COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: January 10, 2017 Effective Date: [redacted]
Expiration Date: January 9, 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: 59-00004

Federal Tax Id - Plant Code: 71-1042639-1

Owner Information

Name: WARD MFG INC
Mailing Address: 117 GULICK ST
PO BOX 9
BLOSSBURG, PA 16912-0009

Plant Information

Plant: WARD MFG LLC/BLOSSBURG PLTS 1-3
Location: 59 Tioga County 59904 Blossburg Borough
SIC Code: 3322 Manufacturing - Malleable Iron Foundries

Responsible Official

Name: ARTHUR P GUIDI
Title: PRESIDENT & COO
Phone (570) 638 - 2131

Permit Contact Person

Name: BRYAN BUCKLEN
Title: ENVIRONMENTAL CONSULTANT
Phone: (570) 638 - 2131

[Signature] Muhammad Q. Zaman
MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

SECTION A. Table of Contents

[redacted]

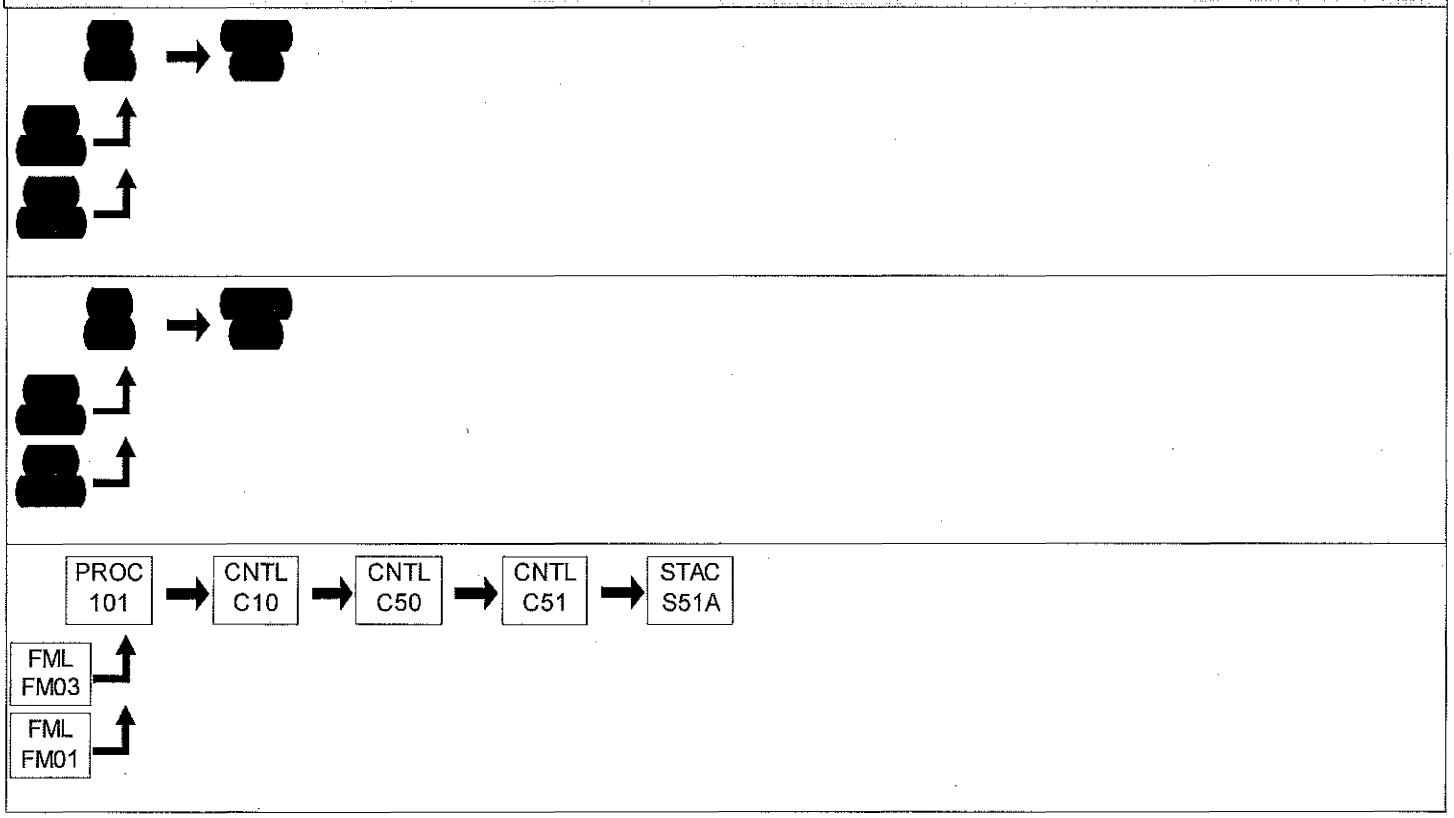
SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput		Fuel/Material
[redacted]	[redacted]			
[redacted]	[redacted]			
101	CUPOLA			
