

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB No. 12-49
	)	(Variance - Air)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

**NOTICE OF FILING**

TO: Mr. John Therriault	Carol Webb, Esq.
Assistant Clerk of the Board	Hearing Officer
Illinois Pollution Control Board	Illinois Pollution Control Board
100 West Randolph Street	1021 North Grand Avenue East
Suite 11-500	Post Office Box 19274
Chicago, Illinois 60601	Springfield, Illinois 62794-9274
<b>(VIA ELECTRONIC MAIL)</b>	<b>(VIA FIRST CLASS MAIL)</b>

**(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 VOLUNTARILY WITHDRAW PETITION FOR VARIANCE**, a copy of which is hereby served upon you.

Respectfully submitted,

UNITED STATES STEEL CORPORATION,  
Petitioner,

Dated: May 10, 2012

By: /s/ Monica T. Rios  
One of Its Attorneys

Katherine D. Hodge  
Monica T. Rios  
Matthew C. Read  
HODGE DWYER & DRIVER  
3150 Roland Avenue  
Post Office Box 5776  
Springfield, Illinois 62705-5776  
(217) 523-4900

**CERTIFICATE OF SERVICE**

I, Monica T. Rios, the undersigned, certify that I have served the attached

MOTION TO VOLUNTARILY WITHDRAW PETITION FOR VARIANCE 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 May 10, 2012; and upon:

Carol Webb, Esq.  
Hearing Officer  
Illinois Pollution Control Board  
1021 North Grand Avenue East  
P.O. Box 19274  
Springfield, Illinois 62794-9274

Gina Roccaforte, Esq.  
Assistant Counsel  
Division of Legal Counsel  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

by depositing said documents in the United States Mail, postage prepaid, in Springfield,  
Illinois, on May 10, 2012.

/s/ Monica T. Rios  
Monica T. Rios

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UNITED STATES STEEL	)	
CORPORATION, a Delaware corporation,	)	
	)	
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	)	(Variance – Air)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

**MOTION TO VOLUNTARILY WITHDRAW PETITION FOR VARIANCE**

NOW COMES Petitioner, UNITED STATES STEEL CORPORATION (“Petitioner”), by and through its attorneys, HODGE DWYER & DRIVER, and hereby moves to voluntarily withdraw its Petition for Variance (“Petition”) requesting a variance from the emission limitation at 35 Ill. Admin. Code Part 217, Subpart I for recuperative reheat furnaces combusting a combination of natural gas and coke oven gas, applicable to its Slab Reheat Furnace 4. In support of this Motion to Voluntarily Withdraw Petition for Variance, Petitioner states as follows:

1. Petitioner is the owner of the integrated steel manufacturing plant in Granite City, Illinois, which was the subject of the Petition.
2. On September 9, 2011, Petitioner filed the Petition with the Illinois Pollution Control Board in this matter.
3. Since filing the Petition, Petitioner and the Illinois Environmental Protection Agency (“Illinois EPA”) have engaged in discussions regarding the requested variance and compliance with the applicable limit via the emissions averaging plan provisions at 35 Ill. Admin. Code § 217.158.

4. Petitioner provided an emissions averaging plan to Illinois EPA for review. On April 30, 2012, Illinois EPA issued a letter stating it is “generally in agreement with [U.S. Steel’s] approach,” and “[i]mportantly, we [Illinois EPA] agree with your determination that the furnaces can comply with the applicable emissions limitations through the emissions averaging option provided in the rule (35 Ill. Adm. Code 217.158(f)).” Illinois EPA’s April 30, 2012 letter, which includes the information that U.S. Steel submitted to Illinois EPA, is attached hereto as Exhibit A.

5. Based on discussions with Illinois EPA and Exhibit A, the variance from the NOx RACT limit for Slab Reheat Furnace No. 4 is no longer necessary. Accordingly, Petitioner requests to withdraw the Petition.

WHEREFORE, for the reasons described herein, Petitioner UNITED STATES STEEL CORPORATION, respectfully asks that the Illinois Pollution Control Board grant this Motion to Voluntarily Withdraw Petition for Variance and issue an Order finding UNITED STATES STEEL CORPORATION’s Petition for Variance in this matter withdrawn as of the date of this Motion.

