance with the emission limits applicable to the basic oxygen furnace operations from permit 95010001.

III. Several Additional Permit Limits Lack Adequate Periodic Monitoring Requirements.

A. Condition 7.3.3.f - Coke Oven Gas Flare

Condition 7.3.3.f sets an opacity limit of 30 percent for the coke oven gas flare. Condition 7.3.8.c requires monthly visible emission observations of the flare, followed by opacity observations if visible emissions are observed. However, this frequency is inadequate to assure compliance with a limit that must be met continuously.[32]

ABC commented on the draft revised CAAPP permit that despite proper operation and maintenance of the flare, environmental factors such as elevated wind speed could decrease the flare's combustion efficiency, resulting in an increase of emissions from the flare and the potential for visible emissions to occur. IEPA's Response to Comments acknowledged that wind speed may affect the flare's combustion efficiency and explained:

> Monthly observations for visible emissions from the flares, with follow up opacity observations if visible emissions are present, would generally address the potential effect of wind speed on the occurrence of visible emissions and opacity from the flares. This is because multiple observations would occur each year under a variety of wind speed conditions.

Response to Comments at 19.

Although the permit requires that two of the twelve observations per year occur during wind speeds of at least 16 miles per hour, IEPA has not demonstrated that the monitoring frequency is sufficient to assure continuous compliance with the opacity limit. Variations in the size, shape, and combustion efficiency of the flare, and the potential for visible emissions to occur, are not limited to the two times a year that USS-GCW is required to perform observations of the flare at elevated wind speeds.

[32] USEPA's Order objected to the initial permit because IEPA failed to provide adequate support for the periodic monitoring associated with the no visible emission limit for the coke oven by-products flare. USEPA Order at 11. The revised permit contains a 30 percent opacity limit for the coke oven gas flare rather than a no visible emission limit. The revised permit also changed the frequency of monitoring from annual to monthly visible emission observations of the flare, with opacity observations required if visible emissions are observed. This petition focuses on the adequacy of the periodic monitoring to assure compliance with the 30 percent opacity limit.

Unless more frequent monitoring is required, emissions from the flare have the potential to exceed the 30 percent opacity limit without observation or documentation by the facility. IEPA has not demonstrated that monthly observations of the flare are "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit". 40 C.F.R. § 70.6(a)(3)(i)(B). EPA should object to the issuance of the permit and direct IEPA to demonstrate how the monitoring requirements in the permit are sufficient to assure compliance with the limit. If IEPA cannot make that demonstration, then additional periodic monitoring should be required.

B. Condition 7.4.3.b.i - Uncaptured Blast Furnace Casthouse

Condition 7.4.3.b.i sets an opacity limit of 20 percent for uncaptured particulate matter from any opening in a blast furnace casthouse. Monitoring requirements specified in Condition 7.4.7.b.i require opacity observations on at least five out of seven operating days or weekly, depending on the previous opacity observations. However, this frequency is inadequate to assure compliance with a limit that must be met continuously.[33]

In the Statement of Basis for the draft revised CAAPP permit, IEPA explained that the frequency of periodic monitoring was based on the conclusion that a violation of the opacity limit would be expected to occur because of the gradual deterioration of the capture and control systems. The Statement of Basis noted, "Weekly opacity observations will enable the source to make timely repairs or take other appropriate actions in response to elevated levels of opacity before actual opacity would ever exceed 20 percent." Statement of Basis at 87.

ABC commented on the draft revised CAAPP permit that past opacity exceedances associated with blast furnace uncaptured emissions did not support the conclusion that opacity exceedances are the result of gradual deterioration of the capture and control systems. In its Response to Comments, IEPA acknowledged that "violations of 35 IAC 212.446(a)(1) can result from 'upsets,' i.e., sudden, transitory events that are not related to deterioration of the capture and control systems on the casthouse." Response to Comments at 21. However, IEPA explained that these upsets would be best addressed by the recordkeeping requirements in the permit, rather than more frequent opacity monitoring of blast furnace uncaptured emissions.