[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
149	CORE ROOM OPERATIONS	400.000	Lbs/HR	CORE BINDERS
149A	NEW CORE MACHINES			
149W	FURAN WARM BOX CORE MACHINE			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
173	MOLDING & CASTING OPERATIONS			
[redacted]	[redacted]			
[redacted]	[redacted]			
[redacted]	[redacted]			
[redacted]	[redacted]			
[redacted]	[redacted]			
[redacted]	[redacted]			
[redacted]	[redacted]			
199	MOLDING LINES (SP01, SP02, & SP03)			
C05	SPO1 FABRIC COLLECTOR			
C06	SPO2 FABRIC COLLECTOR			
C07	SPO3 FABRIC COLLECTOR			
[redacted]	[redacted]			
C10	2 AFTERBURNERS			
[redacted]	[redacted]			
[redacted]	[redacted]			
[redacted]	[redacted]			
C23	FABRIC COLLECTOR #1715			
[redacted]	[redacted]			
[redacted]	[redacted]			
C50	SEAL CAP AND DROP OUT BOX			
C51	CUPOLA FABRIC COLLECTOR			
FM01	COKE STORAGE AREA			
FM02	NATURAL GAS LINE			
FM03	PROPANE			
S05	SPO #1 FABRIC COL STACK			
S06	SPO #2 FABRIC COL STACK			
[redacted]	[redacted]			
S08	SPO #3 FABRIC COL STACK			

