# CLEANER AIR OREGON

## Modeling Protocol and Risk Assessment Work Plan

Prepared for:

Columbia Steel Casting Co., Inc.

November 2021

SLR

# Modeling Protocol and Risk Assessment Work Plan

Prepared for:
Columbia Steel Casting Co., Inc.
10425 N Bloss Ave.
Portland, OR 97203

This document has been prepared by SLR International Corporation (SLR). The material and data in this report were prepared under the supervision and direction of the undersigned.


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# ACRONYMS

| | |
|---|---|
| ASOS | Automated Surface Observing System |
| BPIPPRM | Building Profile Input Program for PRIME |
| CAO | Cleaner Air Oregon |
| CSM | Conceptual Site Model |
| DEQ | Oregon Department of Environmental Quality |
| EPA | United States Environmental Protection Agency |
| GEP | Good Engineering Practice |
| KPDX | Portland International Airport |
| KSLE | McNary Field, Salem, OR |
| $\mu g/m^3$ | micrograms per cubic meter |
| NAD83 | North American Datum of 1983 |
| NED | National Elevation Dataset |
| OAR | Oregon Administrative Rule |
| RAWP | Risk Assessment Work Plan |
| RAL | Risk Action Level |
| RBC | Risk-Based Concentration |
| REER | Risk-Equivalent Emission Rate |
| SLR | SLR International Corporation |
| TAC | toxic air contaminant |
| TEU | Toxic Emission Unit |
| UTM | Universal Transverse Mercator |

# 1. INTRODUCTION

## 1.1 PURPOSE

Columbia Steel Casting Co., Inc. (Columbia Steel) operates a foundry at 10425 N Bloss Ave. in Portland, Oregon, operating under Air Contaminant Discharge Permit No. 26-1869-ST-01. On March 4, 2019, Columbia Steel was informed by the Oregon Department of Environmental Quality (DEQ) that the facility was being called in to the Cleaner Air Oregon (CAO) program administered by DEQ.

Columbia Steel has chosen to perform a Level 3 Risk Assessment as permitted under Oregon Administrative Rule (OAR) 340-245-0050(10) in order to comply with its obligations under the CAO program. SLR International Corporation (SLR) has been retained by Columbia Steel to perform the dispersion modeling and risk assessment.

As part of a Level 3 Risk Assessment, a dispersion modeling demonstration and risk assessment are required. This document serves as the modeling protocol and risk assessment work plan for the demonstration to be conducted as part of the Level 3 Risk Assessment.

The modeling analysis will be conducted to calculate the risk action levels attributable to operations at the facility and thereby determine additional requirements in relation to the action levels as outlined in OAR 340-245-8010 Table 1.

The purpose of this modeling protocol and work plan is to obtain approval from DEQ for the proposed modeling inputs and methodologies. Inputs and methodologies will follow DEQ and United States Environmental Protection Agency (EPA) modeling guidance as further described in this document.

## 1.2 FACILITY DESCRIPTION

Columbia Steel manufactures a wide variety of steel and iron parts for basic industry. Products include replacement parts for high-wear applications, such as those that take abuse from abrasion, impact, or heat in rock crushers, grinding mills, mine shovels and draglines, electric power plants, cement plants, and metal and waste recycling shredders.

Columbia Steel's facility is approximately 87 acres and is located near the St. Johns neighborhood and the Columbia Slough wetlands. The facility is located at Universal Transverse Mercator (UTM) coordinates of 521141 m Easting, 5049576 m Northing, in Zone 10, on the North American Datum of 1983 (NAD83). The facility elevation is about 11 m above sea level.

An overview of the facility, illustrating the location of the facility within the surrounding neighborhood, is shown in Figure 1. A figure limited to the immediate area surrounding the facility, showing the facility boundary in more detail, is shown in Figure 2.

# 2. SITE DESCRIPTION

## 2.1 TOXIC EMISSION UNITS AND STACK PARAMETERS

Toxic emission units (TEUs) present at Columbia Steel may be characterized into four categories: baghouses, roof vents, fugitives (e.g., chemical usage), and natural gas combustion. All TEUs operate during the facility's normal operations.

The risk assessment procedures in OAR 340-245-0050(5) require that the risk from toxic air contaminants emitted from natural gas combustion be calculated and reported in the risk assessment. However, the risk from natural gas combustion is reported separately from the risk from all other toxic air contaminant emissions. Additionally, the risk from toxic air contaminants emitted solely from the combustion of natural gas may be excluded from the total risk for the purposes of determining compliance with the risk action levels (RALs) and may be omitted from any requirements determined under a risk reduction plan if good air pollution control practices are followed. In accordance with these sections of the CAO regulations, the parameters and emission rates associated with the natural gas sources are included in this modeling protocol and work plan, and the TEUs combusting natural gas will be modeled. Their emission rates and stack parameters are therefore included below. However, the risk resulting from natural gas combustion will not be included in the total risk compared to the RALs nor included in any requirements under a risk reduction plan, should that be necessary.

### 2.1.1 POINT SOURCE RELEASES (BAGHOUSES AND ROOF VENTS)

There are currently 19 operating baghouses at the Columbia Steel facility, including one rotoclone control device. These TEUs will be modeled as point sources. Most of the baghouses exhaust vertically; however, baghouses 7 and 19 exhaust horizontally and will be modeled as point horizontal sources. The baghouses are assumed to exhaust at ambient temperature. Stack height and diameter parameters are based on information provided by Columbia Steel.

Emissions from units and activities inside Building 8 and Building 11 are exhausted through vents in each of the roofs of those two buildings. There are five active vents present in the roof of Building 8 and nine active vents present in the roof of Building 11. The vents are presumed to have a release height of one foot greater than the local roof height and to exhaust at ambient temperature. Stack diameters and exhaust velocities are based on information provided by Columbia Steel.

The source descriptions, model identifications, orientations, and stack parameters for the point sources that do not combust natural gas are shown in Table 1.

**Table 1. Source IDs, Description, and Stack Parameters for Point Sources Excluding Natural Gas Emissions**

| Model ID | Source Description | UTM Easting (m) | UTM Northing (m) | Base Elevation (m) | Orientation | Stack Height (m) | Exhaust Temperature | Release Velocity (m/s) | Stack Diameter (m) |
|---|---|---|---|---|---|---|---|---|---|
| BH1 | Baghouse 1 | 521153.0 | 5049643.5 | 11.3 | Vertical | 13.51 | Ambient | 18.047 | 1.168 |
| BH2 | Baghouse 2 | 521159.4 | 5049640.3 | 11.3 | Vertical | 14.94 | Ambient | 14.149 | 1.181 |
| BH3 | Baghouse 3 | 521166.3 | 5049428.1 | 11.5 | Vertical | 12.55 | Ambient | 13.340 | 1.219 |
| BH4 | Baghouse 4 | 521107.2 | 5049636.1 | 11.3 | Vertical | 9.70 | Ambient | 4.279 | 0.711 |
| BH5 | Baghouse 5 | 521168.5 | 5049420.0 | 11.5 | Vertical | 14.48 | Ambient | 12.461 | 1.067 |
| BH6 | Baghouse 6 | 521109.3 | 5049596.8 | 11.3 | Vertical | 12.80 | Ambient | 9.504 | 1.067 |
| BH7 | Baghouse 7 | 520850.3 | 5049822.3 | 9.1 | Horizontal | 8.79 | Ambient | 27.093 | 0.596 |
| BH8 | Baghouse 8 | 521111.4 | 5049680.7 | 10.8 | Vertical | 12.19 | Ambient | 17.701 | 1.372 |
| BH9 | Baghouse 9 | 521041.7 | 5049630.2 | 11.0 | Vertical | 12.19 | Ambient | 9.096 | 0.406 |
| BH10 | Baghouse 10 | 520856.1 | 5049820.1 | 9.1 | Vertical | 15.54 | Ambient | 7.568 | 1.016 |
| BH15 | Baghouse 15 | 521112.6 | 5049464.2 | 11.3 | Vertical | 8.76 | Ambient | 7.838 | 1.676 |
| BH16 | Baghouse 16 | 520735.6 | 5049852.2 | 9.1 | Vertical | 9.07 | Ambient | 6.686 | 0.782 |
| BH17 | Baghouse 17 | 521172.8 | 5049423.0 | 11.5 | Vertical | 14.48 | Ambient | 12.461 | 1.067 |
| RC18 | Rotoclone 18 | 521055.3 | 5049578.6 | 11.0 | Vertical | 5.36 | Ambient | 35.934 | 0.457 |
| BH19 | Baghouse 19 | 520733.4 | 5049845.7 | 9.1 | Horizontal | 10.77 | Ambient | 16.546 | 0.525 |
| BH20 | Baghouse 20 | 521028.2 | 5049595.7 | 12.2 | Vertical | 12.93 | Ambient | 8.845 | 0.864 |
| BH22 | Baghouse 22 | 521171.7 | 5049458.6 | 11.3 | Vertical | 8.33 | Ambient | 16.736 | 0.406 |
| BH24 | Baghouse 24 | 520738.1 | 5049858.1 | 9.1 | Vertical | 6.40 | Ambient | 6.613 | 0.660 |
| BH26 | Baghouse 26 | 521112.1 | 5049471.1 | 11.3 | Vertical | 8.79 | Ambient | 15.523 | 0.762 |
| VENT11_1 | Vent on Building 11 roof | 521137.1 | 5049618.0 | 11.3 | Vertical | 14.15 | Ambient | 8.793 | 1.676 |
| VENT11_2 | Vent on Building 11 roof | 521127.8 | 5049611.6 | 11.3 | Vertical | 12.68 | Ambient | 8.793 | 1.676 |

| Model ID | Source Description | UTM Easting (m) | UTM Northing (m) | Base Elevation (m) | Orientation | Stack Height (m) | Exhaust Temperature | Release Velocity (m/s) | Stack Diameter (m) |
|---|---|---|---|---|---|---|---|---|---|
| VENT11_3 | Vent on Building 11 roof | 521121.1 | 5049581.6 | 11.3 | Vertical | 11.23 | Ambient | 8.793 | 1.676 |
| VENT11_4 | Vent on Building 11 roof | 521140.6 | 5049576.1 | 11.3 | Vertical | 13.78 | Ambient | 8.793 | 1.676 |
| VENT11_5 | Vent on Building 11 roof | 521138.5 | 5049551.8 | 11.3 | Vertical | 14.15 | Ambient | 8.793 | 1.676 |
| VENT11_6 | Vent on Building 11 roof | 521138.2 | 5049521.1 | 11.3 | Vertical | 14.15 | Ambient | 8.793 | 1.676 |
| VENT11_7 | Vent on Building 11 roof | 521137.6 | 5049490.6 | 11.3 | Vertical | 14.15 | Ambient | 8.793 | 1.676 |
| VENT11_8 | Vent on Building 11 roof | 521121.9 | 5049471.7 | 11.3 | Vertical | 11.23 | Ambient | 8.793 | 1.676 |
| VENT11_9 | Vent on Building 11 roof | 521138.1 | 5049453.8 | 11.3 | Vertical | 14.15 | Ambient | 8.793 | 1.676 |
| VENT8_1 | Vent on Building 8 roof | 521039.9 | 5049552.0 | 12.2 | Vertical | 10.97 | Ambient | 7.161 | 0.762 |
| VENT8_2 | Vent on Building 8 roof | 521046.4 | 5049560.9 | 12.2 | Vertical | 8.90 | Ambient | 7.161 | 0.762 |
| VENT8_3 | Vent on Building 8 roof | 521040.2 | 5049565.6 | 12.2 | Vertical | 10.45 | Ambient | 7.161 | 0.762 |
| VENT8_4 | Vent on Building 8 roof | 521046.4 | 5049565.5 | 12.2 | Vertical | 8.90 | Ambient | 7.161 | 0.762 |
| VENT8_5 | Vent on Building 8 roof | 521046.4 | 5049571.1 | 12.2 | Vertical | 8.90 | Ambient | 7.161 | 0.762 |

### 2.1.2 FUGITIVE RELEASES

In addition to the stack emissions, there are emissions at Columbia Steel that are not associated with a point release. Activities generating these emissions include welding and the use of solvents, resins, coating, and other substances containing volatile organic compounds. These activities occur in Buildings 1, 5, 7, and 15.