Presumably, IEPA's Response to Comments refers to the recordkeeping requirement found in Condition 7.4.9(h)(vii) of the permit:

> The Permittee shall maintain the following operating records for the affected blast furnaces:
>
> vii. Records identifying process upsets in the operations at the casthouse that result in the generation of additional opacity or PM emissions, such as refractory

[33] USEPA's Order objected to the initial permit because IEPA failed to provide adequate support for the periodic monitoring associated with the 20 percent opacity requirement in federal regulations. USEPA Order at 12. The revised permit changed the frequency of monitoring from weekly to either five out of seven days or weekly. The monitoring section in the revised permit references state law. Condition 7.4.7.b.i. This petition focuses on the adequaey of the periodic monitoring to assure complianee with the state limit.

> clay falling into the trough during a missed stop. For these upsets, these records shall include the time of the upset, a description of the upset and a discussion of the consequences for opacity and PM emissions from the casthouse.

Permit at 176.

It is unclear how this recordkeeping requirement will provide sufficient information to determine compliance with the opacity limit. Because the permit fails to define "process upsets" or "additional opacity," the conditions under which USS-GCW is required to keep records of its casthouse operations are not clearly specified. As a result, Condition 7.4.9.h.vii lacks practical enforceability. Furthermore, even if the permit defined process upsets and additional opacity, the recordkeeping requirement assumes that US Steel detects all of the upsets that result in additional opacity. This is not necessarily true.

In addition, if USS-GCW does record an upset associated with increased opacity emissions, it is unclear whether the facility is required to record an actual opacity observation for uncaptured blast furnace casthouse emissions or simply provide a general "discussion" of opacity as a part of the recordkeeping requirements. Without an actual opacity observation, these records will not provide sufficient information to determine compliance with the opacity limit.

Consequently, IEPA has not demonstrated that recordkeeping for upsets in combination with opacity observations on a weekly or daily basis, depending on prior opacity observations is "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit". 40 C.F.R. § 70.6(a)(3)(i)(B). USEPA should object to the issuance of the permit and direct IEPA to demonstrate how the monitoring requirements in the permit are sufficient to assure compliance with the limit. If IEPA cannot make that demonstration, then additional periodic monitoring should be required.

C. Conditions 7.4.5-3.c and 7.4.5-3.d.i.A – Blast Furnace Gas Flares

Conditions 7.4.5-3.c and 7.4.5-4.d.i.A prohibit blast furnace gas (BFG) flare #1 and BFG flare #2 from emitting any visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Condition 7.4.7.d requires monthly visible emission observations of the flares, followed by opacity observations if visible emissions are observed. At least two observations must be made during elevated wind speeds of at least 16 miles per hour each year. However, this frequency is inadequate to assure compliance with limits that must be met continuously.[34]

Although IEPA explains in its Response to Comments that variability in the composition of blast furnace gas is not likely to result in visible emissions from the flares, it does acknowledge that

[34] USEPA's Order objected to the initial permit because IEPA failed to provide adequate support for the periodic monitoring associated with the no visible emission limit for the blast furnace excess gas flare. USEPA Order at 13. The revised permit now includes requirements for a second blast furnace gas flare and the frequency of monitoring has been changed from annual to monthly observations for visible emissions from the flares. This petition focuses on the adequacy of the periodic monitoring to assure compliance with the no visible emission limits for BFG flares #1 and #2.

environmental factors such as elevated wind speed may impact the combustion efficiency of the flare and potentially lead to visible emissions. As described above in the case of the coke oven gas flare, variation in the size, shape, and combustion efficiency of the flares and the potential for visible emissions to occur is not limited to the two times a year that USS-GCW is required to perform observations of the flares at elevated wind speeds.

Unless more frequent monitoring is required, emissions from BFG flare #1 and BFG flare #2 have the potential to produce visible emissions without proper observation or documentation by the facility. IEPA has not demonstrated that monthly observations of the flares are "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit". 40 C.F.R. § 70.6(a)(3)(i)(B). USEPA should object to the issuance of the permit and direct IEPA to demonstrate how the monitoring requirements in the permit are sufficient to assure compliance with the limits. If IEPA cannot make that demonstration, additional periodic monitoring should be required.