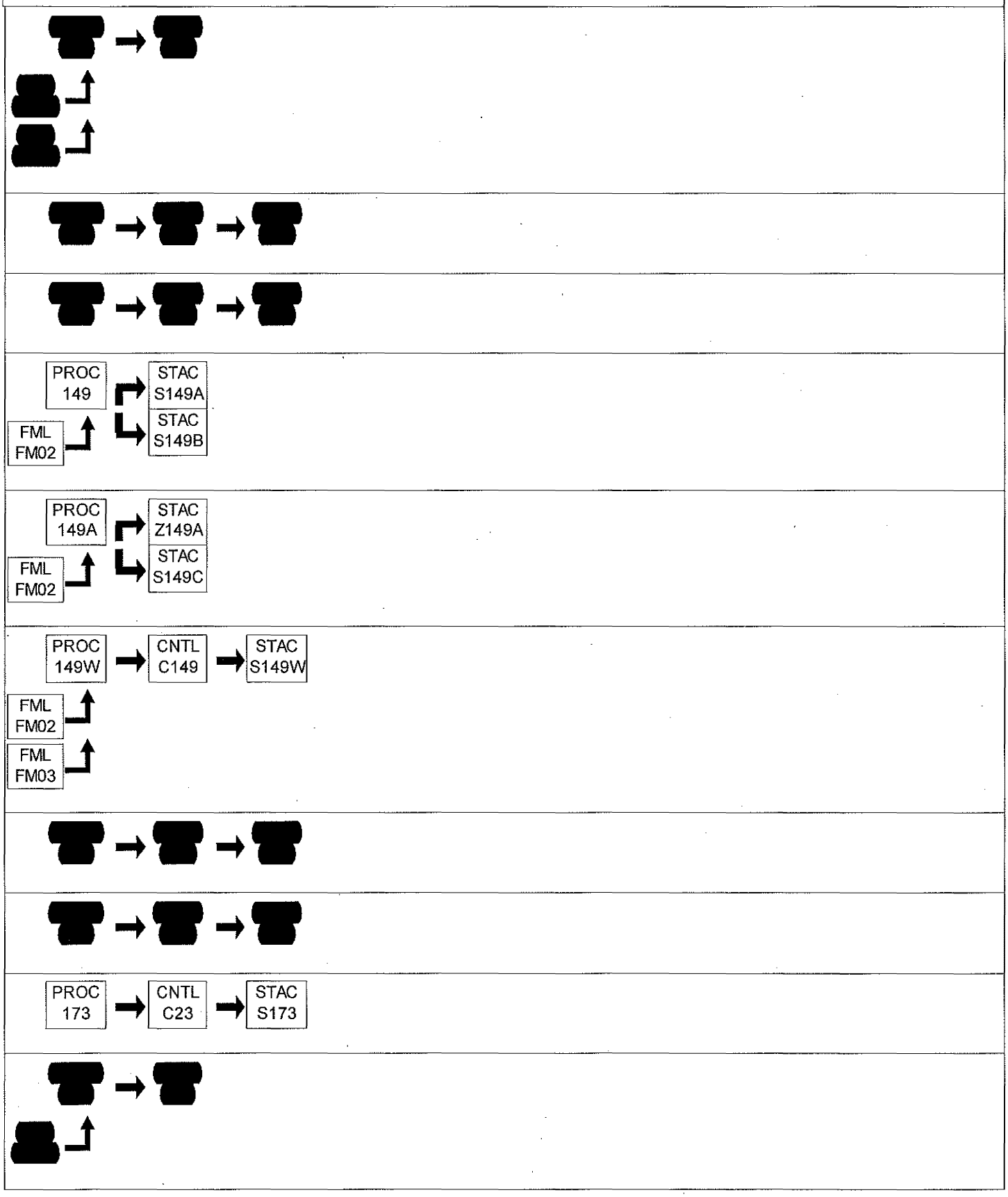
SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
S149A	CORE EXHAUSTS		
S149B	CORE EXHAUSTS		
S149C	NEW CORE MACHINES STACKS		
S149W	WARM BOX MACHINE STACK		
S173	PROCESS 173 EXHAUST		
[redacted]	[redacted]		
[redacted]	[redacted]		
S51	ANNEAL OVEN STACKS		
S51A	CUPOLA FABRIC COLLECTOR STACK		
[redacted]	[redacted]		
[redacted]	[redacted]		
[redacted]	[redacted]		
[redacted]	[redacted]		
[redacted]	[redacted]		
[redacted]	[redacted]		
Z149A	NEW CORE MACHINES EMISSIONS		
[redacted]	[redacted]		
[redacted]	[redacted]		
[redacted]	[redacted]		
[redacted]	[redacted]		

PERMIT MAPS



PERMIT MAPS


PROC 149
STAC S149A
STAC S149B
FML FM02
PROC 149A
STAC Z149A
STAC S149C
FML FM02
PROC 149W
CNTL C149
STAC S149W
FML FM02
FML FM03
PROC 173
CNTL C23
STAC S173

PERMIT MAPS

Ward RACT2 TVOP # 59-00004 Redacted

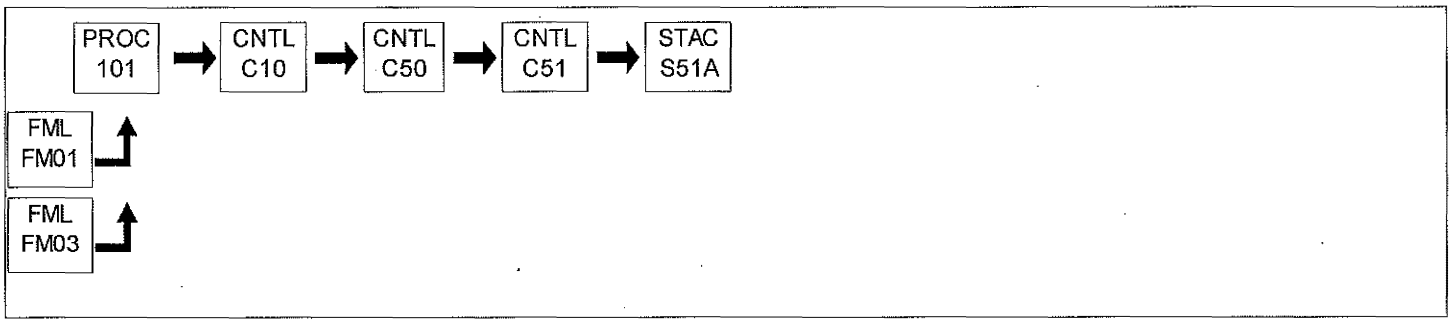
The following pages have been omitted since they contain no pertinent RACT2 case by case conditions.

8-29, 36-41, 44-47, 52-56, 62-77, 83-End of Permit

SECTION D. Source Level Requirements

Source ID: 101 Source Name: CUPOLA

Source Capacity/Throughput:



I. RESTRICTIONS.

Emission Restriction(s).

[redacted]

 # 003 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is also derived from 40 CFR 63.7690(a)(8)]

Pursuant to the RACT provisions of 25 Pa. Code Section 129.99(d), the permittee shall not allow the emission of volatile organic hazardous air pollutants (VOHAP) from the cupola in a manner that any exhaust to the atmosphere of Source ID P101 contains VOHAP in excess of 20 parts per million by volume (ppmv) corrected to 10 percent oxygen.

[redacted]

Throughput Restriction(s).

 # 005 [25 Pa. Code §127.441]
Operating permit terms and conditions.
Pursuant to the RACT provisions of 25 Pa. Code Section 129.99(d), the melt rate of Source ID 101 shall not exceed the following limitations:

(a) 37.78 tons per hour of malleable and gray iron;
(b) 226,680 tons per 12-consecutive month period of iron.

II. TESTING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is also derived from 25 Pa. Code 129.100(a)(4) and 40 CFR 63.7731(a) and

SECTION D. Source Level Requirements

63.7732(a). Compliance with this streamlined permit condition will assure compliance with the provisions of 40 CFR 63.7743(a)(12)].

(a) No later than 5 years from the date of previous performance test, the permittee shall conduct performance tests to demonstrate compliance with the PM and VOHAP emission limitations listed above.

(b) The permittee shall comply with testing requirements specified in the provisions of 40 CFR 63.7(e)(1) in addition to the applicable provisions of 40 CFR 63.7732(b) through (h), relating to test methods.

(c) Testing shall be performed while Source ID 101 is operating at a minimum of 90% of its rated capacity.

(d) At least 60 days prior to the performance of any testing required by this condition, the permittee shall submit three copies of a pretest protocol to the Department for review. This protocol shall describe the test methods and procedures to be used in the performance of testing, as well as include dimensioned sketches of the exhaust system showing the location of all proposed sampling ports. The protocol shall also identify all process data which will be monitored and recorded during the testing, including the process data which will be used to verify the rate of production during testing.

(e) The Department shall be given at least 15 days advance notice of the actual date(s) and time(s) for the performance of any testing required by this condition so that Department personnel can arrange to be present. The Department is under no obligation to accept the results of any testing performed without adequate advance notice having been given to the Department.

[redacted]

SECTION D. Source Level Requirements

[redacted]

IV. RECORDKEEPING REQUIREMENTS.

 # 012 [25 Pa. Code §127.441]
Operating permit terms and conditions.

Pursuant to the recordkeeping requirements of 25 Pa. Code Section 129.100(d), the permittee shall record the following:

(a) melt rate of Source ID 101 at least once per operating shift;
(b) the amount of iron poured from Source P101 for each month.

These records shall be maintained for a minimum of five (5) years and made available to the Department upon request.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

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[redacted]

[redacted]

[redacted]

VI. WORK PRACTICE REQUIREMENTS.

[redacted]

[redacted]

SECTION D. Source Level Requirements

[redacted]

 # 023 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR 63.7690(b)(3). Compliance with the requirements of this streamlined permit condition will assure compliance with the provision of 40 CFR 63.7743(e)(1)].

(a) Pursuant to the RACT provisions of 25 Pa. Code Section 129.99(d), the combustion zone temperature of the Maxon burners (C10) shall not fall below 1300 degrees Fahrenheit (15-minute average).

(b) The periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition shall not be included in the 15-mintue average.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

VII. ADDITIONAL REQUIREMENTS.

[redacted]

 # 029 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[redacted]

(b) Pursuant to the RACT provisions of 25 Pa. Code Section 129.99(d), the air contaminant emissions from the cupola shall be controlled by an afterburner incorporating two (2) 5.2 million Btu per hour natural gas-fired Maxon burners (Control

Device ID C10).

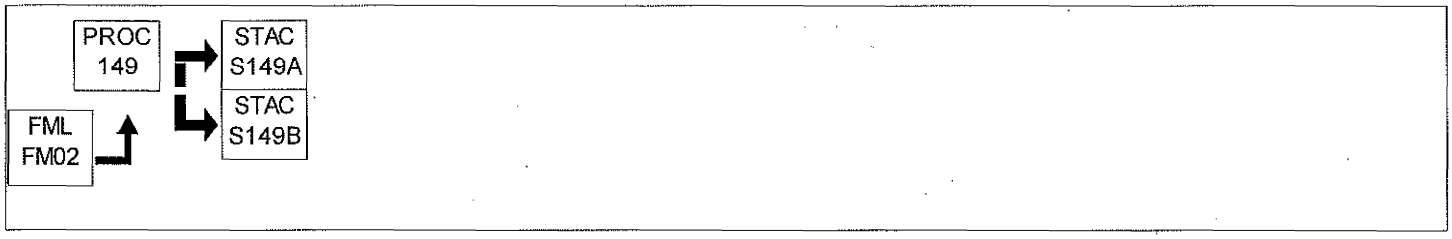
[redacted]

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 149 Source Name: CORE ROOM OPERATIONS

Source Capacity/Throughput: 400.000 Lbs/HR CORE BINDERS



I. RESTRICTIONS.

Emission Restriction(s).

[redacted]

 # 003 [25 Pa. Code §127.441]
Operating permit terms and conditions.
Pursuant to the RACT provisions of Section 129.99(d), the total combined volatile organic compound emissions from the core making machines incorporated in Source P149 shall not exceed 72.66 tons in any 12 consecutive month period.

Fuel Restriction(s).

 # 004 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.511]

Pursuant to the RACT provisions of Section 129.99(d), each unit of Source ID 149 shall be fired only on natural gas or propane.

[redacted]

SECTION D. Source Level Requirements

[redacted]

IV. RECORDKEEPING REQUIREMENTS.

[redacted]

 # 006 [25 Pa. Code §127.441]
Operating permit terms and conditions.

Pursuant to the RACT provisions of Section 129.100(d), the permittee shall maintain comprehensive, accurate records of the following:

(a) monthly calculations used to verify compliance with the 12 consecutive month volatile organic compound limitation for the core making machines incorporated under Source 149;
(b) identification of all binders used in the core making mahcines under Soruce ID 149.

These records shall be maintained for at least 5 years and made available to the Department upon request.

[redacted]

VI. WORK PRACTICE REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]
Operating permit terms and conditions.

Pursuant to the RACT provisions of 25 Pa. Code Section 129.99(d), the permittee shall use Binder WB950, as identified in the November 14, 2014, Minor Operating Permit Modification Application, or other equivalent binder as approved by the Department.

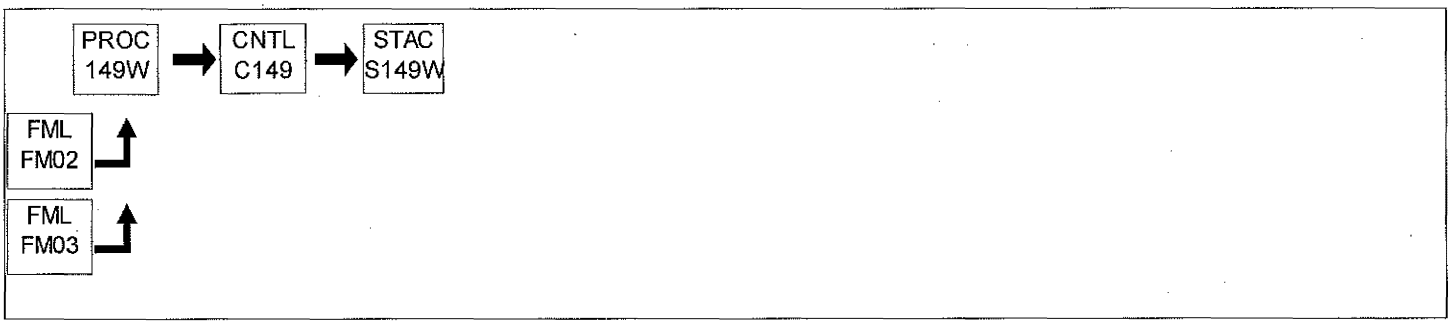
[redacted]

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 149W Source Name: FURAN WARM BOX CORE MACHINE

Source Capacity/Throughput:



I. RESTRICTIONS.

Emission Restriction(s).

[redacted]

 # 002 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

[redacted]

(d) The total combined volatile organic compound (VOC) emissions from Source ID 149W shall not exceed 15.57 tons in any 12 consecutive month period. [Note more restrictive VOC limit pursuant to RACT condition herein.]

[redacted]

 # 004 [25 Pa. Code §127.441]
Operating permit terms and conditions.
Pursuant to the RACT provisions of 25 Pa. Code Section 129.99(d), the total combined volatile organic compound (VOC) emissions from Source ID 149W shall not exceed 8 tons in any 12 consecutive month period.

Fuel Restriction(s).

 # 005 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12 and the RACT

SECTION D. Source Level Requirements

provisions of Section 129.99(d).]

Source ID 149W shall only be fired on natural gas or propane.

[redacted]

[redacted]

[redacted]

[redacted]

IV. RECORDKEEPING REQUIREMENTS.

[redacted]

[redacted]

 # 008 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.511 and, with respect to the volatile organic compound emissions, Section 129.100(d).]

The permittee shall maintain comprehensive and accurate records which verify compliance with the 12 consecutive month emission limitations for nitrogen oxides, carbon monoxide, total particulate matter, volatile organic compounds, and hazardous air pollutants for Source ID 149W. All such records shall be retained for a minimum of five years and shall be made available to the Department upon request.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

VII. ADDITIONAL REQUIREMENTS.

[redacted]

 # 013 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12 and the RACT provisions of Section 129.99(d).]

The permittee shall use Binder WB950, as identified in the November 14, 2014, Minor Operating Permit Modification Application, or other equivalent binder as approved by the Department.

[redacted]

SECTION D. Source Level Requirements

[redacted]

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 173 Source Name: MOLDING & CASTING OPERATIONS

Source Capacity/Throughput:

PROC 173 → CNTL C23 → STAC S173

I. RESTRICTIONS.

Emission Restriction(s).

[redacted]

 # 002 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.1 and 127.12 and the RACT provisions of Section 129.99(d).]

The total combined volatile organic compound (VOC) emissions from the equipment of the two SPO molding lines that are controlled by Control Devices IDs C05 and C07 (the SPO baghouses) associated with Source ID 199, and the equipment of Source ID 173 that are controlled by Control Device ID C23 (the Wheelabrator baghouse associated with Source ID 173) shall not exceed the following rates:

1) 55.3 pounds per hour

2) 109.5 tons per year.

[redacted]

SECTION D. Source Level Requirements

[redacted]

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.511 and, with respect to the volatile organic compound emissions, Section 129.100(d).]