Emissions associated with the use of these materials will be modeled as volume sources. The volume sources will be modeled with a horizontal dimension based on the equivalent diameter of the area of the building in which the fugitives are emitted. The initial horizontal dimension input into the model is this equivalent diameter divided by 4.3 as the TEUs are single volume sources. The initial vertical dimension input into the model is set equal to the building height, divided by 2.15, as appropriate for surface-based TEUs or elevated TEUs on or adjacent to a building. Release height of the fugitive TEUs will be set to one-half of the building height in which they are contained. For Building 7, some fugitive-producing materials are used only in the north half of the building while other substances are characterized as being used throughout the building, so two sources will be used to characterize the Building 7 fugitive emissions.

The source descriptions, model identifications, and volume parameters for the fugitive TEUs are shown in Table 2.

**Table 2. Source IDs, Description, and Release Parameters for Volume Sources**

| Model ID | Source Description | UTM Easting (m) | UTM Northing (m) | Base Elevation (m) | Release Height (m) | Initial Horizontal Dimension (m) | Initial Vertical Dimension (m) |
|---|---|---|---|---|---|---|---|
| FUG01 | Fugitives associated with activities in Building 1 | 520808.3 | 5049825.0 | 9.1 | 4.96 | 18.31 | 4.609 |
| FUG05 | Fugitives associated with activities in Building 5 | 521067.2 | 5049635.8 | 10.9 | 2.59 | 5.20 | 2.409 |
| FUG07 | Fugitives associated with activities throughout Building 7 | 521071.0 | 5049560.1 | 11.0 | 3.74 | 8.75 | 3.474 |
| FUG07N | Fugitives associated with activities in north half of Building 7 | 521070.3 | 5049568.9 | 11.0 | 3.74 | 5.56 | 3.474 |
| FUG15 | Fugitives associated with activities in Building 15 | 521336.2 | 5049411.4 | 12.0 | 6.71 | 20.81 | 6.237 |

### 2.1.3 NATURAL GAS COMBUSTION UNITS

Columbia Steel also operates several sources that solely combust natural gas. Of these sources, some are ladle heaters that have no discrete effluent pathway, but instead exhaust into the interior of Building 11. Emissions from these units will be treated as a volume source based on the dimensions of Building 11.

The other natural gas combusting sources consist of ovens associated with their own stacks emitting to the atmosphere. These sources are represented as point sources in the modeling. Some ovens have two stacks; in these cases, the sources are modeled with two stacks, identified with "A" and "B" suffixes. Stack diameters, release heights, and exhaust temperatures are based on information provided by Columbia Steel. Exhaust velocities from these units were not able to be measured and therefore are based on engineering estimates.

The source descriptions, model identifications, orientations, and stack parameters for the sources that combust natural gas are shown in Table 3.

**Table 3. Source IDs, Description, and Stack/Release Parameters for Natural Gas Combustion Units**

| Model ID | Source Description | UTM Easting (m) | UTM Northing (m) | Base Elevation (m) | Orientation | Stack Height (m) | Exhaust Temperature (K) | Release Velocity (m/s) | Stack Diameter (m) |
|---|---|---|---|---|---|---|---|---|---|
| OVEN102 | Oven 102 | 521360.3 | 5049452.1 | 12.0 | Vertical, Capped | 14.68 | 305 | 11.64 | 1.463 |
| OVEN1_A | Oven 1 | 521114.7 | 5049489.6 | 11.3 | Vertical, Capped | 10.95 | 305 | 11.64 | 0.610 |
| OVEN1_B | | 521114.6 | 5049494.0 | 11.3 | Vertical, Capped | 10.95 | 305 | 11.64 | 0.610 |
| OVEN2_A | Oven 2 | 521114.6 | 5049495.6 | 11.3 | Vertical, Capped | 11.41 | 478 | 11.64 | 0.610 |
| OVEN2_B | | 521114.6 | 5049500.3 | 11.3 | Vertical, Capped | 11.41 | 478 | 11.64 | 0.610 |
| OVEN3_A | Oven 3 | 521114.5 | 5049569.0 | 11.3 | Vertical, Capped | 11.00 | 361 | 11.64 | 0.610 |
| OVEN3_B | | 521114.4 | 5049573.4 | 11.3 | Vertical, Capped | 11.00 | 361 | 11.64 | 0.610 |
| OVEN4_A | Oven 4 | 521114.3 | 5049575.0 | 11.3 | Vertical, Capped | 11.28 | 375 | 11.64 | 0.508 |
| OVEN4_B | | 521114.2 | 5049579.5 | 11.3 | Vertical, Capped | 11.28 | 375 | 11.64 | 0.508 |
| OVEN5_A | Oven 5 | 521114.6 | 5049502.5 | 11.3 | Vertical, Capped | 11.38 | 344 | 11.64 | 0.610 |
| OVEN5_B | | 521114.5 | 5049505.7 | 11.3 | Vertical, Capped | 11.38 | 344 | 11.64 | 0.610 |
| OVEN6_A | Oven 6 | 521114.6 | 5049507.9 | 11.3 | Vertical, Capped | 11.38 | 344 | 11.64 | 0.610 |
| OVEN6_B | | 521114.5 | 5049511.9 | 11.3 | Vertical, Capped | 11.38 | 344 | 11.64 | 0.610 |
| OVEN10_A | Oven 10 | 520853.4 | 5049816.5 | 9.1 | Vertical, Capped | 12.60 | 333 | 11.64 | 0.508 |

| Model ID | Source Description | UTM Easting (m) | UTM Northing (m) | Base Elevation (m) | Orientation | Stack Height (m) | Exhaust Temperature (K) | Release Velocity (m/s) | Stack Diameter (m) |
|---|---|---|---|---|---|---|---|---|---|
| OVEN10_B | | 520850.2 | 5049816.6 | 9.1 | Vertical, Capped | 12.60 | 333 | 11.64 | 0.508 |
| OVEN12_A | Oven 12 | 520835.4 | 5049821.8 | 9.1 | Vertical, Capped | 12.60 | 333 | 11.64 | 0.508 |
| OVEN12_B | | 520832.1 | 5049821.7 | 9.1 | Vertical, Capped | 12.60 | 333 | 11.64 | 0.508 |
| OVEN13_A | Oven 13 | 520829.0 | 5049823.5 | 9.1 | Vertical, Capped | 12.60 | 503 | 11.64 | 0.508 |
| OVEN13_B | | 520826.0 | 5049823.2 | 9.1 | Vertical, Capped | 12.60 | 503 | 11.64 | 0.508 |
| OVEN14 | Oven 14.5 | 520811.1 | 5049829.0 | 9.1 | Vertical, Capped | 11.87 | 333 | 11.64 | 0.076 |
| OVEN18_A | Oven 18 | 520799.2 | 5049831.4 | 9.1 | Vertical, Capped | 12.40 | 366 | 11.64 | 0.406 |
| OVEN18_B | | 520794.9 | 5049832.6 | 9.1 | Vertical, Capped | 12.40 | 366 | 11.64 | 0.406 |
| OVEN20_A | Oven 20 | 520788.4 | 5049833.4 | 9.1 | Vertical, Capped | 12.04 | 333 | 11.64 | 0.406 |
| OVEN20_B | | 520783.0 | 5049834.8 | 9.1 | Vertical, Capped | 12.04 | 333 | 11.64 | 0.406 |
| OVEN21 | Oven 21 | 520779.2 | 5049837.3 | 9.1 | Vertical, Capped | 11.94 | 503 | 11.64 | 0.559 |
| CORE1 | Core Oven 1 | 521062.2 | 5049629.0 | 10.9 | Vertical, Capped | 6.42 | 389 | 11.64 | 0.356 |
| CORE2 | Core Oven 2 | 521064.7 | 5049629.1 | 10.9 | Vertical, Capped | 6.42 | 389 | 11.64 | 0.356 |
| CORE3 | Core Oven 3 | 521068.9 | 5049629.0 | 10.9 | Vertical, Capped | 6.42 | 389 | 11.64 | 0.356 |
| Model ID | Source Description | UTM Easting (m) | UTM Northing (m) | Base Elevation (m) | | Release Height (m) | Initial Horizontal Dimension (m) | Initial Vertical Dimension (m) | |
| LADLE1-3 | Ladles in Building 11 | 521139.6 | 5049551.9 | 11.3 | | 6.94 | 32.92 | 6.45 | |

Figure 3 is a map indicating the location of the emission points and fugitive sources at the facility that do not combust natural gas. Figure 4 is a map indicating the location of the natural gas combustion units.

## 2.2 EMISSION RATES

Emission rates for each TEU and toxic air contaminant (TAC) are shown in Appendix A: Emissions Rates and REER Calculations.

Emission rates shown in Appendix A for the acute represent maximum emissions from each TEU over a daily (i.e., 24-hour) period. Emission rates shown in Appendix A for chronic cancer and chronic non-cancer represent the maximum emissions from each TEU over an annual period. Conversions to the Risk-Equivalent Emission Rate (REER) are also shown for each TEU and TAC in Appendix A: Emissions Rates and REER Calculations.

The air toxics emission inventory submitted by Columbia Steel includes detailed information and calculations on how the emission rates were developed. Emission factor references are noted within the inventory forms. Throughputs are provided for 2020 actual operations, requested potential to emit (PTE), and capacity, which is based on the facility plant site emission limits (PSELs). Columbia Steel has presented a requested PTE that is less than the capacity for most TEUs. Emission rates are presented for both annual emissions (pounds per year) and daily emissions (pounds per 24-hours). Daily emissions were conservatively calculated by assuming the facility operates 260 days per year (i.e., 5 days per week) for most TEUs and activities.

## 2.3 BUILDING LOCATION AND HEIGHTS

The effects of plume downwash will be considered for all stationary point sources. Direction-specific building dimensions will be calculated using the current version of the EPA-approved Building Profile Input Program (BPIPPRM version 04274).

Figure 5 is a map indicating the buildings (20 in total) to be modeled in the downwash analysis. In addition, a review of the baghouses indicates that many baghouses have structures about them that may generate downwash. There are 14 of these structures. Therefore, 34 structures in total will be included in the downwash analysis.

Several buildings at Columbia Steel have slightly sloped roofs. Most of these buildings will be modeled as having a flat roof, with roof height equal to the actual peak height of the roof. The exceptions are Building 8 and Building 11, which as discussed in Section 2.1 have roof vents which serve as TEUs. These buildings will be modeled as having tiered roofs. In addition, Building 1 and Building 18 have more complex roof shapes so the modeling of those buildings will also incorporate different tiers.

A list of the structures, base elevations, and roof heights is presented in Table 4. Roof heights were provided by the facility.

