



**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 9-1452-00040/00005  
Effective Date: 02/27/2013 Expiration Date: 02/26/2023

Permit Issued To: BUFFALO TUNGSTEN INC  
2 MAIN STREET PO BOX 397  
DEPEW, NY 14043-0397

Contact: RALPH SHOWALTER  
BUFFALO TUNGSTEN LLC  
2 MAIN ST  
DEPEW, NY 14043  
(716) 683-9170

Facility: BUFFALO TUNGSTEN  
2 MAIN ST|BLDG 602 MAIN FLOOR  
DEPEW, NY 14043

Description:

- (1) Buffalo Tungsten, Inc. is a manufacturer of tungsten products including tungsten metal powder and tungsten carbide powder. The facility is located at 2 Main Street in the Village of Depew, Erie County, New York.
- (2) This new Air State Facility permit is replacing the existing Certificates to Operate originally issued in the year 1989.
- (3) The predominant emissions from the facility include ammonia and particulates. Captured ammonia emissions are controlled to 94 percent by utilizing an ammonia spray tower scrubber. The collected particulates are controlled using dust collectors and best management practices.
- (4) A performance test to demonstrate compliance with the required 94 percent control efficiency of ammonia emissions across the ammonia gas scrubber must be completed within one (1) year of the effective date of this permit.
- (5) On-going compliance monitoring of the control equipment using established operating limits must be completed to ensure proper operation and maintenance practices are used to minimize the impact of excess emissions on ambient air quality, the environment and human health.

**New York State Department of Environmental Conservation**  
**Facility DEC ID: 9145200040**



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:            DOUGLAS E BORSCHEL  
   270 MICHIGAN AVE  
   BUFFALO, NY 14203-2915

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.



**LIST OF CONDITIONS**

**DEC GENERAL CONDITIONS**

**General Provisions**

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
- Applications for permit renewals, modifications and transfers
- Permit modifications, suspensions or revocations by the Department

**Facility Level**

- Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS



**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: Applications for permit renewals, modifications and transfers**

**Applicable State Requirement: 6 NYCRR 621.11**

**Item 3.1:**

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

**Item 3.2:**

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

**Item 3.3:**

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.



**Applicable State Requirement: 6 NYCRR 621.13**

**Item 4.1:**

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 5: Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS**

**Applicable State Requirement: 6 NYCRR 621.6 (a)**

**Item 5.1:**

Submission of applications for permit modification or renewal are to be submitted to:  
NYSDEC Regional Permit Administrator  
Region 9 Headquarters  
Division of Environmental Permits  
270 Michigan Avenue  
Buffalo, NY 14203-2915  
(716) 851-7165



**Permit Under the Environmental Conservation Law (ECL)**

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY  
PERMIT**

**IDENTIFICATION INFORMATION**

Permit Issued To: BUFFALO TUNGSTEN INC  
2 MAIN STREET PO BOX 397  
DEPEW, NY 14043-0397

Facility: BUFFALO TUNGSTEN  
2 MAIN ST|BLDG 602 MAIN FLOOR  
DEPEW, NY 14043

Authorized Activity By Standard Industrial Classification Code:  
3399 - PRIMARY METAL PRODUCTS, NEC

Permit Effective Date: 02/27/2013

Permit Expiration Date: 02/26/2023



**LIST OF CONDITIONS**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 1 6 NYCRR 211.1: Air pollution prohibited

**Emission Unit Level**

**EU=U-00BTI**

- 2 6 NYCRR Part 211: Compliance Demonstration  
3 6 NYCRR 212.4 (c): Compliance Demonstration  
4 6 NYCRR 212.6 (a): Compliance Demonstration

**EU=U-00BTI,EP=00001**

- 5 6 NYCRR 212.4 (a): Compliance Demonstration  
6 6 NYCRR 212.4 (a): Compliance Demonstration

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 7 ECL 19-0301: Contaminant List  
8 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities  
9 6 NYCRR 201-1.4: Unavoidable noncompliance and violations  
10 6 NYCRR Subpart 201-5: Emission Unit Definition  
11 6 NYCRR 211.2: Visible Emissions Limited

**Emission Unit Level**

- 12 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit  
13 6 NYCRR Subpart 201-5: Process Definition By Emission Unit





**FEDERALLY ENFORCEABLE CONDITIONS**  
**\*\*\*\* Facility Level \*\*\*\***

**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,



required to operate such device effectively.

**Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2**

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

**Item E: Emergency Defense - 6 NYCRR 201-1.5**

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

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

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/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 corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/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 upset provision contained in any applicable requirement.

**Item F: 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 G: 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 H: 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 I: 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 J: 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 K: 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 L: 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 M: 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 1: Air pollution prohibited**



Effective between the dates of 02/27/2013 and 02/26/2023

Applicable Federal 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.

\*\*\*\* Emission Unit Level \*\*\*\*

**Condition 2: Compliance Demonstration**  
Effective between the dates of 02/27/2013 and 02/26/2023

Applicable Federal Requirement:6 NYCRR Part 211

**Item 2.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00BTI

Regulated Contaminant(s):  
CAS No: 0NY075-00-0 PARTICULATES

**Item 2.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Uncontrolled particulate emissions from truck traffic, storage piles, transfer of materials, or other facility operations cannot create a nuisance or exceed ambient air quality standards. Buffalo Tungsten shall implement best management practices to reduce the potential impact of fugitive dust emissions on ambient air quality, the environment and human health. Such measures may include, but are not limited to, paving dirt roadways, installing a tire wash for trucks traveling on dirt roads, sweeping and cleaning paved areas, and installation of windrows.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 3: Compliance Demonstration**  
Effective between the dates of 02/27/2013 and 02/26/2023



**Applicable Federal Requirement:6 NYCRR 212.4 (c)**

**Item 3.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00BTI

Regulated Contaminant(s):  
CAS No: 0NY075-00-0 PARTICULATES

**Item 3.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

- (1) No person will cause or allow emissions of solid particulates that exceed 0.050 grains of particulates per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis.
- (2) On-going compliance monitoring of the particulate emission limit for each particulate emission source, including but not limited to dust collectors, shall be monitored as stated below. A particulate emission source shall include any equipment which emits particulate emissions to the outdoor atmosphere through any conduit, chimney, duct, vent, flue, stack, or opening of any kind. The identified sources at Buffalo Tungsten include emission sources 00DC1, 00DC2, 00DC3, 00DC4 and 00DC5.
  - (a) Each particulate dust collector must be operated and maintained according to manufacturer specifications.
  - (b) Weekly inspection of any fall-out from the dust collectors shall be completed whenever a process is in operation.
  - (c) Weekly differential pressure measurements of each dust collector which vents to the outside atmosphere shall be completed whenever a process is in normal operation.
  - (d) Differential pressure shall be measured between the inlet and outlet to the dust collector. The dust collectors shall be operated within the differential pressure range specified by the manufacturer.
  - (e) The differential pressure transducer shall be calibrated annually or as required by the manufacturer.



(f) If any visible emissions, particulate fall-out or pressure measurement is recorded outside the manufacturer range, then Buffalo Tungsten shall inspect the source, initiate corrective action, and restore operation of the dust collector and associated capture system to its normal operation as expeditiously as practicable.

(4) Records shall be maintained to include: (i) a log documenting whether any visible emissions or fall-out were observed, (ii) a log of the weekly pressure drop measurements with reference to the manufacturer differential pressure range, (iii) the date and time of the observation or measurement, (iv) corrective action taken (if any), and (v) the cause of any visible emissions, fall-out or pressure measurements outside the manufacturer range (if known).

