

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: October 13, 2017

Effective Date: October 13, 2017

Expiration Date: September 30, 2022

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 37-00264

Federal Tax Id - Plant Code: 25-1482572-1

Owner Information

Name: ELLWOOD QUALITY STEELS CO

Mailing Address: 700 MORAMA ST
NEW CASTLE, PA 16101-3950**Plant Information**

Plant: ELLWOOD QUALITY STEELS CO/NEW CASTLE PLT

Location: 37 Lawrence County

37001 New Castle City

SIC Code: 3312 Manufacturing - Blast Furnaces And Steel Mills

Responsible Official

Name: MICHAEL MORGUS

Title: PRESIDENT

Phone (724) 658 - 6503

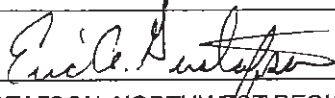
Permit Contact Person

Name: RICHARD A SCHOCHET

Title: PLANT ENGINEER

Phone: (724) 658 - 6515

[Signature]



ERIC A. GUSTAFSON, NORTHWEST REGION AIR PROGRAM MANAGER

Pages 2-27 Completely Redacted

Pages 33-99 Completely Redacted

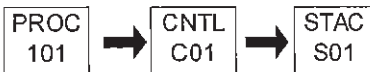
**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: ELECTRIC ARC FURNACE

Source Capacity/Throughput	76,000 Tons/HR	STEEL
	76,000 Tons/HR	CHARGING
	76,000 Tons/HR	TAPPING
	30,000 MCF/HR	NATURAL GAS

Conditions for this source occur in the following groups: 4

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

a) The emissions from the EAF (Source 101) shall not exceed the following:

(1) Carbon Monoxide	4.6 lbs/ton steel produced and 1,035 tons per year
(2) Nitrogen Oxides	0.1 lbs/ton steel produced and 22.5 tons per year
(3) Sulfur Oxides	0.45 lbs/ton steel produced and 101.25 tons per year
(4) VOC	0.3 lbs/ton steel produced and 67.5 tons per year
(5) PM 10	0.45 lbs/ton steel produced and 33.75 tons per year
(6) PM	33.75 tons per year

RACT 2 SIP
Provisions from
Title V Permit
37-00264 Renewal
issued
10/13/17(pages
28-32 of permit

The tons per year limits shall be based on a 12-month rolling total.

[Plan Approval No. 37-264G, Condition No. 2 replaces condition (a) limitations from Plan Approval No. PA-37-264G, Condition No. 15]

b) The permittee shall not permit the emission of particulate matter from the electric arc furnace baghouse (C01) in an amount greater than 0.0041 grains/dry standard cubic foot of exhaust air from the baghouse.

[Compliance with the requirements specified in this streamlined permit condition (b) assures compliance with the provisions in: 40 CFR 60.272a(a)(1) and 40 CFR 63.10686(b)(1)]

[Compliance with the NOx emission limit of 0.1 #/ton and the VOC emission limit of 0.3 #/ton assures compliance with the provisions in 25 Pa Code Section 129.99(g)]

[Compliance with the NOx emission limit of 22.5 tons per year and the VOC emission limit of 67.5 tons per year assures compliance with the provisions in 25 Pa Code Section 129.99(g)]

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

The Department reserves the right to establish to impose more stringent limitations based on results from stack testing.

[Plan Approval No. 37-264G, Condition No. 1]

003 [25 Pa. Code §129.100]**Compliance demonstration and recordkeeping requirements.**

(a) Except as provided in subsection (c), the owner and operator of an air contamination source subject to a NOx requirement or RACT emission limitation or VOC requirement or RACT emission limitation, or both, listed in § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation by performing the following monitoring or testing procedures:

**SECTION D. Source Level Requirements**

(1) - (3) Not applicable.

(4) For an air contamination source without a CEMS, monitoring and testing in accordance with a Department-approved emissions source test that meets the requirements of Chapter 139, Subchapter A (relating to sampling and testing methods and procedures). The source test shall be conducted one time in each 5-year calendar period.

[The facility is meeting paragraph (4) by conducting an annual NO_x test and a VOC test 6-12 months prior to the operating permit renewal]

(b) Except as provided in § 129.97(k) and § 129.99(i) (relating to alternative RACT proposal and petition for alternative compliance schedule), the owner and operator of an air contamination source subject to subsection (a) shall demonstrate compliance with the applicable RACT requirement or RACT emission limitation in accordance with the procedures in subsection (a) not later than:

(1) January 1, 2017, for a source subject to § 129.96(a) (relating to applicability).