**Table 4. Base Elevations and Roof Heights of Structures Modeled for Downwash**

| Structure | Base Elevation (m) | Roof Height Above Ground (m) |
|---|---|---|
| Building 1 | 9.1 | Tiers at 8.23, 9.91, 11.28 m |

| Structure | Base Elevation (m) | Roof Height Above Ground (m) |
|---|---|---|
| Building 2 | 9.6 | 10.36 |
| Building 3 | 8.0 | 11.28 |
| Building 4 | 11.1 | 8.53 |
| Building 5 | 10.9 | 5.18 |
| Building 6 | 11.0 | 6.86 |
| Building 7 | 11.0 | 7.47 |
| Building 8 | 12.2 | Tiers ranging from 8.08 to 10.67 m |
| Building 9 | 11.3 | 9.45 |
| Building 10 | 11.5 | 3.66 |
| Building 11 | 11.3 | Tiers ranging from 9.30 to 13.87 m |
| Building 13 | 11.7 | 6.91 |
| Building 14 | 12.0 | 6.86 |
| Building 15 | 12.0 | 13.41 |
| Building 16 | 11.3 | 3.73 |
| Building 17 | 11.7 | 6.10 |
| Building 18 | 11.6 | Tiers at 5.18, 6.40, 8.23, 11.58 m |
| Building 19 | 11.0 | 5.79 |
| Building 20 | 11.0 | 5.49 |
| Building 21 | 11.4 | 5.41 |
| Baghouse 7 and 10 Structure | 9.1 | 15.54 |
| Baghouse 16, 19, 24 Structure | 8.9 | 10.77 |
| Baghouse 9 Structure | 11.1 | 12.19 |
| Baghouse 20 Structure | 12.2 | 12.93 |
| Baghouse 18 Structure | 10.8 | 5.36 |
| Baghouse 11, 12, 13 Structure | 10.9 | 10.52 |
| Baghouse 15 Structure | 11.1 | 8.76 |
| Baghouse 22 Structure | 11.5 | 8.33 |
| Baghouse 3, 5, 17 Structure | 11.5 | 14.48 |
| Baghouse 8 Structure | 10.8 | 12.19 |
| Baghouse 1 Structure | 11.3 | 13.51 |
| Baghouse 2 Structure | 11.0 | 14.94 |
| Baghouse 6 Structure | 10.6 | 12.80 |
| Baghouse 4 Structure | 10.8 | 9.70 |

# 3. MODEL SELECTION AND INPUTS

## 3.1 MODEL SELECTION

SLR will use the latest version of the AERMOD modeling system, and its associated pre-processors, approved for regulatory use, to complete the modeling analysis. Currently, the specific models and versions are:

- AERMOD version 21112
- AERMET version 21112
- AERSURFACE version 20060
- AERMINUTE version 15272
- AERMAP version 18081
- BPIPPRM version 04274

AERMOD will be set to its default options except that the urban option will be invoked as discussed in 3.7.

## 3.2 UTM COORDINATE SYSTEM

The Portland metropolitan area is located in UTM Zone 10. All emission points, buildings, and receptor locations will be converted to UTM coordinates in Zone 10, NAD83.

## 3.3 METEOROLOGICAL DATA

The surface data to be used in the analysis will be five complete years of data collected at the Portland International Airport (call sign KPDX), located at 43.596°N, 122.609°W, which is approximately 9 km east of the project site. The meteorological sensors at KPDX are Automated Surface Observing System (ASOS)[1], which collects 1-minute data for use in the analysis. Upper air data from McNary Field in Salem, Oregon (call sign KSLE, 44.92°N, 123.02°W) will also be used, which is approximately 80 km south-southwest of the project site. The period of meteorological data to be used is January 1, 2015 to December 31, 2019.

Review of the data and topography at both the facility and KPDX indicates the KPDX data are temporally and spatially representative of the project location and areas of concern. The KPDX station is fewer than 10 km from the facility. Both the facility and KPDX are situated in the City of Portland and have similar land use profiles, with developed land to the south of both the facility and the airport while the Columbia River is the most prominent topographical feature to the north of both the facility and KPDX.

The most-recent version of AERMET will be used to process surface meteorological data from KPDX and upper-air data from KSLE. Additionally, AERMINUTE will be used to incorporate 1-minute surface wind data from KPDX when available.[2]

[1] https://www.faa.gov/air_traffic/weather/asos/?state=OR

[2] One-minute data at KPDX were not available for the months of April 2018 through July 2018, inclusive. As the use of AERSURFACE data is optional and the KPDX data were found to be temporally and spatially representative of the project area, the meteorological

ASOS stations do not collect atmospheric turbulence data. As a result, these data meet the criteria for the use of the ADJ_U* model option. The ADJ_U* option will be invoked in the meteorological data processing.

A topographic map with both the project site and the location of the ASOS instruments is provided in Figure 6. A windrose of the meteorological data is provided in Figure 7. AERMET inputs and data completeness information for the wind speed, wind direction, temperature, and cloud cover data for each quarter of the five-year period is shown in Appendix B. The minimum data capture using these datasets is 95%, exceeding the 90% requirement.

## 3.4 LAND COVER ANALYSIS

A land cover analysis will also be conducted to define the surface characteristics (surface albedo, Bowen ratio, and surface roughness length) for input into stage 3 of AERMET. The EPA-provided AERSURFACE program (version 20060) will be run with 2016 National Land Cover data and accompanying canopy data and impervious surface data to generate surface characteristics for the area surrounding the meteorological site. As the meteorological period of study runs for 2015 to 2019, and the data selected for the land cover analysis are from 2016, the chosen land use data will be representative of conditions existing during the study period.

AERSURFACE inputs are listed in Table 5 below. Selection of surface moisture conditions for each month is shown in Appendix B. Plots showing the land use around the facility and KPDX are presented in Figure 8 and Figure 9, respectively.

**Table 5. AERSURFACE Parameters**

| Parameter | Value |
|---|---|
| Surface roughness study radius | 1 km |
| Bowen ratio and albedo study region | 10 km by 10 km |
| Vary roughness, albedo, Bowen ratio by radius? | Yes, 12 sectors, 30 degrees each in width |
| Seasonal resolution | Summer: June July, August<br>Autumn: September, October, November<br>Winter: December, January, February<br>Spring: March, April, May |
| Continuous Snow Cover most of the winter? | No |
| Is the site near an airport? | Yes |
| Is the site in an arid region? | No |
| Surface Moisture | To be determined month by month. See Appendix B |

data was processed using the 1-minute AERSURFACE data for the 56 months of the 60-month period where it was available. Meteorological data were processed without 1-minute AERSURFACE inputs for April 2018 through July 2018.

## 3.5 DOMAIN AND RECEPTOR GRIDS

### 3.5.1 RECEPTOR GRIDS

A nested Cartesian receptor grid will be generated and used to calculate risk factor scores resulting from emissions from Columbia Steel. Placement of the receptors will follow DEQ guidance[3]:

- 25 m receptor spacing along facility boundary and out to 200 m from facility
- 50 m receptor spacing from 200 to 1,000 m
- 100 m spacing from 1,000 to 2,000 m
- 200 m spacing from 2,000 to 5,000 m
- 500 m spacing from 5,000 to 10,000 m

The inner receptors (boundary, 25m gridded, and 50m gridded) are shown in Figure 10. The outer receptors (100m, 250m, and 500m gridded) are shown in Figure 11.

The area within 1 km of the facility boundary was reviewed for any sensitive receptors. Four sensitive receptors were identified:

- Veronica's Daycare, located at 7014 N Swift St,
- Christ Gospel Church, located at 6265 N Columbia Way,
- George Middle School, located at 10000 N Burr Ave, and
- Clarendon School, located at 9325 N Van Houten Ave.

Receptors will be placed at these four locations as discussed in the next section.

If modeling results obtained with the grid outlined above reveal the presence of any "hot spots", defined regions with a risk of greater than 0.5 outside of the continuous region of risk greater than 0.5, then an additional grid of receptors spaced every 25 m will be placed on the hotspot.

### 3.5.2 ASSIGNMENT OF RECEPTORS TO EXPOSURE LOCATION TYPES

An additional requirement of CAO modeling exercises is the assignment of receptors to exposure location types. The assignment is necessary as the risk scores calculated under CAO are dependent on the type of use present at a particular receptor. The four exposure types are residential, non-resident child, non-resident worker, and acute. The CAO rule defines chronic exposure locations as "an exposure location outside the boundary of a source being modeled for annual average concentrations of a toxic air contaminant" and an acute exposure location as "an exposure location outside the boundary of a source being modeled for daily average concentrations of a toxic air contaminant, and that is (a) a chronic exposure location, or (b) a location where people may spend several hours of one day."[4] Receptors that are assigned a chronic exposure scenario (non-resident child, non-resident worker, or residential) are also

[3] DEQ Air Quality Division Technical Services, "Recommended Procedures for Air Quality Dispersion Modeling", April 2020.
[4] OAR 340-245-0030(4) and (11).

treated as acute exposure locations; however, some acute exposure locations do not have a chronic exposure scenario.

Two zoning datasets were used to assign the exposure type:

1. State-level: the Oregon Administrative Boundary Standard zoning extension; and
2. City-level: the City of Portland zoning map.

In addition to these datasets, SLR also reviewed aerial imagery and publicly available maps to determine the location of schools, churches, daycares, and youth centers in the vicinity of the facility. SLR also reviewed maps from the Oregon Department of Transportation since the facility is adjacent to an active rail line. The processing steps for each of these evaluations is described in more detail below.

All receptors generated on the nested Cartesian grid described in 3.5.1 were assigned an exposure type as described below.

#### 3.5.2.1 State-level Zoning Data

Since the coverage of the modeling domain extends beyond the data coverage of the City of Portland's zoning, the state-level database was used as the first step to assign exposure types to all receptors. The receptors were overlayed onto the state's zoning database in order to determine the exposure type for each receptor.

The state-level zones within the modeling domain, along with the assigned exposure type, are provided in Table 6. The assigned exposure types follow the Oregon DEQ's Cleaner Air Oregon State Zoning to Exposure Location Crosswalk guidance[5]. Review of this guidance indicates a single, recommended exposure type for all zoning categories except for the following that are within the modeling domain: Exclusive Farm Use 80 and Public and Semi-public Uses. For these two categories, it is recommended that additional information is reviewed in order to determine residence, worker locations, or schools and churches.

**Table 6. Crosswalk of State-level Zoning to Assigned Exposure Type**

| orZCode | orZDesc | Assigned Exposure Type |
|---|---|---|
| HDR | High-density Res. | Residential |
| LDR | Low-density Res. | Residential |
| MDR | Medium-density Res. | Residential |
| MLDR | Medium Low-density Res. | Residential |
| MUREH | Mixed-Use Com. & Res. Extremely High | Residential |
| MURH | Mixed-Use Com. & Res. High | Residential |
| MURL | Mixed-Use Com. & Res. Low | Residential |
| MURM | Mixed-Use Com. & Res. Medium | Residential |
| MURMH | Mixed-Use Com. & Res. Med-high | Residential |
| MURVH | Mixed-Use Com. & Res. V.High | Residential |

[5]https://www.oregon.gov/geo/standards/Zoning%20Extension%20to%20Administrative%20Boundaries%20Standard%20v1.0.pdf

| orZCode | orZDesc | Assigned Exposure Type |
|---|---|---|
| RR1 | Rural Residential 1 acre | Residential |
| RR10 | Rural Residential 10 acres | Residential |
| VHDR | Very High-density Res. | Residential |
| VLDR | Very Low-density Res. | Residential |
| EFU80 | Exclusive Farm Use 80 | Residential |
| CC | Commercial - Central | Non-resident adult |
| CG | Commercial - General | Non-resident adult |
| CN | Commercial - Neighborhood | Non-resident adult |
| CO | Commercial - Office | Non-resident adult |
| IC | Industrial Campus | Non-resident adult |
| IH | Industrial - Heavy | Non-resident adult |
| IL | Industrial - Light | Non-resident adult |
| IO | Industrial Office | Non-resident adult |
| RC | Rural Commercial | Non-resident adult |
| PF | Public & semi-public Uses | Non-resident child |
| PF80 | Prime Forest 80 | Acute only |
| POS | Parks & Open Space | Acute only |
| n/a | State of Washington | Excluded |

The state-level zoning, grouped into the four relevant exposure categories, within the modeling domain is provided in Figure 12. Review of Figure 12 indicates small areas of Public and Semi-public uses in the southwestern corner of the domain. Given their proximity to residential locations, these were assigned non-resident child exposure locations in an effort to be conservative.

