~~089-21232-00121~~

United States Steel Corporation
Gary Works
One North Broadway
Gary, IN 46402-3199

Additional info 20118

May 24, 2005

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MAY 25 2005
State of Indiana
Department of Environmental Management
Office of Air Quality

Mack Sims
Permit Engineer, Permit Branch
Office of Air Quality (OAQ)
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46205-6015

Subject: **Amendment to Construction Permit Application, No. 14 Blast Furnace Reline Project, U.S. Steel – Gary Works, Construction Permit Application No. CP 089-20118-00121**

Dear Mr. Sims:

The purpose of this letter and its attachments is to amend the subject application, which was submitted to OAQ in September 2004. We are requesting that the project be reviewed in the light of evaluating net increases in emissions specified in definitions at the current New Source Review Permit regulations (326 IAC, 2-2 and 2-3).

We have estimated the Projected Actual hot metal production rate at No. 14 Blast Furnace after the reline project. That projected level is 3,252,939 tons per year (9,200 tons per day at 96.8% availability). The baseline actual production rate, as specified in the construction permit application, is 3,040,408 tons per year (8,330 tons per day). Therefore, the unadjusted increase in hot metal production attendant to the project is 212,431 tons per year (projected actual minus baseline actual).

The provisions of Indiana Rule 326 IAC 2-3-1 (mm) (2) (A) (iii) require adjustments to the increase in emissions attendant to the project by excluding that portion of the projected actual emissions that the emission unit could have accommodated during the 24-month baseline period. Such accommodation cannot be related to the project (reline of No. 14 Blast Furnace).

During the baseline period No. 14 Blast Furnace could have accommodated an annual hot metal production rate 3,235,312 tons per year (8,864 tons per day). The difference between the level that could have been accommodated and the baseline actual level is an increase of 194,804 tons per year. In accordance with the aforementioned rule the projected actual level must be decreased by the increase that could have been accommodated. This yields an adjusted projected actual level of 3,058,035 tons per year,

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which is an increase of 17,627 tons per year over the baseline actual level. The attached figure illustrates the adjustment of projected actual emissions in accordance with 326 IAC 2-3-1 (mm).

The hot metal production increase of 17,627 tons per year was used in the emissions calculation spreadsheets used to prepare, and presented in the construction permit calculations. The results of the calculations compared to significant emissions increase thresholds are shown in the attached table. The table demonstrates that all of the calculated emissions increases for relevant regulated air pollutants are less than the thresholds. Therefore, the project is not a major modification as defined at 326 IAC 2-3-1 and a New Source Review permit under 326 IAC 2-2 and 2-3 is not required for the project. Consequently, we are requesting a State Construction Permit under the provisions of 326 IAC 2-1.1 for the reline of No. 14 Blast Furnace. The Ambient Air Quality Analysis, Additional Impact Analysis and Best Available Control Technology Analysis presented in the original construction permit application are no longer necessary. We have recently applied for an interim construction permit for the project to enable commencement of construction pending receipt of the requested State Construction Permit.

Please contact me with any comments or questions concerning this matter.

