Facility DEC ID: 7313200008

PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 7-3132-00008/02002
Effective Date: 03/21/2018 Expiration Date: 03/20/2028

Permit Issued To: THE EASTERN COMPANY
PO BOX 460
NAUGATUCK, CT 06770-0460

FRAZER & JONES LLC
PO BOX 4955
SYRACUSE, NY 13221-4955

Contact: THE EASTERN COMPANY
PO BOX 460
NAUGATUCK, CT 06770-0460

Facility: FRAZER AND JONES CO DIV EASTERN CO
3000 MILTON AVE
SOLVAY, NY 13209

Description:
ASF permit for facility, subject to 40 CFR 63, Subpart ZZZZZ (large foundry designation).

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: ELIZABETH A TRACY
615 ERIE BLVD W
SYRACUSE, NY 13204-2400

Authorized Signature: _________________________________ Date: ___ / ___ / _____
Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.
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DEC GENERAL CONDITIONS

****   General Provisions   ****

GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:
The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:
The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:
A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:
Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 3.1:
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

a) materially false or inaccurate statements in the permit application or supporting papers;
b) failure by the permittee to comply with any terms or conditions of the permit;
c) exceeding the scope of the project as described in the permit application;
d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.
**** Facility Level ****

Condition 4: Submission of application for permit modification or renewal-REGION 7 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 4.1:
Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 7 Headquarters
Division of Environmental Permits
615 Erie Blvd West
Syracuse, NY 13204-2400
(315) 426-7400
Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: THE EASTERN COMPANY
PO BOX 460
NAUGATUCK, CT 06770-0460

FRAZER & JONES LLC
PO BOX 4955
SYRACUSE, NY 13221-4955

Facility: FRAZER AND JONES CO DIV EASTERN CO
3000 MILTON AVE
SOLVAY, NY 13209

Authorized Activity By Standard Industrial Classification Code:
3322 - MALLEABLE IRON FOUNDRIES

Permit Effective Date: 03/21/2018  Permit Expiration Date: 03/20/2028
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### FEDERALLY ENFORCEABLE CONDITIONS

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FEDERALLY ENFORCEABLE CONDITIONS

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**
This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability.

**Item A:** Sealing - 6 NYCRR 200.5
The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

**Item B:** Acceptable Ambient Air Quality - 6 NYCRR 200.6
Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

**Item C:** Maintenance of Equipment - 6 NYCRR 200.7
Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,
Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

(a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is prohibited.

(b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

Item E: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item G: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item H: Proof of Eligibility for Sources Defined as Trivial
Activities - 6 NYCRR 201-3.3 (a)
The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: Required Emission Tests - 6 NYCRR 202-1.1
An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item J: Open Fires Prohibitions - 6 NYCRR 215.2
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item K: Permit Exclusion - ECL 19-0305
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: Federally Enforceable Requirements - 40 CFR 70.6 (b)
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

**FEDERAL APPLICABLE REQUIREMENTS**
The following conditions are federally enforceable.

**Condition 18: Visible Emissions Limited**
*Effective between the dates of 03/21/2018 and 03/20/2028*

*Applicable Federal Requirement: 6 NYCRR 211.2*

**Item 18.1:**
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

**Condition 2: Compliance Demonstration**
*Effective between the dates of 03/21/2018 and 03/20/2028*

*Applicable Federal Requirement: 40CFR 63.10881(d)(2), Subpart ZZZZZ*

**Item 2.1:**
The Compliance Demonstration activity will be performed for the Facility.

**Item 2.2:**
Compliance Demonstration shall include the following monitoring:

- **Monitoring Type:** RECORD KEEPING/MAINTENANCE PROCEDURES
- **Monitoring Description:**
  If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry, even if your annual metal melt production falls below 20,000 tons. After three years you may reclassify your facility as a small foundry provided your annual metal melt production for the preceding calendar year was 20,000 tons or less. If you reclassify your large foundry as a small foundry, you must submit a notification of reclassification to the
Administrator within thirty (30) days and comply with the requirements for a small foundry no later than the date you notify the Administrator of the reclassification. If the annual metal melt production exceeds 20,000 tons during any subsequent year, you must submit a notification of reclassification to the Administrator within thirty (30) days and comply with the requirements for a large foundry no later than the date you notify the Administrator of the reclassification.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 3: Site-Specific Plan For Removal Of Mercury Switches
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40 CFR 63.10885(b)(1), Subpart ZZZZZ

Item 3.1:

The owner or operator must comply with the requirements in paragraphs (i) through (v).