(5) At the discretion of the Department, an EPA Method 5 compliance test may be required to demonstrate compliance with the 0.05 grains/dscf emission limit.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.05 grains per dscf

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 4: Compliance Demonstration**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

**Applicable Federal Requirement: 6 NYCRR 212.6 (a)**

**Item 4.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00BTI

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

**Item 4.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

**New York State Department of Environmental Conservation**

**Permit ID: 9-1452-00040/00005**

**Facility DEC ID: 9145200040**



- (1) No person will cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water.
- (2) On-going compliance monitoring with this requirement shall be determined by the facility owner/operator conducting a weekly survey of visible emissions whenever a process is in operation. A process shall include any equipment which emits air contaminants to the outdoor atmosphere through any conduit, chimney, duct, vent, flue, stack, doorway or opening of any kind. The specific locations at Buffalo Tungsten include emission points #00001, #00002, #00003 and any other general room ventilation exhaust or building opening through which air contaminants are emitted to the outdoor atmosphere.
- (3) The weekly survey does not require the determination of opacity levels. Rather the survey is used to document the presence or non-presence of visible emissions, excluding water vapor. Visible emission observations shall be performed, as best as possible, at a location to obtain the proper sun angle, background, and line of sight. The observer must be knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor).
- (4) Upon detecting visible emissions, Buffalo Tungsten shall inspect the source and restore operation of the emission unit (including the control device, if any, and the associated capture system) to its normal operation as expeditiously as practicable.
- (5) Records of the visible emission survey shall be maintained to include: (1) a check list of whether visible emissions were observed or not, (2) the date and time of the visible emission observation, (3) the corrective action taken (if any).
- (6) The Department reserves the right to perform or require the performance of a Method 9 or Method 22 opacity evaluation from any process emission source.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: EPA Method 9 or 22

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -





SEE MONITORING DESCRIPTION  
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 5: Compliance Demonstration**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

**Applicable Federal Requirement: 6 NYCRR 212.4 (a)**

**Item 5.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00BTI Emission Point: 00001

Regulated Contaminant(s):  
CAS No: 007664-41-7 AMMONIA

**Item 5.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

DEMONSTRATING CONTINUOUS COMPLIANCE  
AMMONIA SCRUBBER SYSTEM

- (1) The ammonia treatment system currently has the following monitoring to ensure the water is flowing through the towers and scrubbing the ammonia: (a) high exhaust gas temperature – if cooling/scrubbing water becomes too hot or water flow is lost, the alarm will sound, and (b) low circulating water pressure – monitors pressure of water for leak or loss of performance. Alarm will sound if the pressure change is less than 0.3 bars.
- (2) Upon completion of the required performance test, additional monitoring parameters must be established to demonstrate proper operation of the scrubbing system. Upon determination of the monitoring parameters, Buffalo Tungsten must install, operate, and maintain the proper measurement devices for the ammonia scrubber.
- (3) Buffalo Tungsten must monitor and collect data at all times the affected source is operating, except malfunctions, associated repairs, and required quality assurance or control activities.
- (4) Buffalo Tungsten must maintain the operating parameters within the limits established during the most recent performance test.
- (5) Buffalo Tungsten must keep the records of: (a) all inspection and monitoring data, (b) the occurrence and



duration of each malfunction of the associated air pollution control and monitoring equipment; and (c) actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning air pollution control, or monitoring equipment to its normal or usual manner of operation.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 6: Compliance Demonstration**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

**Applicable Federal Requirement: 6 NYCRR 212.4 (a)**

**Item 6.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00BTI                      Emission Point: 00001

Regulated Contaminant(s):  
CAS No: 007664-41-7                      AMMONIA

**Item 6.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

AMMONIA PERFORMANCE TESTING  
AND ESTABLISH OPERATING LIMITS

(1) A performance test to demonstrate compliance with the required 94 percent control efficiency of ammonia emissions across the ammonia gas scrubber must be completed within one year after the effective permit date.

(2) The performance test must be conducted at the maximum normal operating process load.

(3) Buffalo Tungsten must establish the control parameters during the three-run performance test including: (a) the scrubber effluent pH, (b) scrubber liquid flowrate, (c) pressure drop, and (d) exhaust gas temperature.

(4) Buffalo Tungsten must collect pH, pressure drop, liquid flow-rate, and temperature data every 15 minutes during the entire period of the performance tests.



(5) Buffalo Tungsten must determine the average pH, pressure drop, liquid flow-rate, and temperature for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run. The hourly averages shall be used to establish the on-going operating limits.

(6) The method used to measure ammonia must be approved by the Department.