D. Conditions 7.7.3.b and 7.7.3.g – Slab Reheat Furnaces

Condition 7.7.3.b sets a PM_{10} emission limit of 38.7 ng/J (0.09 lb/mmBtu) of heat input for the slab reheat furnaces. Similarly, Condition 7.7.3.g sets a PM_{10} emission limit of 22.9 mg/scm (0.01 gr/scf) for the slab reheat furnaces. If visible emissions are not observed, then neither PM_{10} limit applies. Monitoring requirements specified in Condition 7.7.9.a require semi-annual opacity observations for each affected slab reheat furnace unless no visible emissions are observed during the first 12 minutes of observation. Testing for emissions from the slab reheat furnaces is only required upon written request from IEPA. The use of semi-annual opacity observations to determine compliance with the PM_{10} emission limits for the slab reheat furnaces, with PM_{10} testing only upon IEPA's request, does not constitute adequate periodic monitoring.[35]

In its Response to Comments, IEPA explained its rationale for relying primarily on opacity observations to monitor PM_{10} emissions from the slab reheat furnaces:

> It is appropriate that the permit rely primarily on observations of visible emissions and opacity as those observations will directly confirm good combustion and proper operation. Good combustion is the concern for an emission unit whose particulate emissions are related to combustion of gaseous fuel. While a precise rate of PM emissions cannot be mathematically derived from the opacity of emissions, such precision is not needed to utilize opacity as an element of Periodic Monitoring.

Response to Comments at 24-25.

[35] USEPA's Order objected to the initial permit because IEPA failed to provide adequate support for the periodic monitoring associated with the PM_{10} emission limit for the slab reheat furnaces. USEPA Order at 29-30. The revised permit changed the testing requirement for the slab reheat furnaces from once in five years to upon written request from IEPA. In addition, the revised permit requires semi-annual opacity observations to determine compliance with the PM_{10} emission limits. This petition focuses on the adequacy of the periodic monitoring to assure compliance with the PM_{10} emission limits.

Without an established correlation between opacity and PM_{10} emissions, it is unclear how compliance with the PM_{10} limits will be determined based on opacity observations of the slab reheat furnaces if opacity is observed. The permit does not specify an opacity level that would correspond to an exceedance of either PM_{10} limit. Furthermore, IEPA has indicated that "some opacity" from the slab reheat furnaces "should not be considered a significant departure from the normal conditions of a furnace." Response to Comments at 25. However, there is no discussion of the range of opacity levels associated with normal conditions of the furnaces or how those opacity levels compare to the PM_{10} limits.

IEPA has not demonstrated that semi-annual opacity observations are "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit". 40 C.F.R. § 70.6.a.3.i.B. USEPA should object to the issuance of the permit and direct IEPA to demonstrate how the monitoring requirements in the permit are sufficient to assure compliance with the limit. If IEPA cannot make that demonstration, additional periodic monitoring should be required.

IV. The Revised Permit Fails To Respond To USEPA's Order With Respect To Excess Emissions Associated With Startup, Breakdown, And Malfunctions.

A. The USEPA Order Focused On IEPA's Advance Approval Of Emissions Violations.

The USEPA Order (pp. 39-40) granted ABC's petition with respect to permit conditions addressing excess emissions associated with startup, shutdown, and malfunction ("SSM") situations. While the conditions addressing startup differ somewhat from those governing malfunction or breakdown, a key defect common to the permit's SSM conditions is that they appear to provide advance approval for USS-GCW to violate emission limits during SSM events. IEPA failed to correct the problems highlighted by the USEPA Order.

USEPA explained that the Illinois State Implementation Plan (SIP) provision on which the permit conditions are primarily based, 35 IAC § 201.262, requires the permittee to demonstrate affirmatively that the elements set forth in the SIP are satisfied in each individual instance of an SSM event. Each event will have its own circumstances – what happened, what did USS-GCW do in advance to prevent such circumstances from occurring, how did USS-GCW respond, what evidence does USS-GCW provide to demonstrate that the excess emissions could not have been avoided, etc.

Noting that the permit appeared to authorize SSM-based violations in advance of SSM events, USEPA found that IEPA had not demonstrated how it had determined in advance of any SSM event that USS-GCW satisfied the SIP's requirements. Accordingly, USEPA gave IEPA two options with respect to the SSM provisions of the revised permit: (1) either explain how IEPA determined in advance that USS-GCW had already satisfied the requirements of 35 IAC § 201.262; or (2) make changes to the permit to ensure that IEPA authorizations are granted only after receiving and considering factual support specific to each SSM event.

> [Re Startup]: EPA is granting the petition and requiring IEPA to explain how it determined in advance that the permittee had met the requirements of the Illinois SIP at 35 IAC § 201.262, or otherwise make appropriate changes to the permit and explain how the permit ensures compliance with the requirements of the SIP.