(i) The owner or operator must include a requirement in his/her scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.

(ii) The owner or operator must prepare and operate according to a plan demonstrating how his/her facility will implement the scrap specification in paragraph (i) for removal of mercury switches. The owner or operator must submit the plan to the Administrator for approval. The owner or operator must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the Administrator or delegated authority within 60 days following disapproval of a plan. The owner or operator may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Administrator or delegated authority. The Administrator or delegated authority may change the approval status of the plan upon 90-days written notice based upon the semiannual report or other information. The plan must include:

(A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from the scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Administrator or delegated authority, the owner or operator must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;

(B) Provisions for obtaining assurance from scrap providers motor vehicle scrap provided to the facility meet the scrap specification;

(C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being...
properly managed, including the minimum frequency such means of corroboration will be implemented; and
(D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (C).
(iii) The owner or operator must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator may request documentation or additional information at any time.
(iv) The owner or operator must establish a goal for each scrap supplier to remove at least 80 percent of the mercury switches. Although an approved site-specific plan may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.
(v) For each scrap provider, the owner or operator must submit semiannual progress reports to the Administrator that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (A). This information can be submitted in aggregate form and does not have to be submitted for each shipment. The Administrator may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

Condition 4: Use Of Scrap That Does Not Contain Motor Vehicle Scrap
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10885(b)(4), Subpart ZZZZZ

Item 4.1:
For scrap not subject to the requirements in 40CFR 63.10885(b)(1) through (3), the owner or operator must certify in his/her notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

Condition 5: Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10890, Subpart ZZZZZ

Item 5.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 5.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
If the facility becomes reclassified as a small foundry,
all monitoring requirements for large foundries (pollution
prevention management practices of section 63.10885 and 63.10886, also sections 63.10895(b) through (e) and sections 63.10896 through 63.10900) would no longer apply.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 6: Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10890, Subpart ZZZZZ

Item 6.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 6.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:
As required by 40CFR 63.10(b)(1), the owner or operator must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

The owner or operator must maintain records of the information specified in 40CFR 63.10890(e)(1) through (7) according to the requirements in 40CFR 63.10(b)(1).

Following the initial determination for an existing affected source as a small foundry, if the annual metal melt production exceeds 20,000 tons during the preceding year, the owner or operator must comply with the requirements for large foundries by the applicable dates in 40CFR 63.10881(d)(1)(i) or (d)(1)(ii). Following the initial determination for a new affected source as a small foundry, if the owner or operator increases the annual metal melt capacity to exceed 10,000 tons, he/she must comply with the requirements for a large foundry by the applicable dates in 40CFR 63.10881(e)(1).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 7: Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10895(c)(1), Subpart ZZZZZ

Item 7.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 7.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
According to 40 CFR 63, Subpart ZZZZZ, section 10895(c)(1), the facility must comply with either the 0.8 lbs PM/ton metal charged or 0.06 tons HAP/ton metal charged, not both.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**** Emission Unit Level ****

Condition 8: Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10885(a)(1), Subpart ZZZZZ

Item 8.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

Item 8.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The owner or operator must prepare and operate at all times according to written material specifications for the purchase and use of only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, chlorinated plastics, or free liquids. For the purpose of
Air Pollution Control Permit Conditions

Permit ID: 7-3132-00008/02002 Facility DEC ID: 7313200008

this subpart, free liquids is defined as material that
fails the paint filter test by EPA Method 9095B, Paint
Filter Liquids Test (revision 2), November 2004
(incorporated by reference see 40CFR 63.14). The
requirements for no free liquids do not apply if the owner
or operator can demonstrate that the free liquid is water
that resulted from scrap exposure to rain.