(2) January 1, 2017, or 1 year after the date that the source meets the definition of a major NO_x emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.96(b).

(c) Not applicable.

(d) The owner and operator of an air contamination source subject to this section and § § 129.96—129.99 shall keep records to demonstrate compliance with § § 129.96—129.99 in the following manner:

(1) The records must include sufficient data and calculations to demonstrate that the requirements of § § 129.96—129.99 are met.

(2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

(e) - (h) Not applicable to this source.

(i) The records shall be retained by the owner or operator for 5 years and made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

004 [25 Pa. Code §129.99]

Alternative RACT proposal and petition for alternative compliance schedule.

(a) The owner or operator of an air contamination source subject to § 129.97 (relating to presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule) located at a major NO_x emitting facility or major VOC emitting facility subject to § 129.96 (relating to applicability) that cannot meet the applicable presumptive RACT requirement or RACT emission limitation of § 129.97 may propose an alternative RACT requirement or RACT emission limitation in accordance with subsection (d).

(b) The owner or operator of a NO_x air contamination source with a potential emission rate equal to or greater than 5.0 tons of NO_x per year that is not subject to § 129.97 or § § 129.201—129.205 (relating to additional NO_x requirements) located at a major NO_x emitting facility subject to § 129.96 shall propose a NO_x RACT requirement or RACT emission limitation in accordance with subsection (d).

(c) The owner or operator of a VOC air contamination source with a potential emission rate equal to or greater than 2.7 tons of VOC per year that is not subject to § 129.97 located at a major VOC emitting facility subject to § 129.96 shall propose a VOC RACT requirement or RACT emission limitation in accordance with subsection (d).

(d) The owner or operator proposing an alternative RACT requirement or RACT emission limitation under subsection (a), (b) or (c) shall:

**SECTION D Source Level Requirements**

(1) Submit a written RACT proposal in accordance with the procedures in § 129.92(a)(1)—(5), (7)—(10) and (b) (relating to RACT proposal requirements) to the Department or appropriate approved local air pollution control agency as soon as possible but not later than:

(i) October 24, 2016, for a source subject to § 129.96(a).

(ii) October 24, 2016, or 6 months after the date that the source meets the definition of a major NOx emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.96(b).

(2) Be in receipt of an approval issued by the Department or appropriate approved local air pollution control agency in writing through a plan approval or operating permit modification for a RACT proposal submitted under paragraph (1)(ii) prior to the installation, modification or change in the operation of the existing air contamination source that will result in the source or facility meeting the definition of a major NOx emitting facility or major VOC emitting facility.

(3) Include in the RACT proposal the proposed alternative NOx RACT requirement or RACT emission limitation or VOC RACT requirement or RACT emission limitation developed in accordance with the procedures in § 129.92(a)(1)—(5) and (b).

(4) Include in the RACT proposal a schedule for completing implementation of the RACT requirement or RACT emission limitation as soon as possible but not later than:

(i) January 1, 2017, for a source subject to § 129.96(a).

(ii) January 1, 2017, or 1 year after the date that the source meets the definition of a major NOx emitting facility or major VOC emitting facility, whichever is later, for a source subject to § 129.96(b).

(5) Include interim dates in the schedule required under paragraph (4) for the:

(i) Issuance of purchase orders.

(ii) Start and completion of process, technology and control technology changes.

(iii) Completion of compliance testing.

(6) Include in the RACT proposal methods for demonstrating compliance and recordkeeping and reporting requirements in accordance with § 129.100 (relating to compliance demonstration and recordkeeping requirements) for each air contamination source included in the RACT proposal.

(7) Demonstrate to the satisfaction of the Department or the appropriate approved local air pollution control agency that the proposed requirement or RACT emission limitation is RACT for the air contamination source.

(e) The Department or appropriate approved local air pollution control agency will:

(1) Review the timely and complete alternative RACT proposal submitted in accordance with subsection (d).

(2) Approve the alternative RACT proposal submitted under subsection (d), in writing, if the Department or appropriate approved local air pollution control agency is satisfied that the alternative RACT proposal complies with the requirements of subsection (d) and that the proposed alternative requirement or RACT emission limitation is RACT for the air contamination source.

(3) Deny or modify the alternative RACT proposal submitted under subsection (d), in writing, if the proposal does not comply with the requirements of subsection (d).