(7) A performance test protocol must be submitted to the Department for approval at least 60 days prior to completion of the test. The Department must be notified 10 days prior to the scheduled test date so a Department representative may be present during the test.

(8) The results of the performance test must be submitted to the Department within 60 days following completion of the performance test.

(9) A review of the measured control parameters, including the pH, pressure, temperature and flow rate, must be submitted to the Department within 60 days following completion of the performance test. The review shall establish the average parameters and propose which parameters to monitor on a continuous basis to demonstrate compliance with the required 94% removal efficiency requirement. If the monitoring parameters and limits have changed from the current monitoring, then Buffalo Tungsten must update the permit to reflect the changes.

(10) Subsequent performance test requirements will be at the discretion of the Department based on design, operation and maintenance practices used to minimize the impact of excess emissions on ambient air quality, the environment and human health.

Parameter Monitored: AMMONIA

Lower Permit Limit: 94 percent degree of air cleaning or greater

Reference Test Method: Department approved method

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION

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: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1), and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

**Item B: 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 7: Contaminant List**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

**Applicable State Requirement:ECL 19-0301**

**Item 7.1:**

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

CAS No: 007664-41-7  
Name: AMMONIA

CAS No: 0NY075-00-0  
Name: PARTICULATES

**Condition 8: Malfunctions and start-up/shutdown activities**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

**Applicable State Requirement:6 NYCRR 201-1.4**

**Item 8.1:**

(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 9: Unavoidable noncompliance and violations**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

**Applicable State Requirement:6 NYCRR 201-1.4**

**Item 9.1:**

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment 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 commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of



any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

**Condition 10: Emission Unit Definition**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

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

**Item 10.1:**

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

Emission Unit: U-00BTI

Emission Unit Description:

Emission Unit U-00BTI includes the production of tungsten and tungsten carbide powder manufactured from ammonium paratungstate (APT) and blue tungsten oxide (BTO). In addition, thermal sprayed powders and cemented carbides are manufactured from tungsten carbide.

The production of these materials include the following activities: calcination, reduction, blending (milling), screening (classifying), mixing, carburization, spray drying, sintering, sorting, smashing (crushing), sifting and magnetic separation. All of these activities take place in the tungsten oxide powder production building.

The main emissions resulting from these activities include ammonia and particulates. Emissions are released to the atmosphere through three emission points. In addition to these point sources there are also fugitive emissions resulting from several natural gas combustion sources.

Building(s): 602

**Condition 11: Visible Emissions Limited**  
**Effective between the dates of 02/27/2013 and 02/26/2023**

**Applicable State Requirement:6 NYCRR 211.2**

**Item 11.1:**

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.

\*\*\*\* Emission Unit Level \*\*\*\*



**Condition 12: Emission Point Definition By Emission Unit**  
Effective between the dates of 02/27/2013 and 02/26/2023

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

**Item 12.1:**

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

Emission Unit: U-00BTI

Emission Point: 00001

Height (ft.): 33 Diameter (in.): 2  
NYTMN (km.): 4757.191 NYTME (km.): 198.587 Building: 602

Emission Point: 00002

Height (ft.): 12 Diameter (in.): 8  
NYTMN (km.): 4757.191 NYTME (km.): 198.587 Building: 602

Emission Point: 00003

Height (ft.): 21 Diameter (in.): 8  
NYTMN (km.): 4757.191 NYTME (km.): 198.587 Building: 602

**Condition 13: Process Definition By Emission Unit**  
Effective between the dates of 02/27/2013 and 02/26/2023

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

**Item 13.1:**

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

Emission Unit: U-00BTI

Process: 001 Source Classification Code: 3-05-150-02

Process Description:

Process 001 includes the production of tungsten and tungsten carbide powders manufactured from ammonium paratungstate (APT) and blue tungsten oxide (BTO). The production steps include calcination, reduction, carburization, screening and milling. During the calcination process, ammonia gas emissions are generated and controlled in an ammonia spray tower scrubbing system (EP1). The particulate emissions generated from the screening, milling and blending processes are controlled using fabric filter dust collectors (EP2). Hydrogen and nitrogen gases generated in the reduction and carburization furnaces are reduced using afterburners.

Emission Source/Control: 00DC1 - Control

Control Type: FABRIC FILTER

Emission Source/Control: 00DC3 - Control

Control Type: DUST COLLECTOR





Emission Source/Control: 00DC4 - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: 00DC5 - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: 00FL1 - Control  
Control Type: DIRECT FLAME AFTERBURNER

Emission Source/Control: 00FL2 - Control  
Control Type: DIRECT FLAME AFTERBURNER

Emission Source/Control: 00FL3 - Control  
Control Type: DIRECT FLAME AFTERBURNER

Emission Source/Control: 000AC - Process

Emission Source/Control: 000IM - Process

Emission Source/Control: 000OX - Process

Emission Source/Control: 00CB1 - Process

Emission Source/Control: 00CB2 - Process

Emission Source/Control: 00CB3 - Process

Emission Source/Control: 00CB4 - Process

Emission Source/Control: 00CB5 - Process

Emission Source/Control: 00CB6 - Process

Emission Source/Control: 00CB7 - Process

Emission Source/Control: 00CM1 - Process

Emission Source/Control: 00CM2 - Process

Emission Source/Control: 00CM3 - Process

Emission Source/Control: 00CM4 - Process

Emission Source/Control: 00CM5 - Process

Emission Source/Control: 00CM6 - Process

Emission Source/Control: 00CM7 - Process

Emission Source/Control: 00GM2 - Process

Emission Source/Control: 00PB2 - Process



- Emission Source/Control: 00RM2 - Process
- Emission Source/Control: 00SC1 - Process
- Emission Source/Control: 00SC2 - Process
- Emission Source/Control: 00US1 - Process
- Emission Source/Control: 00VB1 - Process
- Emission Source/Control: 00VM1 - Process
- Emission Source/Control: 00VM2 - Process
- Emission Source/Control: 03TUB - Process
- Emission Source/Control: 06TUB - Process
- Emission Source/Control: 07TUB - Process
- Emission Source/Control: 14TUB - Process
- Emission Source/Control: 15TUB - Process
- Emission Source/Control: BLUER - Process
- Emission Source/Control: BTOSC - Process
- Emission Source/Control: ELINO - Process
- Emission Source/Control: FLSCR - Process
- Emission Source/Control: HARPE - Process
- Emission Source/Control: ROTAR - Process
- Emission Source/Control: WRMSC - Process

**Item 13.2:**

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

Emission Unit: U-00BTI  
Process: 002 Source Classification Code: 3-09-045-00

Process Description:

Process 002 includes the production of Thermal Spray Powders manufactured from tungsten carbide and other metals. A tungsten carbide slurry is dispersed through spray dryers, a sintering furnace, screening and milling to produce the thermal spray powders. The particulate emissions generated from the spray dryers, screening and milling processes are controlled using fabric filter dust

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collectors (EP2 and EP3). Hydrogen and nitrogen gases generated in the sintering furnace are reduced using afterburners.

Emission Source/Control: 00DC1 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 00DC2 - Control  
Control Type: DUST COLLECTOR

Emission Source/Control: 00FL3 - Control  
Control Type: DIRECT FLAME AFTERBURNER

Emission Source/Control: 000AC - Process

Emission Source/Control: 000IM - Process

Emission Source/Control: 00AM1 - Process

Emission Source/Control: 00AM2 - Process

Emission Source/Control: ELINO - Process

Emission Source/Control: FLSCR - Process

Emission Source/Control: LNIRO - Process

Emission Source/Control: SNIRO - Process

**Item 13.3:**

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

Emission Unit: U-00BTI

Process: 003

Source Classification Code: 3-05-101-07

Process Description:

Process 003 includes recycling of scrap cemented tungsten carbide into a powder to be sold for various applications.

The used cemented tungsten carbide is crushed, sorted and screened into various sizes.

Emission Source/Control: 000RC - Process

Emission Source/Control: 0SIFT - Process

Emission Source/Control: CRMSC - Process

Emission Source/Control: MAGSE - Process

Emission Source/Control: SLING - Process