Some scrap at the facility may be subject to a scrap
management program in 40CFR 63.10885(a)(2).

Monitoring Frequency: PER DELIVERY
Averaging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2018.
Subsequent reports are due every 6 calendar month(s).

**Condition 9: Compliance Demonstration**
**Effective between the dates of 03/21/2018 and 03/20/2028**

**Applicable Federal Requirement:** 40CFR 63.10885(a)(2), Subpart ZZZZZZ

**Item 9.1:**
The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

**Item 9.2:**
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator must prepare and operate at all
times according to written material specifications for the
purchase and use of only iron and steel scrap that has
been depleted (to the extent practicable) of organics and
HAP metals in the charge materials used by the iron and
steel foundry. The materials specifications must include
at minimum the information specified in paragraph (i) or
(ii).

(i) Except as provided in paragraph (ii), specifications
for metallic scrap materials charged to a scrap preheater
or metal melting furnace to be depleted (to the extent
practicable) of the presence of used oil filters,
chlorinated plastic parts, accessible lead-containing
components (such as batteries and wheel weights), and a
program to ensure the scrap materials are drained of free
liquids.
(ii) For scrap charged to a cupola metal melting furnace
that is equipped with an afterburner, specifications for
metallic scrap materials to be depleted (to the extent practicable) of the presence of chlorinated plastics, accessible lead-containing components (such as batteries and wheel weights), and a program to ensure the scrap materials are drained of free liquids.

Some scrap at the facility may be subject to a scrap management program in 40CFR 63.10885(a)(1)

**Condition 10:** Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10895(c)(1), Subpart ZZZZZ

**Item 10.1:**
The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

**Item 10.2:**
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
For an existing iron and steel foundry, the owner or operator must not discharge to the atmosphere emissions from any metal melting furnace or group of all metal melting furnaces that exceed 0.8 pounds of particulate matter per ton of metal charged using methods in 40CFR 63.10898(d), (e) or (f).

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.8 pounds per ton
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 11:** Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10895(c)(1), Subpart ZZZZZ

**Item 11.1:**
The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

**Item 11.2:**
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:
For an existing iron and steel foundry, the owner or operator must not discharge to the atmosphere emissions from any metal melting furnace or group of all metal melting furnaces that exceed 0.06 pounds of total metal HAP per ton of metal charged using methods in 40CFR 63.10898(d), (e) or (f).

Parameter Monitored: 40 CFR 63 - TOTAL METAL HAP
Upper Permit Limit: 0.06 pounds per ton
Reference Test Method: RM 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 12:** Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable Federal Requirement: 40CFR 63.10895(e), Subpart ZZZZ.

**Item 12.1:**
The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

**Item 12.2:**
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:
This facility must maintain the opacity of fugitive emissions from foundry operations no greater than 20 percent (except for one 6-minute average per hour up to 30 percent).
Operators of air contamination sources that are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions shall be required to perform the following:

1) Observe the facility once per day for visible fugitive emissions. This observation must be conducted during
daylight hours except during adverse weather conditions (fog, rain, or snow).

2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for the facility:

- weather condition
- was a plume observed?
- if a plume was observed, the specific location

This logbook must be retained at the facility for five (5) years after the date of the last entry.

3) If the operator observes any visible emissions other than steam, two consecutive days, then a Method 9 analysis (based upon a 6-minute mean) of the affected fugitive source must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: EPA RM 9, or RM 22 as specified in table 1
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION
STATE ONLY ENFORCEABLE CONDITIONS
**** Facility Level ****

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) an emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
(2) the equipment at the facility was being properly operated and maintained;
(3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the levels of emissions that exceeded the emission standards, or other requirements in the permit; and
(4) the facility owner or operator notified the department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)
Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance
with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item C: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.

Condition 13: Contaminant List
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable State Requirement: ECL 19-0301

Item 13.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit (emission limits, control requirements or compliance monitoring conditions).