(f) The proposed alternative RACT requirement or RACT emission limitation and the implementation schedule submitted under subsection (d) will be approved, denied or modified by the Department or appropriate approved local air pollution control agency in accordance with subsection (e) in writing through the issuance of a plan approval or operating permit

**SECTION D. Source Level Requirements**

modification prior to the owner or operator implementing the alternative RACT requirement or RACT emission limitation.

(g) The emission limit and requirements specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (f) supersede the emission limit and requirements in the existing plan approval or operating permit issued to the owner or operator of the source prior to April 23, 2016, on the date specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (f), except to the extent the existing plan approval or operating permit contains more stringent requirements.

(h) The Department will submit each alternative RACT requirement or RACT emission limitation approved under subsection (f) to the Administrator of the EPA for approval as a revision to the SIP. The owner and operator of the facility shall bear the costs of public hearings and notifications, including newspaper notices, required for the SIP submittal.

(i) The owner and operator of a facility proposing to comply with the applicable RACT requirement or RACT emission limitation under subsection (a), (b) or (c) through the installation of an air cleaning device may submit a petition, in writing, requesting an alternative compliance schedule in accordance with the following:

(1) The written petition requesting an alternative compliance schedule shall be submitted to the Department or appropriate approved local air pollution control agency as soon as possible but not later than:

(i) October 24, 2016, for a source subject to § 129.96(a).

(ii) October 24, 2016, or 6 months after the date that the source meets the definition of a major NO_x emitting facility, whichever is later, for a source subject to § 129.96(b).

(2) The written petition must include:

(i) A description, including make, model and location, of each air contamination source subject to a RACT requirement or RACT emission limitation in one or more of subsections (a)–(c).

(ii) A description of the proposed air cleaning device to be installed.

(iii) A schedule containing proposed interim dates for completing each phase of the required work to install the air cleaning device described in subparagraph (ii).

(iv) A proposed interim emission limitation that will be imposed on the affected air contamination source until compliance is achieved with the applicable RACT requirement or RACT emission limitation.

(v) A proposed final compliance date that is as soon as possible but not later than 3 years after the approval of the petition by the Department or the appropriate approved local air pollution control agency. If the petition is for the replacement of an existing source, the final compliance date will be determined on a case-by-case basis. The approved petition shall be incorporated in an applicable operating permit or plan approval.

(j) The Department or appropriate approved local air pollution control agency will review the timely and complete written petition requesting an alternative compliance schedule submitted in accordance with subsection (i) and approve or deny the petition in writing.

(k) The emission limit and requirements specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (j) supersede the emission limit and requirements in the existing plan approval or operating permit issued to the owner or operator of the source prior to April 23, 2016, on the date specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (j), except to the extent the existing plan approval or operating permit contains more stringent requirements.

(l) Approval or denial under subsection (j) of the timely and complete petition for an alternative compliance schedule submitted under subsection (i) will be effective on the date the letter of approval or denial of the petition is signed by the

**SECTION D. Source Level Requirements**

authorized representative of the Department or appropriate approved local air pollution control agency.

Throughput Restriction(s).

#005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The total natural gas consumption from the EAF burners shall not exceed 116,603 MCF of natural gas per year, calculated as a 12 month rolling total.

[Plan Approval No. 37-264G, Condition No. 5]

Control Device Efficiency Restriction(s).

#006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The capture efficiency from the EAF Direct Evacuation Control (DEC) duct shall be at least 90%.

[Plan Approval No. 37-264G, Condition No. 6]

[Compliance with this requirement assures compliance with the provisions in: 40 CFR 63.10686(a)]

II. TESTING REQUIREMENTS.

#007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Every year (12 months), a stack test shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection and the most current edition of the Department's "Source Testing Manual" for CO and NO_x emissions. The stack tests shall be performed while the Electric Arc Furnace is operating in the range of a minimum of 54.8 TPH to a maximum of 76 TPH. The CO and NO_x testing for the EAF shall be conducted in the duct prior to the positive pressure baghouse.

(b) [25 Pa. Code § 139.53(a)(3)] At least 60 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(c) [25 Pa. Code § 139.53(a)(3)] At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

(d) [25 Pa. Code § 139.53(a)(3)] Within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.

(e) [40 CFR Part 60.8(a)] A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.

(f) [25 Pa. Code Section 139.53(b)] A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information: