

**MARYLAND DEPARTMENT OF ENVIRONMENT  
AIR AND RADIATION ADMINISTRATION**

**FACT SHEET AND TENTATIVE DETERMINATION  
W.R. GRACE & CO-CONN**

**PROPOSED INSTALLATION OF MAGNAPORE PLANT AND INDUSTRIAL CATALYST  
OPERATIONS PLANT EXPANSION PROJECT**

**I. INTRODUCTION**

The Maryland Department of the Environment (the "Department") received an application from W. R. Grace & Co.-CONN ("Grace") on June 25, 2025 for a Permit to Construct to install four (4) new washpots and sixteen (16) new wash baskets in the Magnapore Plant and a new manufacturing line in the Industrial Catalyst Operations Plant. A non-confidential addendum was received on March 31, 2026 and a confidential list of plant-wide direct fired burners was received on April 7, 2026. The proposed equipment will be located at 5500 Chemical Rd., Baltimore, MD 21226.

A notice was placed in The Baltimore Sun on July 2, 2025 and July 9, 2025 announcing a hybrid scheduled informational meeting to discuss the permit to construct application. The informational meeting was held on July 15, 2025 at St. Athanasius Church located at 4708 Prudence St, Baltimore, MD 21226 and was also available virtually for registered community members.

As required by law, all public notices were also provided to elected officials in all State, county, and municipality legislative districts located within a one-mile radius of the facility's property boundary.

The Department has reviewed the application and has made a tentative determination that the proposed facility is expected to comply with all applicable air quality regulations. A hybrid public hearing has been scheduled for July 6, 2026 at 6:00 p.m. at the Curtis Bay Recreation Center located at 1630 Filbert St., Baltimore, MD 21226 to provide interested parties an opportunity to comment on the Department's tentative determination and draft permit conditions, and/or to present other pertinent concerns about the proposed facility. Notices concerning the date, time and location of the public hearing will be published in the legal section of a newspaper with circulation in general area of the proposed facility. Interested parties may also submit written comments.

If the Department does not receive any comments that are adverse to the tentative determination, the tentative determination will automatically become a final determination. If adverse comments are received, the Department will review the comments, and will then make a final determination with regard to issuance or denial of the permit. A notice of final determination will be published in a newspaper of general circulation in the affected area. The final determination may be subject to judicial review pursuant to Section 1-601 of the

## **II. CURRENT STATUS AND PROPOSED INSTALLATION**

### **A. Current Status**

W. R. Grace & Co. - CONN is a multi-product specialty inorganic chemicals manufacturing facility that includes several plants that operate independently. Products manufactured at the facility are either silica-based or alumina-based, and include molecular sieves, catalysts, and various grades of silica gel. The facility uses equipment typical of solids handling operations, e.g., calciners, dryers, crushers, grinders, belt conveyors, pneumatic conveyors, screening/classifying devices, storage silos, and fabric filters for product collection and air pollution control. The facility operates under a Federal Title V Operating Permit.

### **B. Proposed Installation**

W. R. Grace & Co. – CONN has proposed to add equipment to their Magnapore & Magnapore Expansion Plants (510-0076-7-1024) and their Industrial Catalyst Operations Plant (510-0076-7-1094).

The new Magnapore Plant equipment includes four (4) new washpots and sixteen (16) new wash baskets. This new equipment will not increase hourly throughput of the Magnapore Plant. It will increase the plant operating hours, which will result in an annual throughput increase.

The new Industrial Catalyst Operations Plant equipment includes a new manufacturing line called Line 3. This new line will not process trivalent chromium. The proposed equipment includes a new natural gas fired spray dryer with an ultra-low NOx burner controlled by a cyclone and baghouse, classifiers with baghouses controlled by a cartridge filter, silos, sacking stations controlled by a fugitive dust collector with a baghouse, and a central vacuum system with a baghouse. Two replacement hammermills common to all Industrial Catalyst Operations Plant manufacturing lines are also proposed.

As part of this project, W. R. Grace & Co. - CONN will be permanently shutting down certain equipment in the Catalyst Additives Operations Plant, including calciners, a dryer, and an airveyor. Additionally, the Spheres Plant, which is part of the Automobile Emissions Operations Plant, will be shut down. Equipment permanently removed from service includes a dryer, columns, a separator, a centrifuge, holding tanks, a filtrate tanks, solids tanks, centrifuge tanks, an SBA reactor, and the CAMET catalytic converter.