Respectfully submitted,

UNITED STATES STEEL CORPORATION,  
Petitioner,

Dated: May 10, 2012

By: /s/Monica T. Rios  
One of Its Attorneys

Katherine D. Hodge  
Monica T. Rios  
Matthew C. Read  
HODGE DWYER & DRIVER  
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(217) 523-4900  
USSC:004/Fil/Motion to Withdraw Petition for Variance



217/785-4140

Electronic Filing - Received Clerk's Office, 05/10/2012

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829  
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

April 30, 2012

Jason K. Braxton  
Environmental Affairs  
United States Steel Corporation  
Penn Liberty Plaza I  
1350 Penn Avenue - Suite 200  
Pittsburgh, PA 15222-4211

Dear Mr. Braxton:

This letter is in response to your request for Illinois EPA's approval of your proposed approach to demonstrating compliance with the NOx RACT emission limits for the Hot Strip Mill Furnaces at the U.S. Steel facility in Granite City. We have reviewed the attached emissions averaging plan and we are generally in agreement with your approach. Importantly, we agree with your determination that the furnaces can comply with the applicable emission limitations through the emissions averaging option provided in the rule (35 Ill. Adm. Code 217.158(f)).

We offer the following comments to ensure that your emissions averaging compliance demonstration will more clearly demonstrate compliance. The formula included in Section 217.158(f) requires the determination of the NOx emission rate for each fuel type when multiple fuels are combusted. For the furnaces at the Granite City facility, the two primary fuels indicated in your calculations are coke oven gas (COG) and natural gas (NG). We believe that the emission rates shown in your calculations for COG and NG for each furnace actually represent the tested emission rates for COG and NG combined. Even though you apparently have not tested for each fuel type separately, we believe it is acceptable to demonstrate compliance using the test results for the combined fuels, as long as the blend of fuels is representative of your normal operations. We therefore agree that your calculated "worst case" emissions, which were determined based on your tested NOx emission rates with a representative combination of COG and NG, are less than the "allowable emissions" and therefore adequately demonstrate compliance. We ask that your future averaging plan, when submitted, more clearly documents your intention to use test results (including CEMS) based on a representative combination of fuel types.

We appreciate the opportunity to comment on your proposed approach to demonstrating compliance with Illinois' NOx RACT requirements. Please do not hesitate to contact me if you have any questions.

Sincerely,

Rob Kaleel  
Air Quality Planning Section  
Illinois EPA

Rockford • 4302 N. Main St., Rockford, IL 61103 • (815) 987-7760  
Elgin • 595 S. State, Elgin, IL 60123 • (847) 608-3131  
Bureau of Land - Peoria • 7620 N. University St., Peoria, IL 61614 • (309) 693-5462  
Collinsville • 2009 Mall Street, Collinsville, IL 62234 • (618) 346-5120

Des Plaines • 9511 W. Harrison St., Des Plaines, IL 60016 • (847) 294-4000  
Peoria • 5415 N. University St., Peoria, IL 61614 • (309) 693-5463  
Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-5800  
Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200

**GCW NOx RACT Compliance- CEMs Determination**

**Section 217.154 Performance Testing**

a) Performance testing of NOx emissions for emission units constructed on or before July 1, 2014, and subject to emissions limitations under Subpart E, F, G, H, or I of this Part must be conducted in accordance with Section 217.157 of this Subpart. Except as provided for under Section 217.157(a)(4) and (e)(1). This subsection does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system.

**Section 217.157 Testing and Monitoring**

b) Glass Melting Furnaces; Cement Kilns; Lime Kilns; Iron and Steel Reheat, Annealing, and Galvanizing Furnaces; and Aluminum Reverberatory and Crucible Furnaces

1) An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, **iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part**, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has **the potential to emit NOx in an amount equal to or greater than one ton per day must install, calibrate, maintain, and operate a continuous emissions monitoring system** on such emission unit for the measurement of NOx emissions discharged into the atmosphere in accordance with 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104.

2) An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NOx in **an amount less than one ton per day must have an initial performance test** conducted pursuant to subsection (b)(4) of this Section and Section 217.154.

Unit	Design Capacity (mmbtu/hr)*	Title V emission Limit (lb/mmbtu)	NOx emissions (tons/day)**
1	360	0.15	0.65
2	360	0.15	0.65
3	360	0.264	1.44
4	440	0.283	1.44

\*Design Capacity for each furnace is derived from the sum of the burner capacities for each furnace.

\*\*Furnaces #3 and #4 will require a NOx CEMS

**Emissions Averaging-Annual**

NOx emissions averaging for the Hot Strip Mill Furnaces  
(Annual)

**Allowable emissions(from Title V limited gas usage)**

Unit	Allowable annual gas usage (mmbtu/yr)	Nox RACT emission limit(lb/mmbtu)	NOx emissions (tons)	Title V emission factor (lbs/mmbtu)	Title V (tons/yr)
1	1,654,304*	0.142	117.46	0.15	124.07
2	1,654,304*	0.142	117.46	0.15	124.07
3	<b>1,654,304</b>	0.142	117.46	0.264	218.37
4	<b>2,206,238</b>	0.142	156.64	0.283	312.18
Total(1-4)	<b>7,169,150</b>	-----	509.01	-----	778.70
Average		0.142		0.212	

\*The allowable annual heat input(mmbtu/yr) for furnaces #1 and #2 were estimated as the split difference of what was left of the total allowable heat input for all four furnaces minus the allowable heat input for furnaces #3 and #4 (Title V permit condition 7.7.7.) in bold.

This estimation was used for demonstrational purposes only and the actual heat input distribution between all four furnaces may vary while remaining below the permitted heat input limits for furnaces #3 and #4. Furnaces #1 and #2 do not have permitted heat input restrictions.

**Projected actual NOx Emissions from 2010 stack tests and permitted gas usage**

Unit	COG (lbs/mmbtu)	Allowable annual gas usage (mmbtu/yr)	NG (lbs/mmbtu)	Assuming 100%COG (tons/yr)	Assuming 100%NG (tons/yr)	Worst case (tons/yr)
1	0.066	1,654,304	0.044	54.59	36.39	54.59
2	0.053	1,654,304	0.064	43.84	52.94	52.94
3	0.046	1,654,304	0.068	38.05	56.25	56.25
4	0.155	2,206,238	0.155	170.98	170.98	170.98
Total(1-4)	-----	7,169,150	-----	307.46	316.56	334.76

	Tons/yr
Total Allowable	509.01
Worst Case Projected actual	334.76

**Emissions Averaging-Ozone**

NOx emissions averaging for the Hot Strip Mill Furnaces (ozone)

Allowable emissions(Title V Limited Heat Input)

Unit	Design Capacity (mmbtu/hr)	Ozone season (hrs)	Allowable Ozone gas usage (mmbtu/season)	NOx RACT emission limit (lb/mmbtu)	Ozone Season NOx emissions (tons/season)
1	360	3,648	1,313,280	0.142	93.24
2	360	3,648	1,313,280	0.142	93.24
3	360	3,648	1,313,280	0.142	93.24
4	440	3,648	1,605,120	0.142	113.96
Total(1-4)			<b>5,544,960</b>	-----	<b>393.69</b>

Projected actual NOx Emissions from 2010 stack tests and permitted gas usage

Unit	COG Emissions Factor (lbs/mmbtu)	Allowable gas usage (mmbtu/season)	NG Emissions Factor (lbs/mmbtu)	Assuming 100%COG (tons/season)	Assuming 100%NG (tons/season)	Worst case (tons/season)
1	0.066	1,313,280	0.044	<b>43.34</b>	28.89	43.34
2	0.053	1,313,280	0.064	34.80	<b>42.02</b>	42.02
3	0.046	1,313,280	0.068	30.21	<b>44.65</b>	44.65
4	0.155	1,605,120	0.155	124.40	124.40	124.40
Total(1-4)	-----	5,544,960	-----	232.74	239.97	254.41

	(tons/Ozone season)
NOx RACT Total Allowable	393.69
Worst Case Projected actual	254.41