Figure 12 also displays large areas of Exclusive Farm Use 80 in the northwestern quadrant of the modeling domain. Although much of this area consists of undeveloped land and fields, a few farmhouses appear to be present in the area. Therefore, this area was assigned a residential exposure location in an effort to be conservative.

All receptors that fall within the State of Washington were categorized as excluded.

#### 3.5.2.2 City of Portland Zoning Data

A similar methodology was applied to the receptors that fell within the City of Portland zoning dataset. The descriptions of the zones were reviewed to generate a crosswalk between zoning type and exposure type as shown in Table 7. Generally, any category that could have residential buildings was assigned a residential exposure type. The city-level zoning, grouped into the four relevant exposure categories, within the modeling domain is provided in Figure 13.

For those receptors that fall within the extents of both zoning datasets, differences in zones between the two datasets were noted at some locations. The receptors with differences in the near vicinity of the

facility are illustrated in Figure 14. In Figure 14, the background zones are based on the state-level datasets with the color-coding of the receptors based on the City of Portland zoning. The differences in the colors denote the difference in zoning classification. The areas with differences are annotated. The City of Portland data was used in the assignment of exposure type for these receptors.

**Table 7. Crosswalk of City of Portland Zoning to Assigned Exposure Type**

| ZONE | ZONE_DESC | Assigned Exposure Type |
|---|---|---|
| CM1 | Commercial Mixed Use 1 | Residential |
| CM2 | Commercial Mixed Use 2 | Residential |
| CM3 | Commercial Mixed Use 3 | Residential |
| CR | Commercial Residential | Residential |
| CX | Central Commercial | Residential |
| EX | Central Employment | Residential |
| IR | Institutional Residential | Residential |
| R1 | Residential 1,000 | Residential |
| R10 | Residential 10,000 | Residential |
| R2 | Residential 2,000 | Residential |
| R2.5 | Residential 2,500 | Residential |
| R20 | Residential 20,000 | Residential |
| R3 | Residential 3,000 | Residential |
| R5 | Residential 5,000 | Residential |
| R7 | Residential 7,000 | Residential |
| RF | Residential Farm / Forest | Residential |
| RH | High Density Residential | Residential |
| RM1 | Residential Multi-Dwelling 1 | Residential |
| RM2 | Residential Multi-Dwelling 2 | Residential |
| RM3 | Residential Multi-Dwelling 3 | Residential |
| RM4 | Residential Multi-Dwelling 4 | Residential |
| RMP | Residential Manufactured Dwelling Park | Residential |
| RX | Central Residential | Residential |
| CE | Commercial Employment | Non-resident adult |
| EG1 | General Employment 1 | Non-resident adult |
| EG2 | General Employment 2 | Non-resident adult |
| IG1 | General Industrial 1 | Non-resident adult |
| IG2 | General Industrial 2 | Non-resident adult |
| IH | Heavy Industrial | Non-resident adult |
| CI1 | Campus Institutional 1 | Non-resident child |
| CI2 | Campus Institutional 2 | Non-resident child |

| ZONE | ZONE_DESC | Assigned Exposure Type |
|---|---|---|
| MC | County Zoning - Multnomah | Acute only |
| OS | Open Space | Acute only |
| WC | County Zoning - Washington | Acute only |

#### 3.5.2.3 Analysis of Aerial Imagery and Public Information

In order to ensure the receptors in the vicinity of the facility were properly classified, additional analyses of aerial imagery and public data information were also undertaken. This involved reviewing available information to determine the location of nearby schools, daycares, youth clinics, and churches where children may assemble on a regular basis. This information is provided in Figure 15, where receptors that fall within these areas were classified as non-resident child. An additional receptor was also placed at the following locations:

- Veronica's Daycare, located at 7014 N Swift St.;
- Christ Gospel Church, located at 6265 N Columbia Way;
- George Middle School, located at 10000 N Burr Ave.; and
- Clarendon School, located at 9325 N Van Houten Ave.

#### 3.5.2.4 Receptor Exclusion

The area immediately to the south and southeast of the facility is bounded by N Junction St and a rail line. DEQ guidance notes, "There may be places where it is not appropriate for risk to be evaluated for any of the exposure location types. This includes roadways and railroads." It is not expected that people would spend several hours of a day along either N Junction St or the rail line so as to meet the definition of an acute exposure location. Therefore, receptors falling into these locations, as shown in Figure 16, will not be considered exposure locations.

Note that there is a rail yard to the southwest of the facility. In contrast to the rail line, where activity is expected to be the transient passage of trains, activity in the rail yard is expected to include maintenance, assembly, and disassembly of trains such that workers may be spending several hours each day in the area. Therefore, the rail yard to the southwest of the facility will be treated as a potential exposure location.

#### 3.5.2.5 Final Assigned Exposure Type

As detailed above, the assignment of exposure types for each receptor is a multistep process. This process included:

- Initially assign exposure type based on state-level zoning data for all receptors.
- For those receptors that fall within the City of Portland zoning layer, reassign exposure type based on City of Portland data.
- Review aerial imagery and public information to reassign select receptors that fall within the footprint of schools, daycares, youth clinics, and churches. Note that four additional discrete receptors were placed at the aforementioned sensitive receptors.

- Reassign receptors located on the rail line adjacent to the facility so that risk is not calculated.

Color-symbolized illustrations of the final exposure types with varying resolutions and backgrounds are provided in Figure 17 through Figure 20.

### 3.5.3 TERRAIN PROCESSING

In order to obtain the elevations and scale heights of the receptors, AERMAP (version 18081) will be used. Terrain data obtained from the National Elevation Dataset (NED) will be used as the input. The NED data will be at a 1/3 arcsecond resolution, which translates into a resolution of approximately 10 meter spacing for the terrain.

## 3.6 DOWNWASH

The effects of plume downwash will be considered for all point sources. Direction-specific building dimensions will be calculated using the current version of the EPA-approved Building Profile Input Program (BPIPPRM, version 04274). The site layout, dimensions, and heights to be used are obtained from building drawings and are discussed in Section 2.3.

The BPIP program also calculates the Good Engineering Practice (GEP) stack height; however, the GEP height is defined as the greater of 65 m or H + 1.5 L, where H is the height of the significant nearby structure and L the lesser of the projected height or width of the nearby structure. Since all point source TEUs at Columbia Steel are less than 65 m in height, the stack heights used at Columbia Steel satisfy GEP requirements.

## 3.7 URBAN/RURAL DETERMINATION

Columbia Steel is situated within the city of Portland, in a strip of industrial land running northwest-southeast along a rail line. A residential neighborhood is located to the immediate south, with the Smith and Bybee wetlands to the immediate north.

The standard method by which to choose whether the urban option should be invoked is to perform an Auer analysis to determine whether 50 percent or greater of land use categories within 3 km of the facility fall into urban categories. However, the *AERMOD Implementation Guide* (EPA 2019) recognizes that "there may be sources located within an urban area but located close enough to a body of water or to other non-urban land use categories to result in a predominately rural land use classification within 3 kilometers of the source following that procedure. Users are therefore cautioned against applying the Land Use Procedure on a source-by-source basis but should also consider the potential for urban heat island influences across the full modeling domain."

Columbia Steel is located within the Portland urbanized area, but the presence of the Smith and Bybee wetlands to its immediate north would result in a rural classification if performing a strict Auer analysis with a 3 km radius. However, consideration of the larger modeling domain indicates land use within the

domain is predominantly urban, with heat island influences expected across the domain. Therefore, the urban option will be invoked for the modeling.

Columbia Steel is located in the Portland–Vancouver–Hillsboro, OR–WA Metropolitan Statistical Area, which has a population of approximately 2.5 million people as of 2019. The population of Portland itself is estimated to be 654,741 as of July 1, 2019.[6] The population value of 650,000 (two significant figures) will be used as input to AERMOD for the variable, P, in equation one (1) of the AERMOD Implementation Guide (EPA, 2019).

[6] https://www2.census.gov/programs-surveys/popest/tables/2010-2019/cities/totals/SUB-IP-EST2019-ANNRES-41.xlsx

# 4. RISK ASSESSMENT WORK PLAN

## 4.1 INTRODUCTION

A Level 3 Risk Assessment will be performed to estimate excess cancer risks and non-cancer health effects due to facility TAC emissions. This Risk Assessment Work Plan (RAWP) provides the information listed in Section 3.2 of the guidance document "Recommended Procedures for Toxic Air Contaminant Health Risk Assessments" (July 2020).

## 4.2 CONCEPTUAL SITE MODEL

The Conceptual Site Model (CSM) includes information regarding emitted facility TACs, a toxicity and exposure pathway assessment for emitted TACs, and exposure locations.

### 4.2.1 TOXIC AIR CONTAMINANT EMISSIONS

A listing of Facility TEUs that do not combust natural gas is provided in Section 2.1.1 and Section 2.1.2. TEUs that combust only natural gas are described in Section 2.1.3. The list of TACs emitted from the facility are provided in Table 8. Individual TAC emission rates from each TEU are provided in Appendix A for TEUs not combusting natural gas, as well as for sources combusting natural gas.

### 4.2.2 EXPOSURE LOCATIONS

Under the CAO program, chronic exposure will be evaluated at residential, non-residential adult (worker), and non-residential child (schools and daycare facilities) locations. Acute exposure will be evaluated at locations outside the facility boundary including areas where people may spend several hours in one day as well as all chronic exposure locations. Sensitive population exposure will also be assessed.

Details regarding the various exposure locations identified from available land use zoning data are provided in Section 3.5.

## 4.3 TOXICITY ASSESSMENT

The emission inventory described in Appendix A indicates that 74 TACs are emitted from the facility. The potential human health risks associated with these TACs will be evaluated in the risk assessment.

The toxicity potential risk associated with hypothetical exposures to each TAC are assessed in a screening-level risk assessment using the Risk-Based Concentrations (RBC) provided in OAR 340-245-8040 Table 4. The RBCs account for both the inhalation and non-inhalation pathways, as applicable to each TAC, as well as early-life exposure adjustment factors. Table 8 lists the RBCs for each emitted TAC.

**Table 8. RBCs for Each Emitted TAC**

| CAS No. or DEQ ID | TAC | Non cancer TBACT RAL | Residential Chronic | | Non-Residential Chronic | | | | Acute |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cancer RBC | Non-cancer RBC | Child Cancer RBC | Child Non-cancer RBC | Worker Cancer RBC | Worker Non-cancer RBC | Non-cancer RBC |
| | | | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) |
| 95-63-6 | 1,2,4-trimethylbenzene | HI3 | | 60 | | 260 | | 260 | |
| 106-99-0 | 1,3-Butadiene | HI3 | 0.033 | 2.0 | 0.86 | 8.8 | 0.40 | 8.8 | 660 |
| 78-93-3 | 2-Butanone (Methyl ethyl ketone) | HI3 | | 5,000 | | 22,000 | | 22,000 | 5,000 |
| 91-57-6 | 2-Methyl naphthalene | -- | -- | -- | -- | -- | -- | -- | -- |
| 56-49-5 | 3-Methylcholanthrene | -- | -- | -- | -- | -- | -- | -- | -- |
| 57-97-6 | 7,12-Dimethylbenz[a]anthracene | -- | -- | -- | -- | -- | -- | -- | -- |
| 83-32-9 | Acenaphthene | -- | -- | -- | -- | -- | -- | -- | -- |
| 208-96-8 | Acenaphthylene | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-07-0 | Acetaldehyde | HI3 | 0.45 | 140 | 12 | 620 | 5.5 | 620 | 470 |
| 67-64-1 | Acetone | HI3 | | 31,000 | | 140,000 | | 140,000 | 62,000 |
| 107-02-8 | Acrolein | HI5 | | 0.35 | | 1.5 | | 1.5 | 6.9 |
| 7429-90-5 | Aluminum and compounds | HI5 | | 5.0 | | 22 | | 22 | |
| 7664-41-7 | Ammonia | HI3 | | 500 | | 2,200 | | 2,200 | 1,200 |
| 120-12-7 | Anthracene | -- | -- | -- | -- | -- | -- | -- | -- |
| 7440-36-0 | Antimony and compounds | HI3 | | 0.30 | | 1.3 | | 1.3 | 1 |
| 7440-38-2 | Arsenic and compounds | HI3 | 2.4E-05 | 0.00017 | 0.0013 | 0.0024 | 0.00062 | 0.0024 | 0.20 |
| 7440-39-3 | Barium and compounds | -- | -- | -- | -- | -- | -- | -- | -- |
| 56-55-3 | Benz[a]anthracene | | 0.00021 | | 0.0078 | | 0.015 | | |
| 71-43-2 | Benzene | HI3 | 0.13 | 3.0 | 3.3 | 13 | 1.5 | 13 | 29 |
| 50-32-8 | Benzo[a]pyrene | HI3 | 4.3E-05 | 0.0020 | 0.0016 | 0.0088 | 0.0030 | 0.0088 | 0.0020 |
| 205-99-2 | Benzo[b]fluoranthene | | 5.3E-05 | | 0.0020 | | 0.0038 | | |