### III. APPLICABLE REGULATIONS

The proposed installation is subject to all applicable Federal and State air quality control regulations, including, but not limited to the following:

- (a) 40 CFR Part 63 Subpart VVVVVV, National Emissions Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.
- (b) COMAR 26.11.01.05-1, which requires that the Permittee submit an annual certification of emissions for volatile organic compounds (VOC) and nitrogen oxides (NOx).
- (c) COMAR 26.11.01.07C, which requires that the Permittee report to the Department occurrences of excess emissions.
- (d) COMAR 26.11.02.09A, which requires that the Permittee obtain a permit-to-construct if an installation is to be modified in a manner that would cause changes in the quantity, nature or characteristics of emission from the installation as referenced in this permit.
- (e) COMAR 26.11.02.19C & D, which require that the Permittee submit to the Department annual certifications of emissions, and that the Permittee maintain sufficient records to support the emissions information presented in the submittals.
- (f) COMAR 26.11.06.02C(2), which prohibits visible emissions other than uncombined water.
- (g) COMAR 26.11.06.03B(2), which limits the concentration of particulate matter in any exhaust gases to not more than 0.03 grains per standard cubic foot of dry exhaust gas.
- (h) COMAR 26.11.06.03C and D, which requires that the Permittee take reasonable precautions to prevent particulate matter from unconfined sources and materials handling and construction operations from becoming airborne.
- (i) COMAR 26.11.09.08J, which establishes requirements with regard to control of NOx emissions from installations other than fuel burning equipment.
- (j) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (k) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of

toxic air pollutants.

- (I) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health.

#### **IV. GENERAL AIR QUALITY**

The U.S. Environmental Protection Agency (EPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) for six (6) criteria pollutants, i.e., sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, ozone, and lead. The primary standards were established to protect public health, and the secondary standards were developed to protect against non-health effects such as damage to property and vegetation.

The Department utilizes a statewide air monitoring network, operated in accordance with EPA guidelines, to measure the concentrations of criteria pollutants in Maryland's ambient air. The measurements are used to project statewide ambient air quality, and currently indicate that Baltimore City complies with the NAAQS for sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, and lead.

Ground level ozone continues to present a problem for the entire Baltimore metropolitan area, which is classified as a non-attainment area for ozone. The primary contributors to the formation of ozone are emissions of oxides of nitrogen, primarily from combustion equipment, and emissions of Volatile Organic Compounds (VOC) such as paint solvents and gasoline vapors. Baltimore City is included in the non-attainment area for ozone.

With regard to toxic air pollutants (TAPs), screening levels (i.e., acceptable ambient concentrations for toxic air pollutants) are generally established at 1/100 of allowed worker exposure levels (TLVs)<sup>1</sup>. The Department has also developed additional screening levels for carcinogenic compounds. The additional screening levels are established such that continuous exposure to the subject TAP at the screening level for a period of 70 years is expected to cause an increase in lifetime cancer risk of no more than 1 in 100,000.

#### **V. ENVIRONMENTAL JUSTICE ANALYSIS**

The concept behind the term environmental justice (EJ) is that all Maryland residents and communities should have an equal opportunity to enjoy an enhanced quality of life. How to assess whether equal protection is being applied is the challenge.

Communities surrounded by a disproportionate number of polluting facilities puts residents at a higher risk for health problems from environmental exposures. It is important that residents who

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<sup>1</sup> TLVs are threshold limit values (exposure limits) established for toxic materials by the American Conference of Governmental Industrial Hygienists (ACGIH). Some TLVs are established for short-term exposure (TLV – STEL), and some are established for longer-term exposure (TLV – TWA), where TWA is an acronym for time-weight average.

may be adversely affected by a proposed source be aware of the current environmental issues in their community in order to have meaningful involvement in the permitting process. Resources may be available from government and private entities to ensure that community health is not negatively impacted by a new source located in the community.

The Maryland General Assembly passed HB 1200, effective October 1, 2022, that adds to MDE's work into our mission to help overburdened and underserved communities with environmental issues. In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the proposed source is located. The EJ Score, expressed as a statewide percentile, was shown to be 100 which the Department has verified. This score represents a combined measure of pollution and the potential vulnerability of a population to the effects of pollution.

An EJ Score of 100 indicates that the proposed installation is located in an area that is disproportionately impacted by pollution resulting in a higher risk of health problems from environmental exposures. As a result, the Department required the applicant to conduct additional community outreach prior to reviewing the permit application in order to ensure that residents were afforded broader opportunities to participate in the permit process and understand the impacts that the proposed installation may have on them and the community.

W. R. Grace & Co.- CONN conducted extensive outreach with the Curtis Bay community, as outlined below.

- In October 2024, discussions began with community leaders regarding the proposed Industrial Catalyst Operations Plant Line 3 and Magnapore Plant modifications. Engagement started informally with the leaders of the Community of Curtis Bay Association (CCBA) followed by a special Community Advisory Panel (CAP) meeting on October 16, 2024.
- On December 4, 2024 Grace met with the CCBA Board of Directors to provide additional details on the project and hear initial feedback.
- On December 12, 2024 Grace presented the project to community members at a CCBA meeting, expanding the discussion to a broad community audience, listening to feedback and answering questions about the project, scope, emissions and permitting process. During these early engagement meetings, community members raised concerns about particulate matter and nitrogen oxides. Grace documented those concerns and communicated that they would explore options for mitigating those emissions.
- In January 2025, Grace provided an update and made a public, voluntary commitment to mitigate any increase in particulate matter and nitrogen oxides during the January 22, 2025 Special Community Meeting and the January 27, 2025 community meeting with the Concerned Citizens for a Better Brooklyn (CCBB). Grace delayed submission of the permit application to allow time to review community input.
- In February and March of 2025, Grace answered questions from the CCBA via email.

- The informational meeting held on July 15, 2025 and the public could join the meeting in-person or online. The public also had the opportunity to request language translation as needed.
- In August of 2025, Grace published answers to questions received during the Informational meeting on their website at [www.Grace.com/curtisbay](http://www.Grace.com/curtisbay).
- In September of 2025 Grace published a summary of voluntary emissions mitigation on their webpage.
- Grace met with the Curtis Bay Communication Association (CBCA) on April 9, 2026 and with CCBB on April 20, 2026 to provide updates regarding how the goal to mitigate particulate matter and nitrogen oxides will be achieved.

In addition to meeting minimum State and federal applicable air quality requirements, the air quality permit to construct will require Grace to permanently shut down equipment and install low emissions equipment as follows:

- (1) Part C(7) and Part C(8) of the permit list the equipment associated with the CAO Plant and the AEO Plant Spheres to be permanently removed from service prior to commencing operation of any new equipment authorized by the permit.
- (2) Part C(11) of the permit requires the ICO Plant Line 3 spray dryer (EST-35801) to be equipped with an ultra-low NOx burner that is designed to meet 10 ppm at 3% oxygen.

These changes along with other voluntary mitigation efforts by Grace are designed to offset emissions increases associated with this project.

To address public concerns regarding accidents and releases, the Permittee is subject to federal requirements under Section 112(r) of the Clean Air Act. A 112(r) Risk Management Plan (RMP) is an EPA-mandated document for facilities handling specific hazardous toxic or flammable substances. It outlines potential accident effects, prevention steps (e.g., training, maintenance), and emergency response procedures to protect the community and environment. Although the Department is not the delegated authority to implement or enforce Section 112(r), the federal-only enforceable reporting requirements are included in condition Part D(8) of the permit.

## **VI. COMPLIANCE DEMONSTRATION AND ANALYSIS**

The proposed installation must comply with all State imposed emissions limitations and screening levels, as well as the NAAQS. The Department has conducted an engineering and air quality review of the application. The emissions were projected based on material usage estimates, engineering estimates and AP-42 emission factors. The conservative U.S. EPA's SCREEN3 model was used to project the maximum ground level concentrations from the proposed facility, which were then compared to the screening levels and the NAAQS.

- A. Estimated Emissions** - The maximum emissions of air pollutants of concern from the proposed installation are listed in Table I.