USEPA Order at 39.

> [Re Malfunctions or breakdowns]: EPA ... is granting the petition and requiring IEPA either to explain in the statement of basis how it determined in advance that the permittee had met the requirements of the Illinois SIP at 35 IAC § 201.262, or to specify in the permit that continued operation during malfunction or breakdown will be authorized on a case-by-case basis if the source meets the SIP criteria.

USEPA Order at 39-40.

B. IEPA Did Not Comply With The USEPA Order In Issuing The Revised Permit.

In issuing the revised permit, IEPA took neither of the permissible options set forth by USEPA.

With respect to the first option, IEPA disavowed having made any advance determinations that USS-GCW has already satisfied the SIP's SSM requirements.

> Statement of Basis (p.37): "Neither the provisions in the SIP nor the provisions in the CAAPP permit delineating the elements for a viable claim of malfunction/breakdown or startup translate into any advanced determination on excess emissions."
>
> Response to Comments (pp. 37-38): "The permit does not determine and does not provide that violations of specified standards or limitations are not violations (nor does the SIP). Further, the permit does not determine the viability of any defense (prima facie) that may be made in response to any enforcement action (nor does the SIP)."

With respect to the second option, IEPA made no material changes to the permit conditions, emphasizing instead the recordkeeping and reporting requirements it added to the revised permit.[36]

> [W]ithout significant alteration in interpretation or approach, slight enhancements were made to the text of the relevant provisions... The revisions were made to more clearly reflect the authorizations at issue and attendant obligations. More noteworthy, recordkeeping requirements related to malfunctions and breakdowns

[36] IEPA added another startup provision in the coke oven battery section, which had a malfunction/breakdown provision but not a startup provision in the initial Title V permit. Revised permit conditions 7.2.5-4 (new provision re startup) and 7.2.5-5 (relocated malfunction/breakdown provision).

> were enhanced. Recordkeeping and reporting requirements related to startups were also enhanced.

Response to Comments at 37 (emphasis supplied). The table below compares the key language regarding advance permission in the initial and revised permit.

	Initial Permit	Revised Permit
Startup Conditions	Permittee is authorized to operate … in violation of the applicable standards … during startup."[37]	Permittee is authorized to violate the applicable standards … during startup."[38]
Malfunction, Breakdown Conditions	"Permittee is authorized to continue operation … in violation of the applicable standards … in the event of a malfunction or breakdown."[39]	"Permittee is authorized to continue operation … in excess of the applicable standards … in the event of a malfunction or breakdown."[40]

These minor wording changes seem only to reinforce the concern that IEPA has pre-approved emission violations during startup. And although IEPA removed the word "violation" from the malfunction conditions, the revised permit nonetheless pre-approves USS-GCW's operation in excess of permit limits.

C. IEPA's Interpretation Of The Permit's SSM Conditions Is Inconsistent With The Permit Conditions Themselves And With The Underlying SIP Provisions.

Rather than take either option offered in the USEPA Order, IEPA claims that USEPA misconstrued the permit's SSM provisions.[41] However, the counter-explanation offered by IEPA

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[37] Initial permit, conditions 7.4.5-2.c (blast furnace operations), 7.7.5 (slab reheat furnaces), and 7.10.3.g (boilers).

[38] Revised permit, conditions 7.2.5-4 (coke oven batteries; this is a new condition, without counterpart in initial permit), 7.4.5-2.b.ii.A (blast furnace operations), 7.7.5.a (slab reheat furnaces), and 7.10.3.i (boilers).

[39] Initial permit, conditions 7.2.5-4 (coke oven batteries), 7.3.5 (coke by-product recovery plant), 7.4.5-2.b.i (blast furnace operations), 7.5.5-2.b.(basic oxygen processes), and 7.10.3.h (boilers). The initial permit also contained a malfunction/breakdown provision regarding continuous casting operations, 7.6.5.a, which has no counterpart in the revised permit.

[40] Revised permit, conditions 7.2.5-5.a (coke oven batteries), 7.3.5 (coke by-product recovery plant and COG desulfurization system), 7.4.5-2.b.i.A (blast furnace operations), 7.5.5-2.b.i (basic oxygen processes), and 7.10.3.j (boilers).

[41] IEPA also claims that the underlying issues are inherent in the Illinois SIP, and that SIP changes should not be made in the context of a Title V permit. Response to Comments at 37. ABC does not disagree that the Illinois SIP provisions regarding SSM are problematic. Indeed, the verbal contortions that IEPA has undertaken in an attempt to argue that its permit language, authorizing USS-GCW "to violate the applicable standards … during startup" (e.g., condition 7.2.5-4) and "to continue operation … in excess of the applicable state standards … in the event of a malfunction or breakdown" (e.g., condition 7.2.5-5.a), does not pre-authorize emissions violations indicate that, at the least, the SIP is sufficiently ambiguous that it could effectively preclude enforcement of emission limits violated during SSM events (i.e. when most violations actually occur). The provisions could well be interpreted (1) to authorize IEPA to grant advance permission for sources to violate limits during SSM limits, without receiving event-specific information, and (2) to enable sources to defend successfully against (and presumably avoid even the initiation of) enforcement actions by demonstrating that they complied with the vague and limited requirements associated with the advance permission. In addition, the SIP fails to ensure that any pre-authorization does not

– in the Statement of Basis accompanying the draft revised permit and the Response to Comments accompanying the final revised permit – is at odds with the language in the permit and the SIP.

Both the Statement of Basis and the Response to Comments describe a two-step process for sources to take advantage of an SSM defense. IEPA contends that the advance permission it grants in the permit – to violate emission limits during startup and operate with excessive emissions during malfunctions and breakdowns – is nothing more than permission to later assert an SSM defense in response to an enforcement action.[42] The second step would occur if and when an enforcement action is brought; USS-GCW could rely on the permission as a prima facie defense provided it demonstrates compliance with the "attendant terms and conditions" of the permit.

With respect to the first step, we respectfully submit that most people reading the permit without benefit of the Statement of Basis and Response to Comments would not – and did not (e.g., ABC's Petition and USEPA's Order) – reach those conclusions regarding the so-called first step. Because the permit is enforceable and the Statement of Basis and Response to Comments are not, the permit conditions that expressly authorize USS-GCW "to violate" or "to operate in excess of" emission limits, are at best ambiguous – if not directly contradictory to IEPA's off-permit explanations. The permit language could well suggest to a judge – in the event anyone overcomes the apparent hurdle of the permit language to bring an enforcement action – that IEPA had already excused the violations. In that event, the permit conditions would function as blanket exemptions, in violation of federal and state law.

In addition, IEPA's explanation of the first step does not survive careful review. The permit cites 35 IAC § 201.149 and Part 201, Subpart I, in granting the authorizations to violate/operate in excess of permit limits.[43] The cited regulations require a permit applicant seeking advance permission to provide IEPA with the following information:

> A request for permission to continue to operate during a malfunction or breakdown, if desired, … shall include as a minimum: a full and detailed explanation of why such continued operation is necessary; the anticipated nature, sources and quantities of emissions which will occur during such continued operation; the anticipated length of time during which such operation will continue; all measures, such as use of off-shift labor or equipment which will be taken to minimize the quantity of air contaminant emissions and length of time during which such operation will continue. When the standards or limitations of

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impair the rights of USEPA and citizens under the Clean Air Act to enforce all violations, and it fails to limit the defense offered in 35 IAC § 201.265 to claims for penalties rather than injunctive relief. For these and other reasons, ABC urges USEPA to grant the separate petition, submitted by the undersigned counsel on behalf of Sierra Club, for a SIP call requiring several states, including Illinois, to amend the SSM provisions in their SIPs to comply with the Clean Air Act and EPA policy. Petition to Find Inadequate and Correct Several State Implementation Plans under Section 110 of the Clean Air Act Due to Startup, Shutdown, Malfunction, and/or Maintenance Provisions. Submitted to USEPA Administrator Lisa Jackson on behalf of Sierra Club. June 30, 2011.

[42] Statement of Basis at 36-38 ("The first step … consists of seeking authorization … to prospectively make a claim of malfunction/breakdown or startup", p 36); Response to Comments at 37-38.

[43] See, e.g., permit conditions 7.2.5-4 (coke ovens – startup) and 7.2.5-5.a (coke ovens – malfunction/breakdown).