| CAS No. or DEQ ID | TAC | Non cancer TBACT RAL | Residential Chronic | | Non-Residential Chronic | | | | Acute |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cancer RBC | Non-cancer RBC | Child Cancer RBC | Child Non-cancer RBC | Worker Cancer RBC | Worker Non-cancer RBC | Non-cancer RBC |
| | | | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) |
| 191-24-2 | Benzo[g,h,i]perylene | | 0.0047 | | 0.17 | | 0.34 | | |
| 207-08-9 | Benzo[k]fluoranthene | | 0.0014 | | 0.052 | | 0.10 | | |
| 7440-41-7 | Beryllium and compounds | HI3 | 0.00042 | 0.0070 | 0.011 | 0.031 | 0.0050 | 0.031 | 0.020 |
| 85-68-7 | Butyl benzyl phthalate | -- | -- | -- | -- | -- | -- | -- | -- |
| 7440-43-9 | Cadmium and compounds | HI3 | 0.00056 | 0.0050 | 0.014 | 0.037 | 0.0067 | 0.037 | 0.030 |
| 75-15-0 | Carbon Disulfide | HI3 | | 800 | | 3,500 | | 3,500 | 6,200 |
| 74-87-3 | Chloromethane (Methyl chloride) | HI3 | | 90 | | 400 | | 400 | 1,000 |
| 18540-29-9 | Chromium VI, chromate, and dichromate particulate | HI3 | 3.1E-05 | 0.083 | 0.00052 | 0.88 | 0.0010 | 0.88 | 0.30 |
| 218-01-9 | Chrysene | | 0.00043 | | 0.016 | | 0.030 | | |
| 7440-48-4 | Cobalt and compounds | HI3 | | 0.10 | | 0.44 | | 0.44 | |
| 7440-50-8 | Copper and Compounds | HI3 | | | | | | | 100 |
| 74-90-8 | Cyanide, Hydrogen | HI3 | | 0.80 | | 3.5 | | 3.5 | 340 |
| 110-82-7 | Cyclohexane | HI3 | | 6,000 | | 26,000 | | 26,000 | |
| 226-36-8 | Dibenz[a,h]acridine | -- | -- | -- | -- | -- | -- | -- | -- |
| 84-74-2 | Dibutyl phthalate | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-09-2 | Dichloromethane (Methylene chloride) | HI3 | 59 | 600 | 620 | 2,600 | 1,200 | 2,600 | 2,100 |
| 111-77-3 | Diethylene glycol monomethyl ether | -- | -- | -- | -- | -- | -- | -- | -- |
| 100-41-4 | Ethyl benzene | HI3 | 0.40 | 260 | 10 | 1,100 | 4.8 | 1,100 | 22,000 |

| CAS No. or DEQ ID | TAC | Non cancer TBACT RAL | Residential Chronic | | Non-Residential Chronic | | | | Acute |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cancer RBC | Non-cancer RBC | Child Cancer RBC | Child Non-cancer RBC | Worker Cancer RBC | Worker Non-cancer RBC | Non-cancer RBC |
| | | | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) |
| 111-76-2 | Ethylene glycol monobutyl ether | HI3 | | 82 | | 360 | | 360 | 29,000 |
| 206-44-0 | Fluoranthene | | 0.00053 | | 0.020 | | 0.038 | | |
| 86-73-7 | Fluorene | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-00-0 | Formaldehyde | HI3 | 0.17 | 9.0 | 4.3 | 40 | 2.0 | 40 | 49 |
| 110-54-3 | Hexane | HI3 | | 700 | | 3,100 | | 3,100 | |
| 7783-06-4 | Hydrogen Sulfide | HI3 | | 2.0 | | 8.8 | | 8.8 | 98 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | | 0.00061 | | 0.022 | | 0.043 | | |
| 67-63-0 | Isopropyl alcohol | HI3 | | 200 | | 880 | | 880 | 3,200 |
| 7439-92-1 | Lead and compounds | HI3 | | 0.15 | | 0.66 | | 0.66 | 0.15 |
| 7439-96-5 | Manganese and compounds | HI3 | | 0.090 | | 0.40 | | 0.40 | 0.30 |
| 7439-97-6 | Mercury and compounds | HI3 | | 0.077 | | 0.63 | | 0.63 | 0.60 |
| 101-68-8 | Methylene diphenyl diisocyanate (MDI) | HI3 | | 0.080 | | 0.35 | | 0.35 | 12 |
| 1313-27-5 | Molybdenum trioxide | -- | -- | -- | -- | -- | -- | -- | -- |
| 91-20-3 | Naphthalene | HI3 | 0.029 | 3.7 | 0.76 | 16 | 0.35 | 16 | 200 |
| 71-36-3 | n-Butyl alcohol | -- | -- | -- | -- | -- | -- | -- | -- |
| 7440-02-0 | Nickel and compounds | -- | -- | -- | -- | -- | -- | -- | -- |
| 365 | Nickel compounds, insoluble | HI3 | 0.0038 | 0.014 | 0.10 | 0.062 | 0.046 | 0.062 | 0.20 |
| 85-01-8 | Phenanthrene | -- | -- | -- | -- | -- | -- | -- | -- |
| 108-95-2 | Phenol | HI3 | | 200 | | 880 | | 880 | 5,800 |
| 504 | Phosphorus and compounds | -- | -- | -- | -- | -- | -- | -- | -- |
| 115-07-1 | Propylene | HI5 | | 3,000 | | 13,000 | | 13,000 | |

| CAS No. or DEQ ID | TAC | Non cancer TBACT RAL | Residential Chronic | | Non-Residential Chronic | | | | Acute |
|---|---|---|---|---|---|---|---|---|---|
| | | | Cancer RBC | Non-cancer RBC | Child Cancer RBC | Child Non-cancer RBC | Worker Cancer RBC | Worker Non-cancer RBC | Non-cancer RBC |
| | | | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) | (µg/m³) |
| 108-65-6 | Propylene glycol monomethyl ether acetate | -- | -- | -- | -- | -- | -- | -- | -- |
| 129-00-0 | Pyrene | -- | -- | -- | -- | -- | -- | -- | -- |
| 78-92-2 | sec-Butyl alcohol | HI3 | | 30,000 | | 130,000 | | 130,000 | |
| 7782-49-2 | Selenium and compounds | HI3 | | | | | | | 2.0 |
| 7631-86-9 | Silica, crystalline (respirable) | HI5 | | 3.0 | | 13 | | 13 | |
| 7440-22-4 | Silver and compounds | -- | -- | -- | -- | -- | -- | -- | -- |
| 100-42-5 | Styrene | HI3 | | 1,000 | | 4,400 | | 4,400 | 21,000 |
| 7440-28-0 | Thallium and compounds | -- | -- | -- | -- | -- | -- | -- | -- |
| 108-88-3 | Toluene | HI3 | | 5,000 | | 22,000 | | 22,000 | 7,500 |
| 26471-62-5 | Toluene diisocyanates (2,4- and 2,6-) | HI3 | 0.091 | 0.021 | 2.4 | 0.092 | 1.1 | 0.092 | 0.071 |
| 78-40-0 | Triethyl phosphate | -- | -- | -- | -- | -- | -- | -- | -- |
| 7440-62-2 | Vanadium (fume or dust) | HI3 | | 0.10 | | 0.44 | | 0.44 | 0.80 |
| 1330-20-7 | Xylene (mixture), including m-xylene, o-xylene, p-xylene | HI3 | | 220 | | 970 | | 970 | 8,700 |
| 7440-66-6 | Zinc and compounds | -- | -- | -- | -- | -- | -- | -- | -- |

## 4.4 EXPOSURE ASSESSMENT

The exposure assessment estimates the potential public exposure to emitted facility TACs by using an air quality dispersion model to determine how and where the emissions disperse in the atmosphere and what the estimated ground level concentrations are within the surrounding community. Details regarding the exposure assessment methodology (i.e., dispersion modeling) are presented in Section 2 and Section 3.

## 4.5 RISK CHARACTERIZATION

SLR proposes to use the REER approach for risk characterization, as allowed by DEQ guidance ("Recommended Procedures for Toxic Air Contaminant Health Risk Assessments") Section 3.1.3, Approach C. Under the REER approach, each TAC emission rate described in Section 2.2 is normalized to risk by dividing the emission rate by the appropriate RBC for each exposure type. The calculated REERs are then summed for each TEU for input to the AERMOD dispersion model as the "emission rate" in the SRCPARAM cards for each TEU. The AERMOD output is thus equivalent to units of risk thereby significantly reducing or even eliminating post-processing calculations that other approaches require to calculate risks from standard AERMOD output. The DEQ considers the REER method mathematically equivalent to performing separate risk calculations after modeling as described in "Recommended Procedures for Toxic Air Contaminant Health Risk Assessments", Section 3.1.3, Approaches A and B.

For each TAC, there are up to seven RBCs, accounting for the different exposure scenarios under Cleaner Air Oregon (acute, chronic non-cancer residential, chronic cancer residential, chronic non-cancer non-resident child, chronic cancer non-resident child, chronic non-cancer non-resident worker, chronic cancer non-resident worker). Conversions of TAC emissions to REERs for each of the seven exposure scenarios are provided in Appendix A. For each of the seven exposure scenarios, AERMOD will be run using the appropriate REERs and the receptors assigned to each exposure scenario.

For the non-cancer risks, certain TACs fall into two classes of Hazard Index, with some TACs falling into the Hazard Index 3 (HI3) category and other TACs falling into the Hazard Index 5 (HI5) category as described in OAR 340-245-8010 Table 1. Review of the TACs emitted by the facility in Tables A-1 through A-7 indicates that, of the 40 TACs emitted by the facility's non-natural gas TEUs that have RBCs, only three (acrolein, aluminum and compounds, and respirable silica) are HI5 TACs. Review of the emission rates of these TACs and their RBCs versus other TACs in the inventory indicate that these three TACs are not expected to be major contributors to the facility's risk. Therefore, for conservatism and simplicity, all TACs will be treated as though they are HI3 TACs, and calculated acute and chronic non-cancer risks will be compared to the RALs defined for facilities emitting HI3 TACs.

As discussed in Section 2, the facility includes several sources which combust only natural gas. REER calculations for these sources are also included in Appendix A. These sources will be modeled separately, and the risk attributable to these sources will be included in the modeling report. However, the risk attributable to these sources will not be included in the reported risk for comparison to the Risk Action Levels. In addition, should a Risk Reduction Plan be necessary, the risk contributions from the sources emitting only natural gas will not be included in the Risk Reduction Plan analysis.

## 4.6 UNCERTAINTY EVALUATION

The results of the risk assessment will be based on a number of assumptions, many of which are required to be used by the DEQ. With few exceptions, when substantial uncertainty is associated with a variable used in modeling or risk estimation, conservative (e.g., health-protective) assumptions will be used. This practice of bias will cause risks to be overestimated, and the degree to which risks are overestimated is unknown. Because facilities subject to the CAO program are required to make assumptions according to

the same guidelines, the risk results are at best useful as a yardstick for comparing relative risk from one facility to another. Because of the great deal of uncertainty in many important assumptions, the results are not accurate for predicting actual risk in absolute numbers and should not be used as such. Risk estimates generated under the CAO program should not be interpreted as the expected rates of disease in the exposed population but rather as estimates of potential for disease, based on current scientific knowledge and assumptions incorporated into all elements of a risk assessment.

Some of the important sources of uncertainty include: 1) extrapolation of toxicity data in animals to humans, 2) uncertainty in the estimation of emissions, 3) uncertainty in the air dispersion model, and 4) uncertainty in the exposure estimates. In addition to uncertainty, there is a natural range or variability in measured parameters defining the exposure scenario.

# 5. REFERENCES

State of Oregon Department of Environmental Quality. Recommended Procedures for Air Quality Dispersion Modeling. April 2020.

-----. Recommended Procedures for Toxic Air Contaminant Health Risk Assessments. July 2020.

U.S. Environmental Protection Agency (USEPA). AERMOD Implementation Guide. August 2019 (EPA-454/B-19-035).

U.S. Environmental Protection Agency (USEPA). Guideline on Air Quality Models. January 2017. 40 CFR 51 Appendix W.

# 6. LIMITATIONS

The services described in this work product were performed in accordance with generally accepted professional consulting principles and practices. No other representations or warranties, expressed or implied, are made. These services were performed consistent with our agreement with our client. This work product is intended solely for the use and information of our client unless otherwise noted. Any reliance on this work product by a third party is at such party's sole risk.

This work product presents professional opinions and findings of a scientific and technical nature. The work product shall not be construed to offer legal opinion or representations as to the requirements of, nor the compliance with, environmental laws rules, regulations, or policies of federal, state or local governmental agencies.

# 7. FIGURES

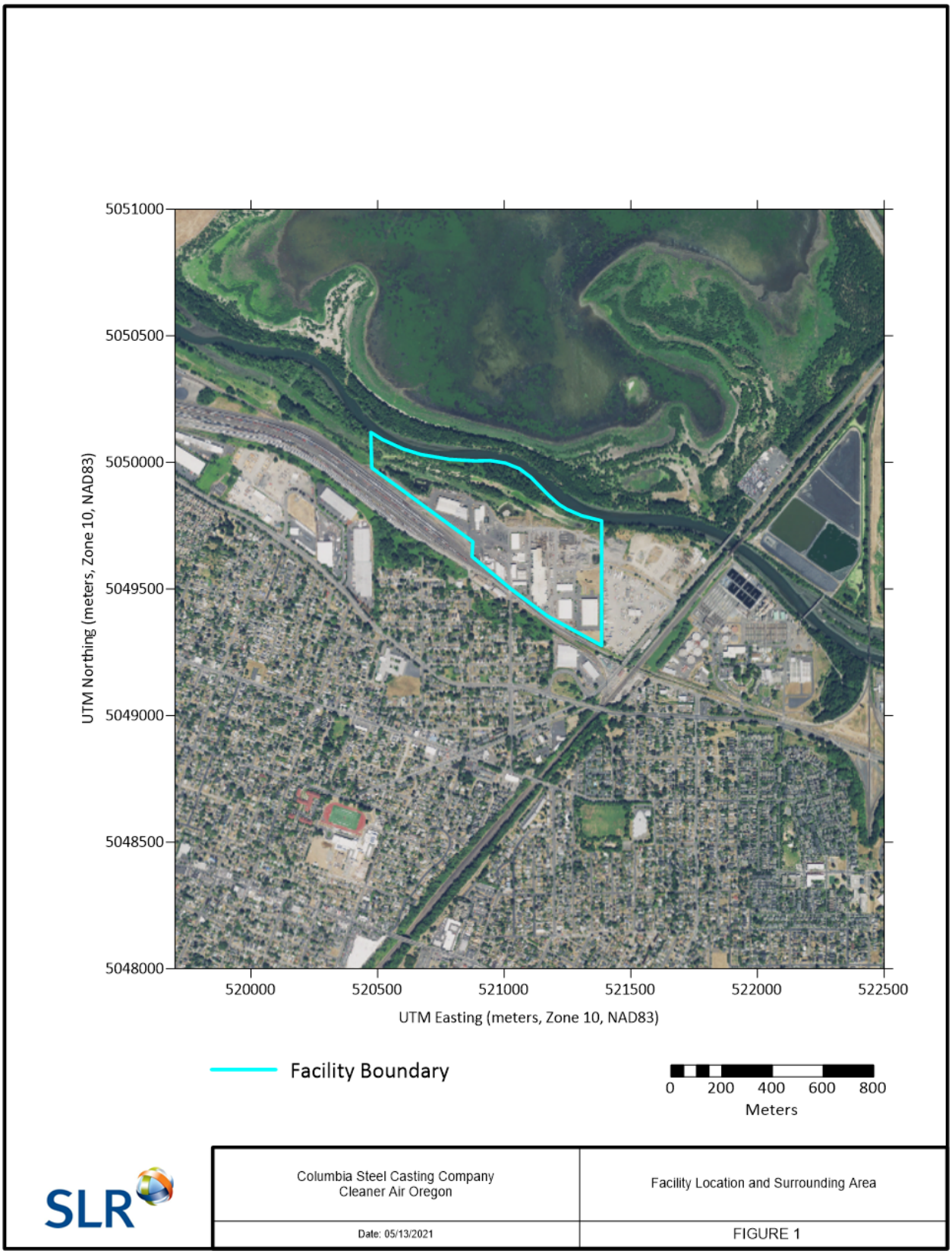



**Figure 1. Facility Location and Surrounding Area**

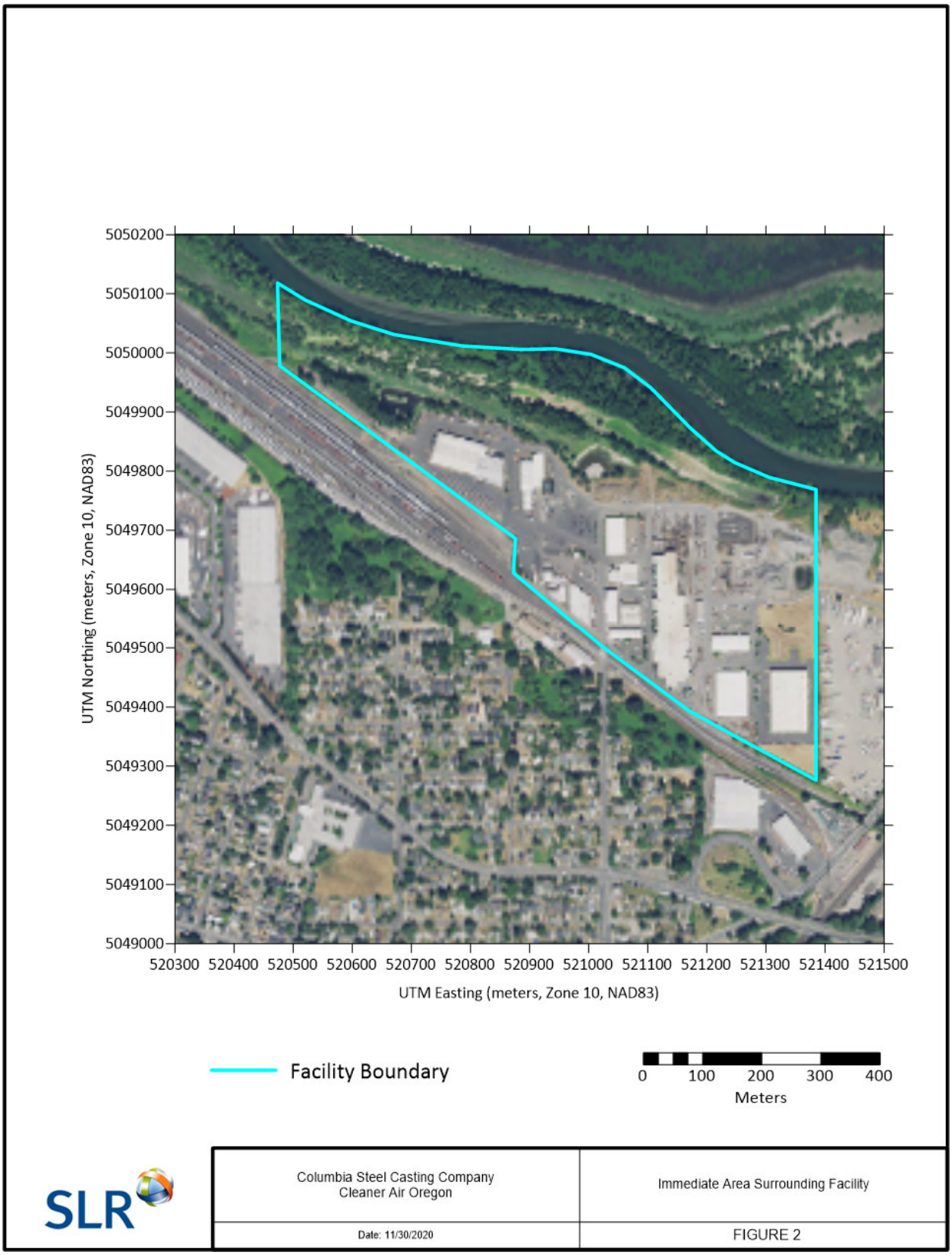
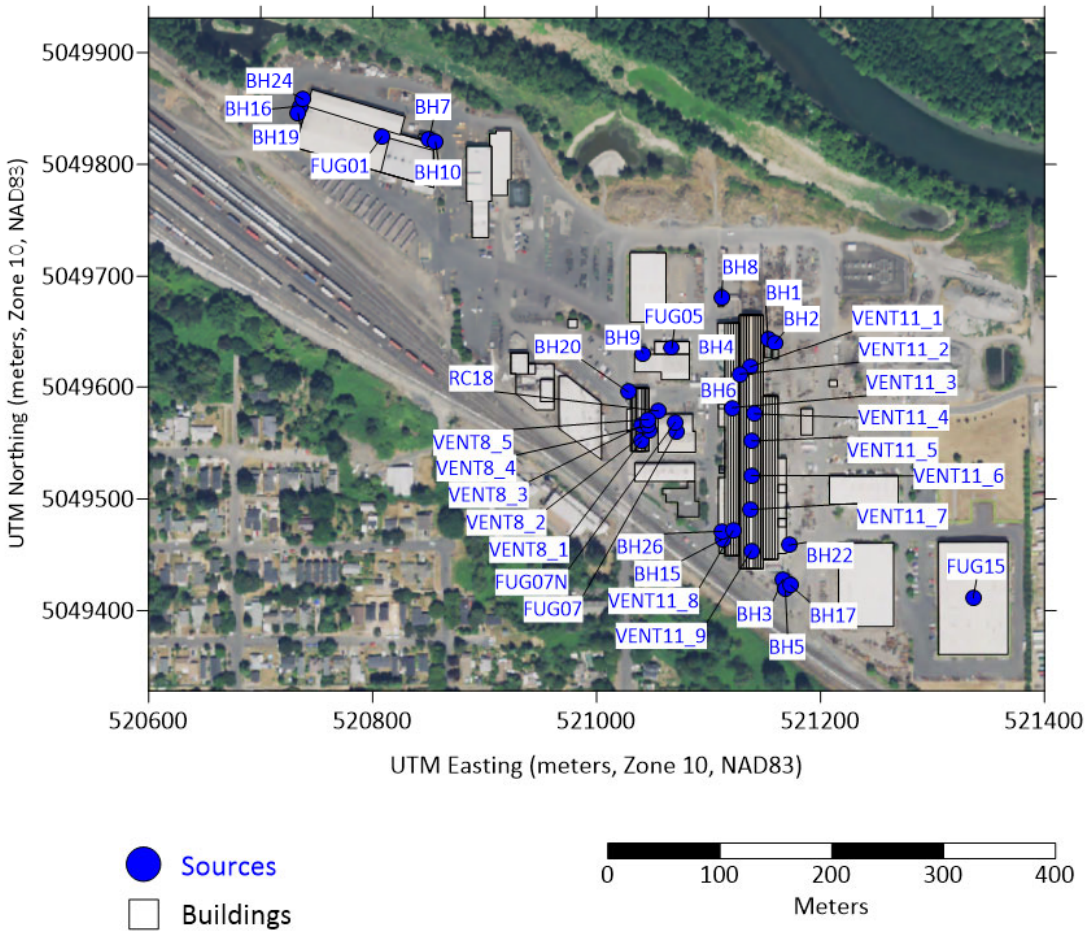
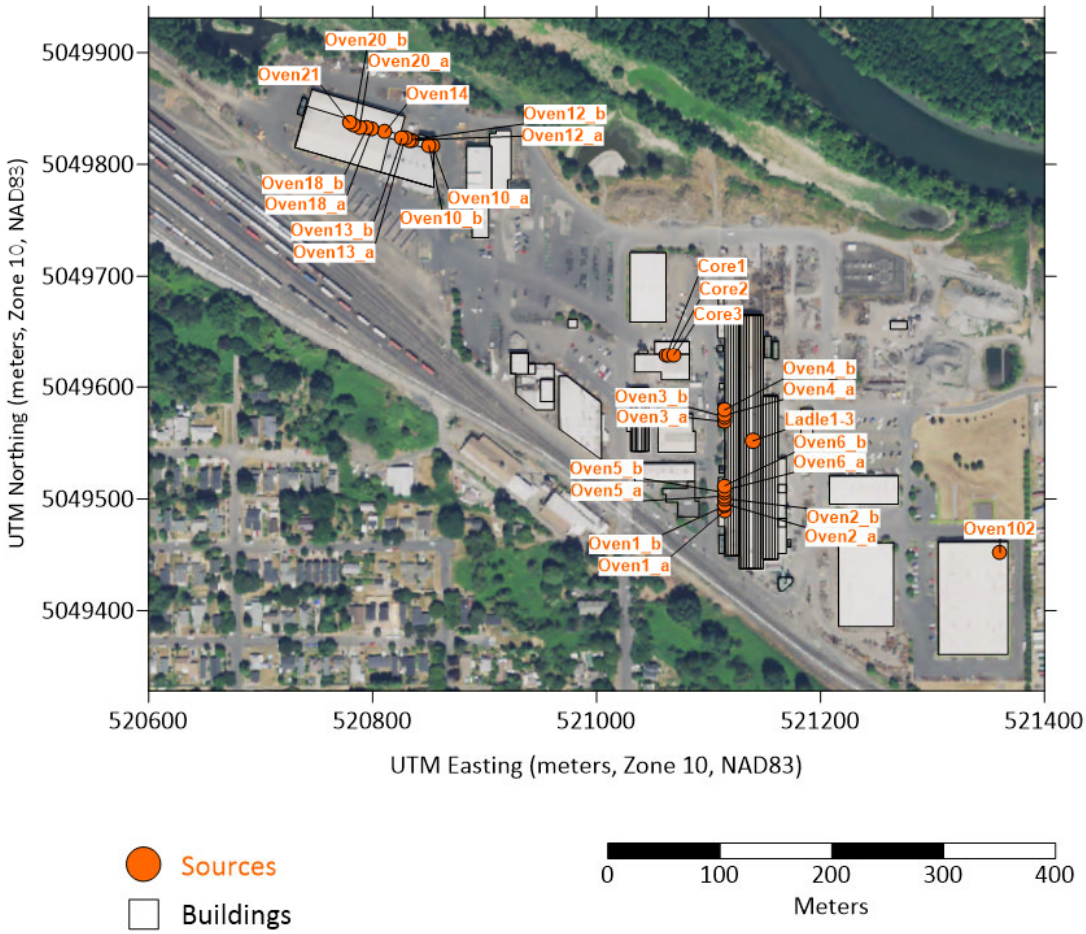



**Figure 2. Immediate Area Surrounding Facility**




| Columbia Steel Casting Company<br>Cleaner Air Oregon | Location of Toxic Emission Units<br>Excluding Sources Combusting Natural Gas |
|---|---|
| Date: 04/26/2021 | FIGURE 3 |

**Figure 3. Location of Toxic Emission Units Excluding Sources Combusting Natural Gas**




Sources

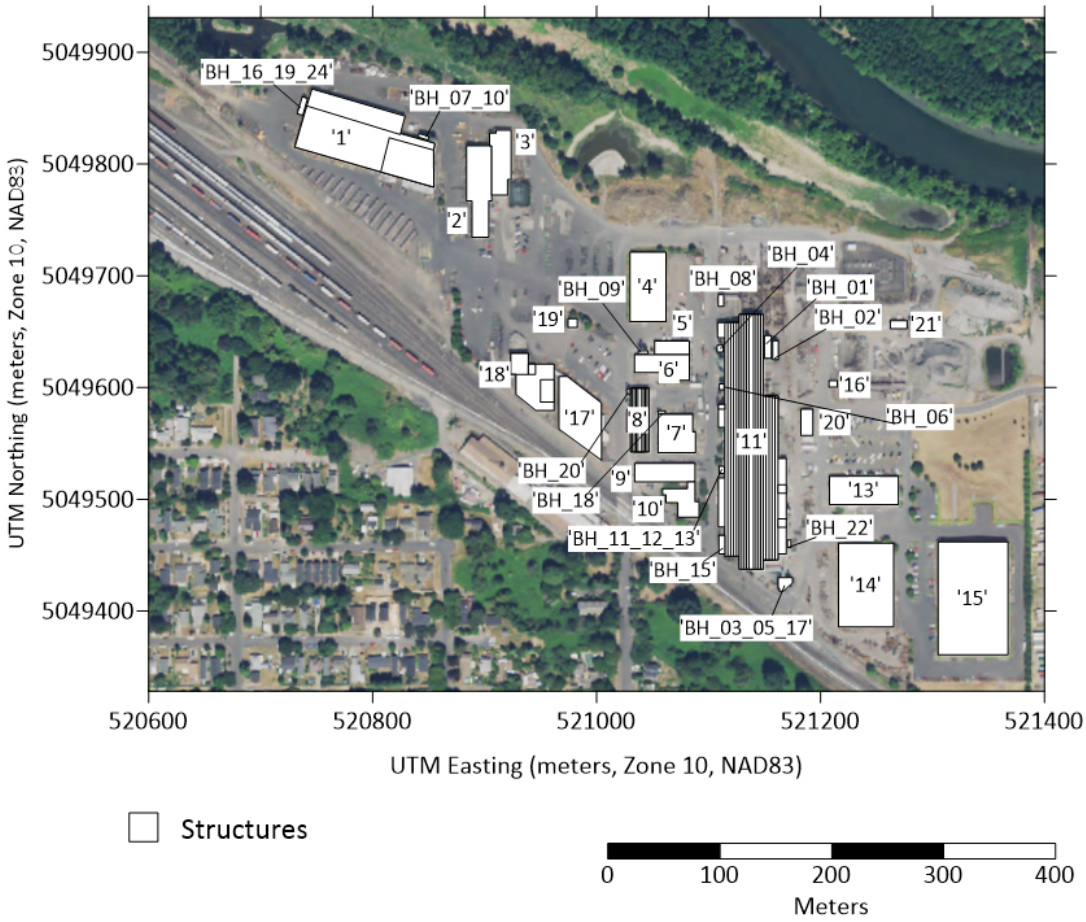
Buildings

0 100 200 300 400

Meters

| | |
|---|---|
| Columbia Steel Casting Company<br>Cleaner Air Oregon | Location of Toxic Emission Units<br>Combusting Natural Gas |
| Date: 05/06/2021 | FIGURE 4 |

**Figure 4. Location of Toxic Emission Units Combusting Natural Gas**



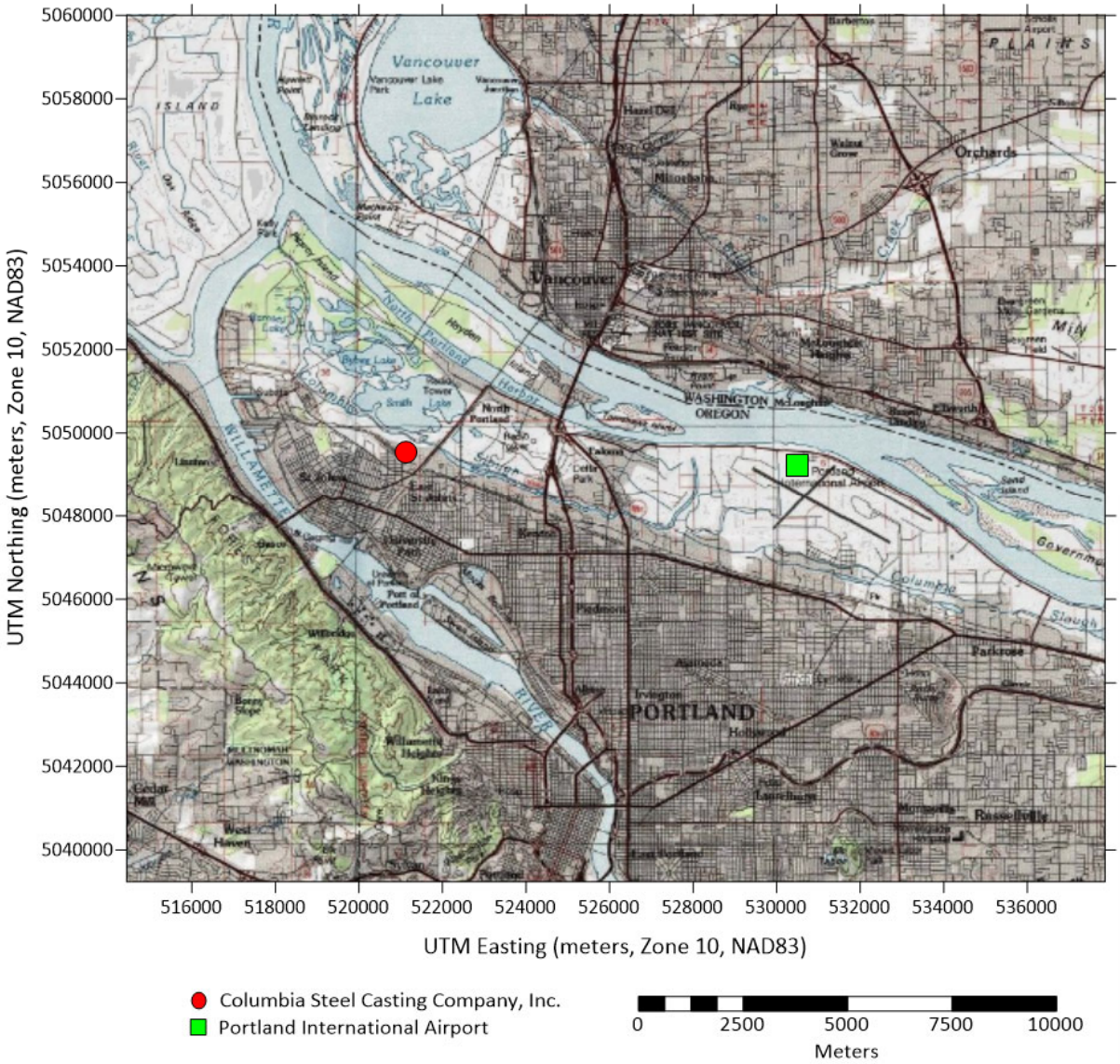

Structures

0 100 200 300 400
Meters

*Note: Structures marked solely with a number are buildings.*
*Structures whose identification begins with "BH" are housings surrounding baghouses.*