(a) The permittee shall keep records of the following:

(1) Such information as is necessary to demonstrate that compliance with the particulate matter emission limitation applicable herein to Control Device ID C23 is being achieved.

(2) Such information as is necessary to demonstrate that compliance with the sulfur oxides emission limitation applicable herein to Control Device ID C23 is being achieved.

(3) Such information as is necessary to demonstrate that compliance with the combined VOC emission limitations applicable herein to Source IDs 173 and 199 is being achieved.

(b) These records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

[redacted]

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SECTION D. Source Level Requirements

[redacted]

SECTION D. Source Level Requirements

[redacted]

[redacted]

[redacted]

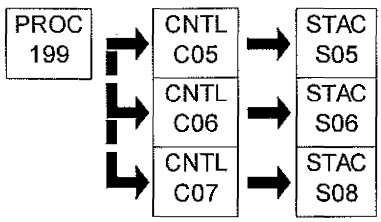
[redacted]

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 199 Source Name: MOLDING LINES (SP01, SP02, & SP03)

Source Capacity/Throughput:



I. RESTRICTIONS.

Emission Restriction(s).

[redacted]

 # 002 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.1 and 127.12 and the RACT provisions of Section 129.99(d).]

The total combined volatile organic compound (VOC) emissions from the equipment of the two SPO molding lines that are controlled by Control Devices IDs C05 and C07 (the SPO baghouses) associated with Source ID 199, and the equipment of Source ID 173 that are controlled by Control Device ID C23 (the Wheelabrator baghouse associated with Source ID 173) shall not exceed the following rates:

1) 55.3 pounds per hour

2) 109.5 tons per year.

[redacted]

SECTION D. Source Level Requirements

[redacted]

IV. RECORDKEEPING REQUIREMENTS.

[redacted]

[redacted]

 # 010 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR 63.7710(b).]

[redacted]

(c) Pursuant to the RACT provisions of Section 129.99(d), the permitee shall keep the procedures for igniting gases from mold vents associated with Source ID 199 or maintain records of the ignitability determination according to 40 CFR 63.7710(b)(6) available to the Department for review upon request.

 # 011 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.511]

(a) The permittee shall keep records of the following:

[redacted]

(2) Pursuant to the recordkeeping requirements of Section 129.100(d), such information as is necessary to demonstrate that compliance with the combined VOC emission limitations specified above under I. Restrictions.

[redacted]

VI. WORK PRACTICE REQUIREMENTS.

[redacted]

SECTION D. Source Level Requirements

 # 016 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR 63.7745(a)(5)]

(a) Pursuant to the RACT provisions of Section 129.99(d), the permittee shall ignite gases from mold vents according to the procedures in the plan required by 40 CFR 63.7710(b)(6).

VII. ADDITIONAL REQUIREMENTS.

SECTION D. Source Level Requirements

[redacted]

 # 019 [25 Pa. Code §127.441]
Operating permit terms and conditions.

Pursuant to the RACT provisions of 25 Pa. Code Section 129.99(d), by no later than January 1, 2017, the permittee shall cease operation of all volatile organic compound-emitting sources associated with SPO2. For reference, SPO2 consists of the following:

(1) Cupola Runner
(2) Ladle Fill station
(3) Pouring Conveyer
(4) Spill Sand Pit Conveyer
(5) Mold Cooling Conveyer
(6) Rollover, Punchout, Separator, and Casting Conveyer
(7) Discharge to Didion Feed Conveyer
(8) Return Sand Belt (basement to 1st floor)
(9) Didion Feed or "Punchout to Drum" Conveyer (Unit 19a)
(10) Didion Media Drum (Unit 20)
(11) Didion Sand Discharge Conveyer (Unit 15)
(12) Didion Discharge
(13) Accumulating/Cooling Conveyer (Unit 21a)
(14) Deaccumulating Conveyers (Units 13b and 21b)
(15) A Wheelabrator #7117 TA-SB model 144 Jet III D/C fabric collector (Control Device ID C06).