CAS No: 000050-00-0
Name: FORMALDEHYDE

Condition 14: Malfunctions and start-up/shutdown activities
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable State Requirement: 6 NYCRR 201-1.4
Item 14.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 15: Emission Unit Definition
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 15.1:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: U-CRMLD
Emission Unit Description:
Casting cores are formed by various machines in this process. Fine sand is combined with a binder prior to forming the core under pressure in one of several types of molding machines: Shalco hot box style; Redford; Shalco (Redford like); and Laempe cold box style. The process contains: 2-Redfords R22, 2-Shalco U-180, 5-Shalco
hotboxes and 1 Laempe LL20.

Building(s): 12

**Item 15.2:**
The facility is authorized to perform regulated processes under this permit for:

**Emission Unit:** U-FNSHG

**Emission Unit Description:**
Finishing production of malleable and ductile iron castings is completed within this emission unit. Castings undergo shakeout, whereby sand molds are broken free and separated. Surface finishing including: grinding, annealing, shot blasting, drilling, tapping, buffing, sorting, packaging and warehousing.

Building(s): 1 19 20

**Item 15.3:**
The facility is authorized to perform regulated processes under this permit for:

**Emission Unit:** U-FURNC

**Emission Unit Description:**
This unit is comprised of scrap metal receipt and preparation, induction furnace melting and metallurgical alloying. Incoming scrap metal liquid surface contamination is removed in a pre-heater prior to charging into one of the three (3) induction melting furnaces. The metallurgy is adjusted during the furnace melt operation before pouring metal into crucibles for transfer to casting operations.

Building(s): 3

**Condition 16: Renewal deadlines for state facility permits**

Effective between the dates of 03/21/2018 and 03/20/2028

**Applicable State Requirement:** 6 NYCRR 201-5.2 (c)

**Item 16.1:**
The owner or operator of a facility having an issued state facility permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

**Condition 17: Compliance Demonstration**

Effective between the dates of 03/21/2018 and 03/20/2028

**Applicable State Requirement:** 6 NYCRR 201-5.3 (c)

**Item 17.1:**
The Compliance Demonstration activity will be performed for the Facility.
Item 17.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation
Region 7
615 Erie Blvd West
Syracuse, NY 13204

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 1: Air pollution prohibited
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable State Requirement: 6 NYCRR 211.1

Item 1.1:
No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 19: Compliance Demonstration
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable State Requirement: 6 NYCRR 212-2.1 (a)

Item 19.1:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 000050-00-0 FORMALDEHYDE

Item 19.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Facility emits Formaldehyde from their core machines,
0.108 lbs/hr and PTE 946 lbs/yr. The facility did model Formaldehyde (using AERMOD) and showed no exceedance of the guideline concentration or the ambient standard for Formaldehyde. These factors were taken into consideration along with environmental rating criteria to de-rate Formaldehyde from an "A" rating to a "B" rating based on the results of the air dispersion modeling analysis.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**** Emission Unit Level ****

Condition 20: Emission Point Definition By Emission Unit
Effective between the dates of 03/21/2018 and 03/20/2028

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 20.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-CRMLD

Emission Point: 00011
Height (ft.): 35  Length (in.): 17  Width (in.): 17
NYTMN (km.): 4768.322  NYTME (km.): 399.932  Building: 12

Emission Point: 00012
Height (ft.): 55  Length (in.): 20  Width (in.): 27
NYTMN (km.): 4768.322  NYTME (km.): 399.932  Building: 12

Emission Point: 00018
Height (ft.): 55  Length (in.): 16  Width (in.): 22
NYTMN (km.): 4768.3  NYTME (km.): 399.9  Building: 12

Emission Point: 00019
Height (ft.): 26  Length (in.): 27  Width (in.): 20
NYTMN (km.): 4768.3  NYTME (km.): 399.9  Building: 12

Item 20.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-FNSHG

Emission Point: 00020
Height (ft.): 13  Diameter (in.): 30
NYTMN (km.): 4768.3  NYTME (km.): 399.9  Building: 20

Emission Point: 00T26
Height (ft.): 24 Diameter (in.): 0
NYTMN (km.): 4768.322 NYTME (km.): 399.932 Building: 19