- B. Compliance with National Ambient Air Quality Standards** - The maximum ground level concentrations for particulate matter, nitrogen oxides, sulfur dioxide and carbon monoxide based on the emissions from the proposed installation are listed in column 2 of Table II. The combined impact of the projected contribution from the proposed installation and the ambient background concentration for each pollutant shown in column 3 of Table II is less than the NAAQS for each pollutant shown in column 4.
- C. Compliance with Air Toxics Regulations** – The toxic air pollutants of concern that would be emitted from this installation are listed in column 1 of Table III. The predicted maximum off-site ambient concentrations of these toxic air pollutants are shown in column 4 of Table III, and in each case the maximum concentration is less than the corresponding screening level for the toxic air pollutant shown in column 2.

## **VII. TENTATIVE DETERMINATION**

Based on the above information, the Department has concluded that the proposed installation will comply with all applicable Federal and State air quality control requirements. In accordance with the Administrative Procedure Act, Department has made a tentative determination to issue the Permit to Construct.

Enclosed with the tentative determination is a copy of the draft Permit to Construct.

**TABLE I  
PROJECTED MAXIMUM EMISSIONS FROM THE PROPOSED INSTALLATION**

| POLLUTANT                              | PROJECTED MAXIMUM EMISSIONS FROM PROPOSED INSTALLATION |             |
|--|--|-------------|
|  | (lbs/day)  | (tons/year) |
| Nitrogen Dioxide (NO <sub>2</sub> )    | 12   | 2.14        |
| Sulfur Dioxide (SO <sub>2</sub> )      | 0.3  | 0.05        |
| Carbon Monoxide (CO)                   | 36   | 6.58        |
| Volatile Organic Compounds (VOC)       | 3  | 0.54        |
| Particulate Matter (PM <sub>10</sub> ) | 14   | 2.52        |

**TABLE II  
PROJECTED IMPACT OF EMISSIONS OF CRITERIA POLLUTANTS FROM THE PROPOSED INSTALLATION ON AMBIENT AIR QUALITY**

| POLLUTANTS                              | MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS CAUSED BY EMISSIONS FROM PROPOSED PROCESS (µg/m <sup>3</sup> ) | BACKGROUND AMBIENT AIR CONCENTRATIONS (µg/m <sup>3</sup> )* | NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) (µg/m <sup>3</sup> ) |
|---|---|---|---|
| Nitrogen Dioxide (NO <sub>2</sub> )     | 1-hr max. → 10.1<br>annual avg. → 0.81  | 1-hr avg. → 79<br>annual avg. → 27                          | 1-hr max. → 188<br>annual avg. → 100                                |
| Carbon Monoxide (CO)                    | 8-hr max. → 21.7<br>1-hr max. → 31  | 8-hr max. → 1374<br>1-hr max. → 2176                        | 8-hr max. → 10,000<br>1-hr max. → 40,000                            |
| Sulfur Dioxide (SO <sub>2</sub> )       | 1-hr max. → 0.3   | 1-hr max. → 22.5  | 1-hr max → 196.5  |
| Particulate Matter (PM <sub>10</sub> )  | 24-hr max. → 4.75   | 24-hr max. → 38   | 24-hr max. → 150  |
| Particulate Matter (PM <sub>2.5</sub> ) | 24-hr max. → 0.09<br>annual avg. → 0.91   | 24-hr avg. → 20<br>annual avg. → 7.7                        | 24-hr max → 35<br>annual avg. → 9                                   |

\*Background concentrations were obtained from Maryland air monitoring stations as follows:

NO<sub>2</sub>, → I-95 South Welcome Center, North Laurel – Howard Co., highest 2025 Maryland value  
 CO 8-hr Max, SO<sub>2</sub> & PM<sub>2.5</sub> 24-hr avg. → 600 Dorsey Rd. Essex, highest 2025 Maryland value  
 CO 1-hr Max → 12003 Old Baltimore Pike, Beltsville – Prince George's Co., highest 2025 Maryland value  
 PM<sub>10</sub> and PM<sub>2.5</sub> Annual Avg → 3900 Hillen Rd., highest 2025 Maryland value

**TABLE III  
PREDICTED MAXIMUM OFF-SITE AMBIENT CONCENTRATIONS FOR  
TOXIC AIR POLLUTANTS EMITTED FROM THE PROPOSED INSTALLATION**

| <b>TOXIC AIR POLLUTANTS</b> | <b>SCREENING LEVELS (<math>\mu\text{g}/\text{m}^3</math>)</b> | <b>PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)</b> | <b>PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS (<math>\mu\text{g}/\text{m}^3</math>)</b> |
|-----------------------------|---|--|---|
| 2-Methylnapthalene          | 1-hour→ None<br>8-hour→ 29.08<br>Annual→ None                 | 5.10E-06   | 1-hour→ None<br>8-hour→ 7.37E-05<br>Annual→ None  |
| 3-Methylcholanthrene        | 1-hour→ None<br>8-hour→ 20<br>Annual→ None                    | 3.83E-07   | 1-hour→ None<br>8-hour→ 5.53E-06<br>Annual→ None  |
| Ammonia                     | 1-hour→ 243<br>8-hour→ 174<br>Annual→ None                    | 54.81  | 1-hour→ 231<br>8-hour→ 160<br>Annual→ None  |
| Anthracene                  | 1-hour→ None<br>8-hour→ 20<br>Annual→ None                    | 5.1E-07  | 1-hour→ None<br>8-hour→ 7.37E-06<br>Annual→ None  |
| Benzene                     | 1-hour→ 79.87<br>8-hour→ 15.97<br>Annual→ None                | 4.46E-04   | 1-hour→ 9.22E-03<br>8-hour→ 6.45E-03<br>Annual→ None  |
| Benzo(g,h,i)perylene        | 1-hour→ None<br>8-hour→ 20<br>Annual→ None                    | 2.55E-07   | 1-hour→ None<br>8-hour→ 3.69E-06<br>Annual→ None  |
| Butane                      | 1-hour→ None<br>8-hour→ 23,771<br>Annual→ None                | 4.46E-01   | 1-hour→ None<br>8-hour→ 6.45<br>Annual→ None  |
| Ethane                      | 1-hour→ None<br>8-hour→ 12,303<br>Annual→ None                | 6.59E-01   | 1-hour→ None<br>8-hour→ 9.52<br>Annual→ None  |
| Fluoranthene                | 1-hour→ None<br>8-hour→ 82<br>Annual→ None                    | 6.38E-08   | 1-hour→ None<br>8-hour→ 9.21E-06<br>Annual→ None  |
| Fluorene                    | 1-hour→ None<br>8-hour→ 20<br>Annual→ None                    | 5.95E-07   | 1-hour→ None<br>8-hour→ 8.60E-06<br>Annual→ None  |

| <b>TOXIC AIR POLLUTANTS</b> | <b>SCREENING LEVELS (<math>\mu\text{g}/\text{m}^3</math>)</b> | <b>PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)</b> | <b>PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS (<math>\mu\text{g}/\text{m}^3</math>)</b> |
|-----------------------------|---|--|---|
| Formaldehyde                | 1-hour→ None<br>8-hour→ 20.3<br>Annual→ 8.00E-01              | 1.59E-02   | 1-hour→ None<br>8-hour→ 2.30E-01<br>Annual→ 2.63E-02  |
| Hexanol                     | 1-hour→ None<br>8-hour→ 27<br>Annual→ None                    | 7.02E-01   | 1-hour→ None<br>8-hour→ 26<br>Annual→ None  |
| n-Hexane                    | 1-hour→ None<br>8-hour→ 1,762<br>Annual→ None                 | 3.83E-01   | 1-hour→ None<br>8-hour→ 5.53<br>Annual→ None  |
| Naphthalene                 | 1-hour→ 786<br>8-hour→ 524<br>Annual→ None                    | 1.30E-04   | 1-hour→ 2.68E-03<br>8-hour→ 1.87E-03<br>Annual→ None  |
| Pentane                     | 1-hour→ None<br>8-hour→ 17,705<br>Annual→ None                | 5.53E-01   | 1-hour→ None<br>8-hour→ 7.99<br>Annual→ None  |
| Phenanthrene                | 1-hour→ None<br>8-hour→ 9.80<br>Annual→ None                  | 3.61E-06   | 1-hour→ None<br>8-hour→ 5.22E-05<br>Annual→ None  |
| Propane                     | 1-hour→ None<br>8-hour→ 18,032<br>Annual→ None                | 3.40E-01   | 1-hour→ None<br>8-hour→ 4.91<br>Annual→ None  |
| Pyrene                      | 1-hour→ None<br>8-hour→ 20<br>Annual→ None                    | 1.06E-06   | 1-hour→ None<br>8-hour→ 1.54E-05<br>Annual→ None  |
| Toluene                     | 1-hour→ None<br>8-hour→ 753<br>Annual→ None                   | 7.23E-04   | 1-hour→ None<br>8-hour→ 1.04E-02<br>Annual→ None  |
| Arsenic                     | 1-hour→ None<br>8-hour→ 0.10<br>Annual→ 0.0002                | 4.25E-05   | 1-hour→ None<br>8-hour→ 6.14E-04<br>Annual→ 7.01E-05  |
| Barium                      | 1-hour→ None<br>8-hour→ 5.00<br>Annual→ None                  | 9.35E-04   | 1-hour→ None<br>8-hour→ 5741.35E-02<br>Annual→ None   |
| Beryllium                   | 1-hour→ None<br>8-hour→ None<br>Annual→ 0.0004                | 2.55E-06   | 1-hour→ None<br>8-hour→ None<br>Annual→ 4.21E-06  |

| <b>TOXIC AIR POLLUTANTS</b> | <b>SCREENING LEVELS (<math>\mu\text{g}/\text{m}^3</math>)</b> | <b>PROJECTED WORST-CASE FACILITY-WIDE EMISSIONS (lbs/hr)</b> | <b>PREDICTED MAXIMUM OFF-SITE GROUND LEVEL CONCENTRATIONS (<math>\mu\text{g}/\text{m}^3</math>)</b> |
|-----------------------------|---|--|---|
| Cadmium                     | 1-hour→ None<br>8-hour→ 0.02<br>Annual→ 0.0006                | 2.34E-04   | 1-hour→ None<br>8-hour→ 3.38E-03<br>Annual→ 3.86E-04  |
| Chromium (elemental)        | 1-hour→ None<br>8-hour→ 5.00<br>Annual→ None                  | 2.98E-04   | 1-hour→ None<br>8-hour→ 4.30E-03<br>Annual→ None  |
| Chromium (trivalent)        | 1-hour→ None<br>8-hour→ 5.00<br>Annual→ None                  | 5.30E-02   | 1-hour→ None<br>8-hour→ 7.50E-01<br>Annual→ None  |
| Cobalt                      | 1-hour→ None<br>8-hour→ 0.20<br>Annual→ None                  | 1.79E-05   | 1-hour→ None<br>8-hour→ 2.58E-04<br>Annual→ None  |
| Copper                      | 1-hour→ None<br>8-hour→ 2.00<br>Annual→ None                  | 1.81E-04   | 1-hour→ None<br>8-hour→ 2.61E-03<br>Annual→ None  |
| Manganese                   | 1-hour→ None<br>8-hour→ 2.00<br>Annual→ None                  | 8.08E-05   | 1-hour→ None<br>8-hour→ 1.17E-03<br>Annual→ None  |
| Mercury                     | 1-hour→ 0.3<br>8-hour→ 0.10<br>Annual→ None                   | 5.53E-07   | 1-hour→ 1.14E-05<br>8-hour→ 7.99E-06<br>Annual→ None  |
| Molybdenum                  | 1-hour→ None<br>8-hour→ 5.00<br>Annual→ None                  | 2.34E-04   | 1-hour→ None<br>8-hour→ 3.38E-03<br>Annual→ None  |
| Nickel                      | 1-hour→ None<br>8-hour→ 1.00<br>Annual→ None                  | 4.25E-06   | 1-hour→ None<br>8-hour→ 6.14E-05<br>Annual→ None  |
| Selenium                    | 1-hour→ None<br>8-hour→ 2.00<br>Annual→ None                  | 5.10E-06   | 1-hour→ None<br>8-hour→ 7.37E-05<br>Annual→ None  |
| Vanadium                    | 1-hour→ None<br>8-hour→ 0.5<br>Annual→ None                   | 4.89E-04   | 1-hour→ None<br>8-hour→ 7.06E-03<br>Annual→ None  |
| Zinc                        | 1-hour→ 1000<br>8-hour→ 500<br>Annual→ None                   | 6.16E-03   | 1-hour→ None<br>8-hour→ 8.91E-02<br>Annual→ None  |

The values represent maximum facility-wide emissions of toxic air pollutants during any 1-hour period of facility operation.

The values are based on worst-case emissions from the proposed facility and were predicted by EPA's SCREEN3 model, which provides conservative estimations concerning the impact of pollutants on ambient air quality.