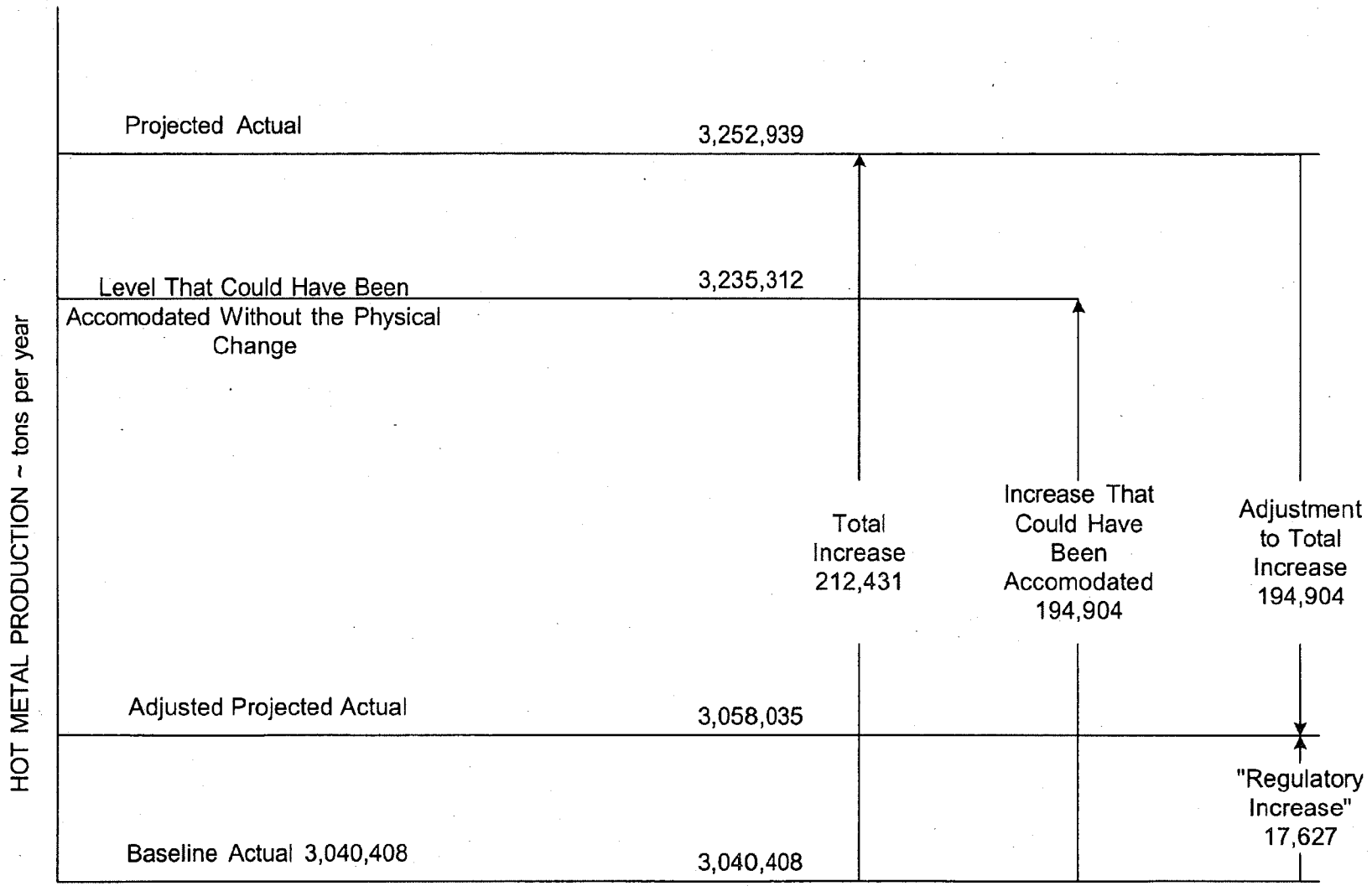
Sincerely,

Jim Alexander

James Alexander
Manager, Environmental Air Compliance

Attachments

U.S. STEEL - GARY WORKS
NO. 14 BLAST FURNACE RELINE PROJECT
HOT METAL PRODUCTION LEVELS RESULTING FROM THE PROJECT



U.S. STEEL - GARY WORKS
NO. 14 BLAST FURNACE RELINE PROJECT
CONSTRUCTION PERMIT APPLICATION
FOR 17,627 TONS/YR HOT METAL THROUGHPUT INCREMENT

Estimated Increases in Emissions of Relevant Regulated Air Pollutants Compared to Significant Emissions (Major Source Modification) Thresholds

Pollutant	Estimated Emissions Increases tons/yr		Significant Emissions Thresholds tons/yr
	Case I[1]	Case II[1]	
Particulate Matter (PM)	6.948	14.638	25
Particulate Matter (PM_{10})	5.578	14.257	15
Sulfur Dioxide (SO_2)	10.203	10.203	40
Oxides of Nitrogen (NOx)	2.415	2.446	40
Carbon Monoxide (CO)	96.791	99.017	100
Volatile Organic Compounds (VOC)	0.054	0.054	15.44[2]
Lead (Pb)	0.0034	0.006	0.6
Hydrogen Sulfide (H_2S)	0.357	0.357	10
Fluorides (F)	0.107	0.107	3
Beryllium (Be)	4.4E-08	4.4E-08	0.0004
Mercury (Hg)	1.1E-06	1.2E-05	0.1
Individual HAP	0.042	0.212	10
Total HAPs	0.122	0.300	25

(1) Assumes all additional hot metal produced at No. 13 Blast Furnace is processed through:

Case I - No. 1 BOP Shop
Case II - No. 2 Q-BOP Shop

(2) Remainder in the USS - Gary Works VOC Diminimis Account prior to the No. 13 Blast Furnace Reline Project (total of all previous increases) in calendar years 2000 through 2004 to date. Total increases including project is less than 25 tons VOC/yr major source modification threshold in severe ozone non-attainment area.

5/19/2005
USSG05015\DRAFT Amendment Construction Permit Application\Table