> Subchapter c of this Chapter will be violated during startup, a request for permission to violate such standards or limitations ... shall include, as a minimum: a description of the startup procedure for each emission source, the duration and frequencies of such startups, the type and quantities of emissions during such startups and the applicant's efforts to minimize any such startup emissions, duration of individual startups and frequency of startups.

35 IAC Part 201, Subpart I, section 201.261.

1. USS-GCW's Application for Advance Permission to Operate in Excess of or Violate Emission Limits Was Woefully Incomplete.

USS-GCW applied for advance permission for both malfunction/breakdown and startup events, but did not provide all of the required information. Rather, USS-GCW stated repeatedly that key information required by this SIP provision could not be known in advance.

For example, although the regulations require information regarding the anticipated quantities of emissions during malfunction/breakdown, USS-GCW said it could not provide that information: "The quantities of air contaminants emitted during malfunction or breakdown conditions are directly related to the specific type of malfunction or breakdown condition and thus cannot be determined on a prior basis." CAAPP permit application, Request to Continue Operation during Malfunction or Breakdown for Coke Ovens "A" and "B" (Including Pushing, Charging and Fugitives), Exhibit 204-1 at 2 [hereinafter Coke Oven Malfunction Authorization Request] (emphasis supplied) (submitted herewith as part of Exhibit 13).[44] For the same stated reason, USS-GCW declines to provide the anticipated duration of excess emissions. *Id.*[45]

In addition, USS-GCW did not provide any specific information as to measures it would take to minimize emissions during SSM events. USS-GCW repeatedly restates the regulatory

[44] *See also* CAAPP permit application, Request to Continue Operation during Malfunction or Breakdown, Coke Oven Byproducts Plant, Exhibit 204-1 at 1 (stating that the quantity of emissions depends on the type of malfunction and "thus cannot be determined on a prior basis");*id.*, Request to Continue Operation during Malfunction or Breakdown, Blast Furnaces "A" and "B" and Blast Furnace Casthouse, Exhibit 204-1 at 2 (same); *id.*, Request to Continue Operation during Malfunction or Breakdown, BOF, Exhibit 204-1 at 1 (same); *id.*, Request to Continue Operation during Malfunction or Breakdown, Boilers 11 & 12, Exhibit 204-1 at 2 (same);*id.*, Request to Continue Operation during Malfunction or Breakdown, Boilers 1-10, Exhibit 204-1 at 2 (same); *id.*, Request to Operate during Startup of Equipment, Blast Furnaces "A" and "B" and Blast Furnace Casthouse, Exhibit 203-2 at 3 (stating that the quantities of emissions "cannot be determined on a prior basis); *id.*, Request to Operate during Startup of Equipment, Boilers 11&12, Exhibit 203-2 at 2 (same); *id.*, Request to Operate during Startup of Equipment, Boilers 1-10, Exhibit 203-2 at 2 (same). The portions of USS-GCW's permit application containing requests for advance permission to operate in excess of/violate limits during SSM events are submitted herewith as Exhibit 13.

[45] *See also* CAAPP permit application, Request to Continue Operation during Malfunction or Breakdown, Coke Quenching, Exhibit 204-1 at 1 (stating that the will duration vary depending on the type of malfunction or breakdown); CAAPP permit application, Request to Continue Operation during Malfunction or Breakdown, Coke Oven Byproducts Plant, Exhibit 204-1 at 1 (same); *id.*, Request to Continue Operation during Malfunction or Breakdown, Blast Furnaces "A" and "B" and Blast Furnace Casthouse, Exhibit 204-1 at 2 (same); *id.*, Request to Continue Operation during Malfunction or Breakdown, BOF, Exhibit 204-1 at 1 (same); *id.*, Request to Continue Operation during Malfunction or Breakdown, Boilers 11 & 12, Exhibit 204-1 at 2 (same); *id.*, Request to Continue Operation during Malfunction or Breakdown, Boilers 1-10, Exhibit 204-1 at 2 (same). Submitted herewith as Exhibit 13.

boilerplate; that "[a]ll measures shall be taken to minimize the quantity of emissions and the duration of such emission due to malfunctions or breakdowns," and lists measures to illustrate good operation of its equipment. *See, e.g.*, Coke Oven Malfunction Authorization Request at 2 (see questions 8 and 9).[46] Just as the causes of breakdown and malfunction are not known in advance, the measures that will be required and that will actually be taken to deal with them are also unpredictable and inherently unknowable until they actually occur. Even the best-laid plans are rarely executed precisely as anticipated.