Emission Point: 0500A
Height (ft.): 30 Length (in.): 28 Width (in.): 41
NYTMN (km.): 4768.3 NYTME (km.): 399.9 Building: 1

Emission Point: 0500B
Height (ft.): 30 Length (in.): 28 Width (in.): 41
NYTMN (km.): 4768.3 NYTME (km.): 399.9 Building: 1

Emission Point: 0500C
Height (ft.): 30 Length (in.): 28 Width (in.): 41
NYTMN (km.): 4768.3 NYTME (km.): 399.9 Building: 1

Emission Point: 0AAF1
Height (ft.): 16 Length (in.): 32 Width (in.): 36
NYTMN (km.): 4768.3 NYTME (km.): 399.9 Building: 1

Emission Point: 0AAF2
Height (ft.): 20 Length (in.): 28 Width (in.): 26
NYTMN (km.): 4768.3 NYTME (km.): 399.9 Building: 1

Emission Point: 0AAF3
Height (ft.): 20 Length (in.): 28 Width (in.): 26
NYTMN (km.): 4768.3 NYTME (km.): 399.9 Building: 1

**Item 20.3:**
The following emission points are included in this permit for the cited Emission Unit:

**Emission Unit:** U-FURNC

**Emission Point:** 00015
Height (ft.): 27 Diameter (in.): 70
NYTMN (km.): 4768.116 NYTME (km.): 399.996 Building: 3

**Emission Point:** 00016
Height (ft.): 27 Diameter (in.): 70
NYTMN (km.): 4768.116 NYTME (km.): 399.996 Building: 3

**Emission Point:** 00017
Height (ft.): 27 Diameter (in.): 70
NYTMN (km.): 4768.116 NYTME (km.): 399.996 Building: 3

**Condition 21:** **Process Definition By Emission Unit**
Effective between the dates of 03/21/2018 and 03/20/2028

**Applicable State Requirement:** 6 NYCRR Subpart 201-5

**Item 21.1:**
This permit authorizes the following regulated processes for the cited Emission Unit:
Emission Unit: U-CRMLD
Process: MLD
Process Description:
Casting cores are formed by various molding machines in this process. Fine sand is combined with a binder prior to forming the core under pressure in one of the several types of molding machines: the Shalco Hotbox, Redford, Shalco (Redford-like) and Laempe cold box style. The process contains 2 Redford R22's, 2 Shalco U-180, 5 shalco hot box and 1 Laempe LL20.

Emission Source/Control: HOTBK - Process
Emission Source/Control: LAEMP - Process
Emission Source/Control: REDFD - Process
Emission Source/Control: SHALC - Process

Item 21.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-FNSHG
Process: FIN
Process Description:
Metal castings are finished during this process. After solidifying casting molds are broken and molding sand is shaken free and recovered. Subsequently, sprues are removed and rough castings are surface treated by one or more techniques: grinding, shot blasting, annealing and buffing, before sorting, grading, packaging and warehouse.

Emission Source/Control: FNDRY - Control
Control Type: FABRIC FILTER
Emission Source/Control: SHOT1 - Control
Control Type: FABRIC FILTER
Emission Source/Control: SHOT3 - Control
Control Type: FABRIC FILTER
Emission Source/Control: SPRUE - Control
Control Type: DUST COLLECTOR
Emission Source/Control: GRIND - Process

Item 21.3:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-FURNC
Process: MLT
Process Description:
Qualified and sized scrap metal, free of surface contamination, is charged to one of the three induction furnaces for melting and alloying. Impurities are removed and metal chemistry is adjusted during melting/blending batches. After achieving heat-temperature and confirming correct metallurgy, the melt is poured into crucibles for transfer to automatic casting machines where molten metal is cast into sand molds and allowed to cool and solidify before mold separation, sand recycle and casting finishing.

Emission Source/Control: FRN01 - Process
Design Capacity: 3 tons per hour

Emission Source/Control: FRN02 - Process
Design Capacity: 3 tons per hour

Emission Source/Control: FRN03 - Process
Design Capacity: 3 tons per hour