Oddly, IEPA's Statement of Basis claims that USS-GCW submitted "complete" permission forms, specifically referencing the requirements for information regarding anticipated quantity of emissions, duration of emissions, and measures to minimize emissions.[47] IEPA also claims that it "thoroughly reviewed this information against the SIP."[48] There are some significant gaps between IEPA's off-permit explanations on the one hand, and the permit and SIP on the other.

The reality is that USS-GCW's request for permission to violate emission limits during SSM events did not comply with the SIP requirements. That is because the SIP calls for detailed SSM information that can only be known after an event occurs.

2. IEPA Granted Advance Permission Without Having the Information Required by the SIP.

IEPA's off-permit explanation of the nature of the advance authorization granted in the permit is also inconsistent with the SIP provision governing IEPA's decision to grant advance permission for emission violations during SSM events:

> Permission shall not be granted to allow continued operation during a malfunction or breakdown unless the applicant submits proof to the Agency that: such continued operation is necessary to prevent injury to persons or severe damage to equipment; or that such continued operation is required to provide essential services; provided, however, that continued operation solely for the economic benefit of the owner or operator shall not be a sufficient reason for granting of permission. Permission shall not be granted to allow violation of the standards or limitations of Subchapter c of this Chapter during startup unless the applicant has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual startups and frequency of startups.

35 IAC § 201.262 (emphasis supplied). As the USEPA Order made clear, the SIP precludes IEPA from granting permission to operate in excess of or violate standards without first having received inherently event-specific information about the necessity to continue operation during malfunctions or breakdowns and efforts to minimize the length and frequency of emissions during startups.

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[46] *See* 35 IAC § 201.261(a); *see also* CAAPP permit application, Request to Continue Operation during Malfunction or Breakdown, Coke Quenching, Exhibit 204-1 at 1.
[47] Statement of Basis at 37.
[48] Id.

> The specific proof required in each instance usually will depend on the nature and cause of the malfunction or breakdown. Thus, a determination that the permittee has met the requirements of 35 IAC § 201.262 to authorize continued operations during malfunction or breakdown is a case-by-case determination.

USEPA Order at 39.

In the revised (and initial) permit, however, IEPA authorizes USS-GCW to operate in excess of limits during malfunctions or breakdowns, and to violate limits during startup – in advance of those events having occurred and without having received event-specific information required by 35 IAC § 201.262.[49]

With respect to malfunctions and breakdowns, 35 IAC § 201.262 precludes IEPA from granting permission to operate in excess of limits without proof that "continued operation is necessary to prevent injury to persons or severe damage to equipment." The USS-GCW application, however, merely described "[s]ome examples of typical malfunction and/or breakdown conditions" and the types of damages that could occur during such conditions.[50] It made no effort to demonstrate why continued operation during any actual malfunction or breakdown would actually be necessary to prevent injury to persons or severe damage to equipment. In addition, USS-GCW's commitment to minimize emissions during malfunctions or breakdowns was limited to broad generalities:

> All measures shall be taken to minimize the quantity of emissions and the duration of such emissions due to malfunctions or breakdowns. Repairs will be made to the malfunctioning system as rapidly as possible. The coal charging operation will not be initiated when excessive pressures are indicated within the ovens or gas collecting mains.[51]

Notwithstanding the vagueness of USS-GCW's submission, IEPA found it sufficient to grant advance permission to exceed emission limits during malfunctions and breakdowns.

> This authorization is provided because the Permittee has applied for such authorization in its CAAPP application, generally explaining why such continued operation would be required to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns.[52]

The situation is similar with respect to startups. The SIP precludes IEPA from granting permission to operate in excess of limits without proof that "all reasonable efforts have been made to minimize startup emissions, duration of individual startups and frequency of startups."

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[49] See permit conditions cited in footnotes 38 and 40, above.

[50] Coke Oven Malfunction Authorization Request at 1-2. The other requests to continue operation in violation of emission limits during malfunction or breakdown have similar general examples. See Exhibit 13, and permit application sections cited in footnotes 44 and 46, above.

[51] Exhibit 13, p. 9. See also pp. 29, 67, and 74.

[52] See permit conditions listed in footnote 40, above. In addition, the permit notes USS-GCW's "continuing obligation to minimize excess emissions during malfunction or breakdown." See, e.g., condition 7.2.5-5.a.v.

35 IAC § 201.262. USS-GCW's application provided only the most general statements imaginable regarding the efforts it may take to minimize startup emissions. The entire Minimizing Emissions section of the application reads as follows:

> All measures shall be taken to minimize the quantity of emissions and duration of such emissions due to start-ups and shut-downs. Such start-ups and shut-downs shall rarely be performed, usually not more than once in a period of many years. Under normal operations, when coke production requirements are low, every effort shall be made to limit coke production by methods other than pushing batteries empty in order to avoid battery shut-down.[53]

Nevertheless, IEPA granted advance authorization to violate emission limits during startup events, again reciting that USS-GCW has already submitted sufficient proof as to measures to minimize emissions:

> This authorization is provided because the Permittee has applied for such authorization in its CAAPP application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual starts, and frequency of startups."[54]

Thus, notwithstanding IEPA's attempts in the Statement of Basis and Response to Comments to minimize the significance of the advance permission granted in the permit, the language in the permit itself, read in light of the SIP, indicate that IEPA has already – impermissibly – given approval for USS-GCW to violate emission limits during SSM events. In short, IEPA has not adequately responded to the USEPA Order regarding SIP-based startup and malfunction/breakdown events. Accordingly, ABC urges USEPA to grant the petition on this issue and direct IEPA to revise the permit language to comply with the Clean Air Act and the Illinois SIP.

V. The Revised Permit Fails To Respond To USEPA's Order To Include Applicable Requirements.

The USEPA Order granted ABC's petition with respect to IEPA's failure to include applicable requirements from four new source review permits in the initial Title V/CAAPP permits. USEPA Order at 3-5, with permits identified in footnote 1. The revised permit includes requirements from three of those permits, but does not include any requirements from the fourth – the coke plant permit issued March 13, 2008 to Gateway Energy & Coke Company c/o SunCoke Company.

IEPA did not address the Gateway coke oven permit in the Statement of Basis, except to state that it would be issuing a separate Title V/CAAPP permit to Gateway for its coke oven plant at

[53] CAAPP permit application, Request to Operate during Startup of Equipment Coke Ovens "A" and "B", Exhibit 203-2 at 2. Similarly-vague statements appear in the portions of the application for other processes. See Exhibit 13 at pp. 36, 52, and 59.

[54] See permit conditions listed in footnote 38, above. In addition, the permit notes in each of those conditions that USS-GCW has a "continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups." See, e.g., condition 7.2.5-4.a.

the USS-GCW facility.[55] In the Response to Comments, IEPA states that while it considers the Gateway coke oven batteries to be part of the "single source" USS-GCW facility, and while it issued Title V/CAAPP permits for all other operations at the USS-GCW facility that are owned or operated by third parties when it issued the initial USS-GCW Title V/CAAPP permit, it was not yet issuing even a draft Title V/CAAPP permit for the Gateway coke oven plant. It made no commitment as to when such permit might be issued.

This is not an acceptable response. While ABC appreciates the advantages of issuing a separate permit to Gateway for the operations it controls, ABC sees no reason for the interminable delay in issuing such permit. IEPA has not adequately responded to USEPA's Order. It is now more than three years since IEPA issued a major new source review construction permit for that plant, and two years since IEPA issued the initial Title V/CAAPP permit for the several operations at the USS-GCW "single source" facility. Yet IEPA has not even issued a draft Title V/CAAPP permit for the Gateway coke oven plant. ABC respectfully urges USEPA to grant the petition and direct IEPA to issue promptly a Title V/CAAPP permit for the Gateway coke oven plant, with specified deadlines for issuing the draft and final versions of that permit.

VI. Conclusion

For the reasons set forth above, the American Bottom Conservancy urges USEPA to object to the revised Title V/CAAPP permit issued by the Illinois Environmental Protection Agency to the United States Steel Granite City Steel facility.

Respectfully submitted,

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Dated: August 16, 2011

cc: U.S. Steel Corporation – Granite City Works Facility, David Hacker, Attorney
Susan Hedman, Regional Administrator, USEPA Region 5
Lisa Bonnett, Interim Director, Illinois Environmental Protection Agency

[55] Statement of Basis at 5.