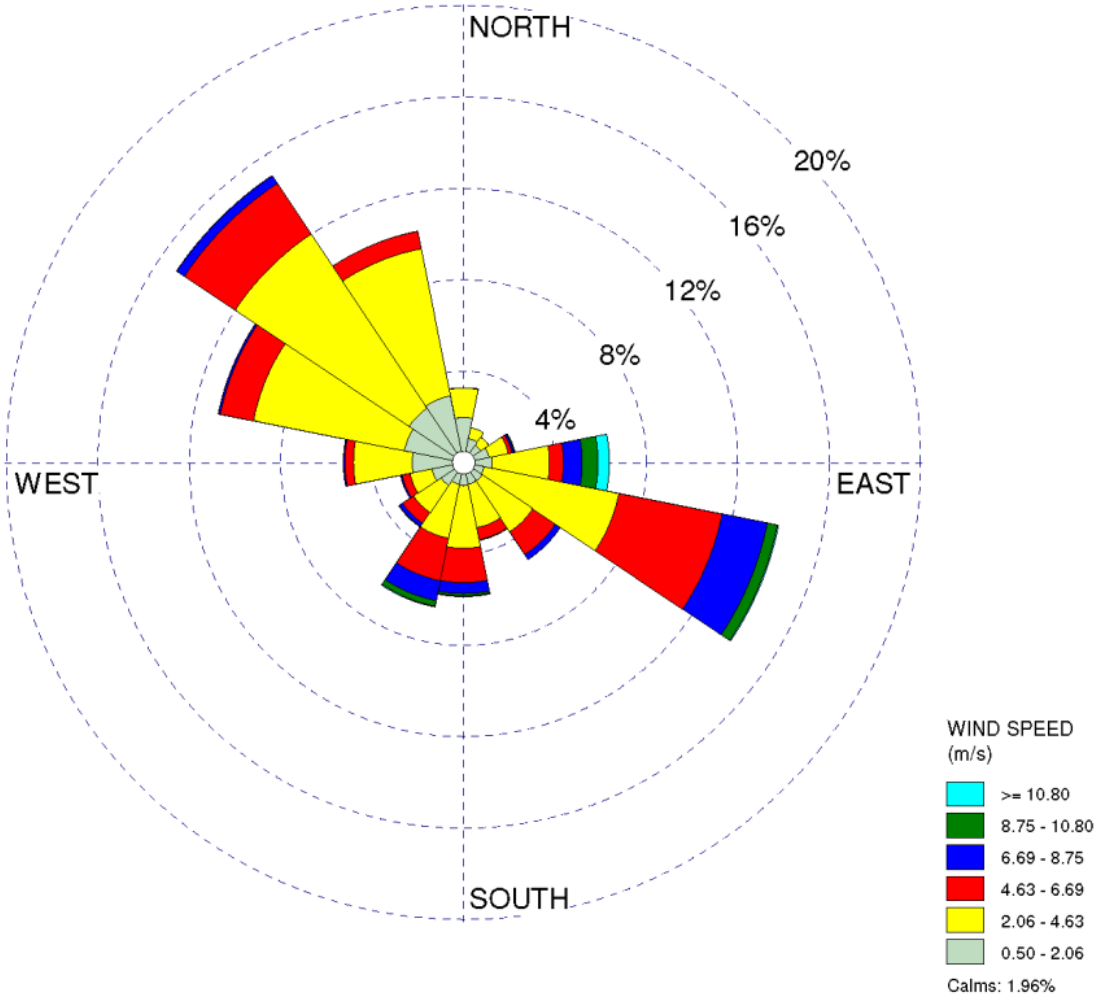
| Columbia Steel Casting Company<br>Cleaner Air Oregon | Location of Structures Included in Downwash |
|---|---|
| Date: 04/26/2021 | FIGURE 5 |

**Figure 5. Location of Structures Included in Downwash**



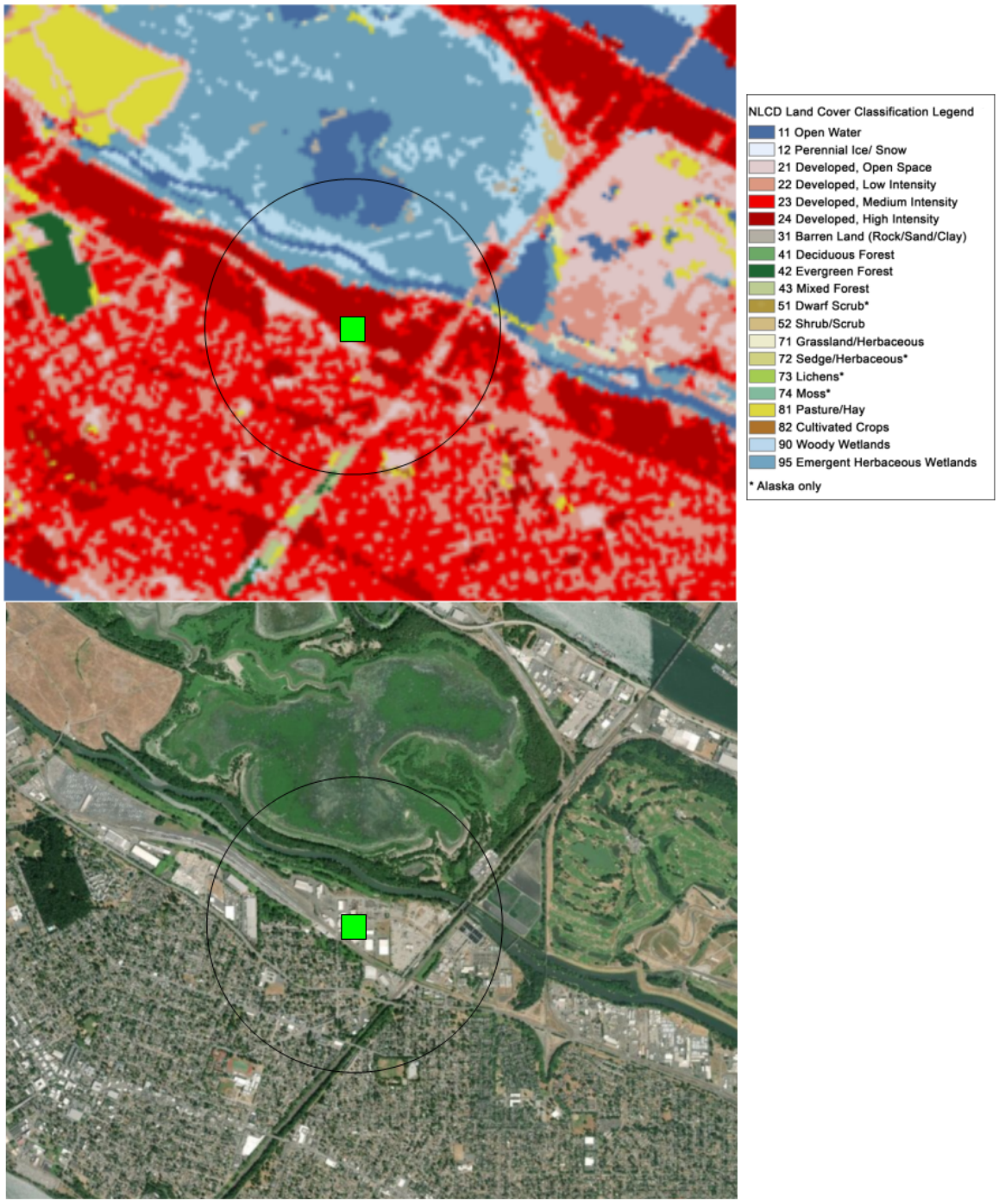

| Columbia Steel Casting Company<br>Cleaner Air Oregon | Facility and NWS<br>Station Location |
|---|---|
| Date: 05/13/2021 | FIGURE 6 |

**Figure 6. Facility and NWS Station Location**



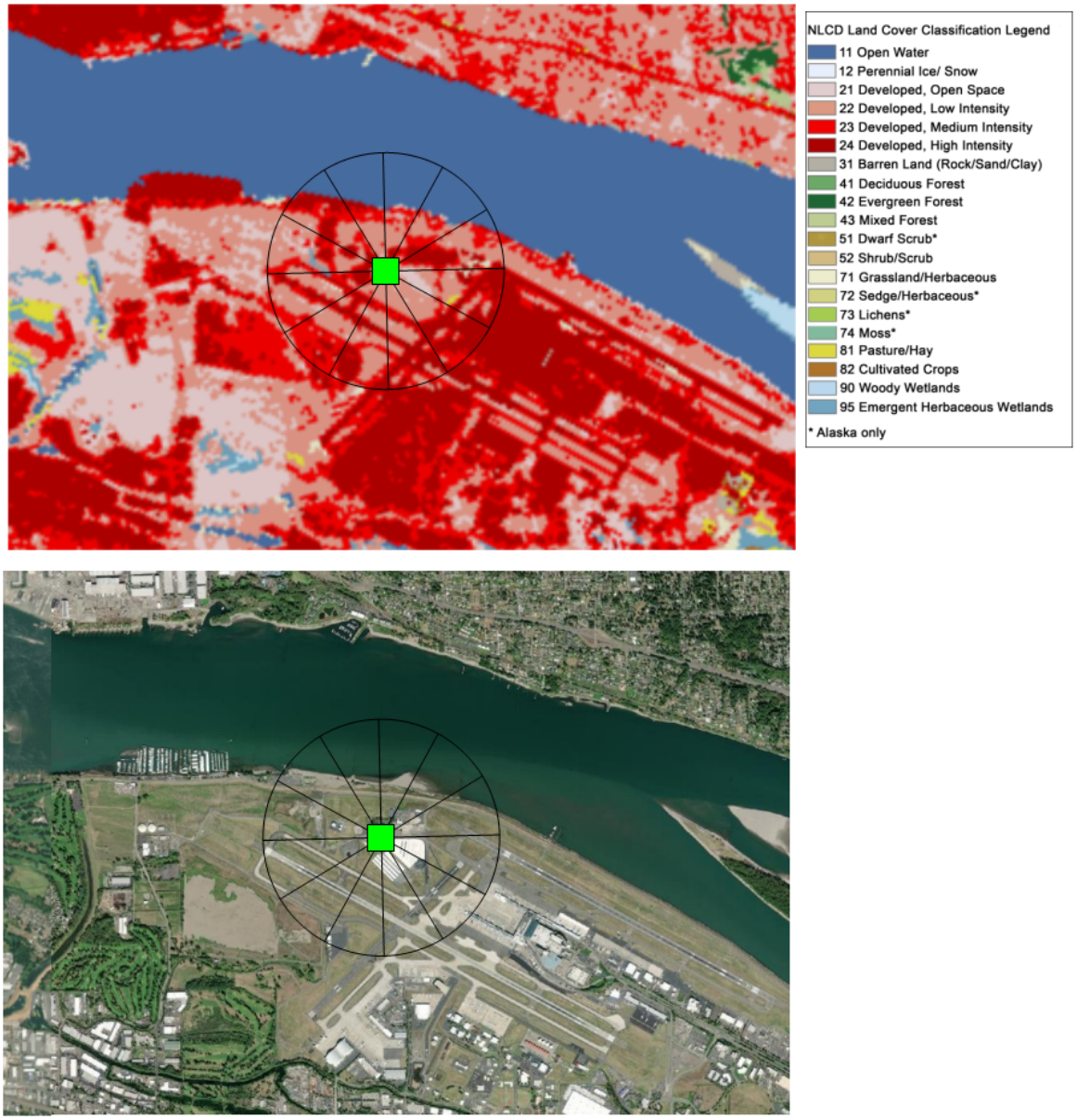

| | |
|---|---|
| Columbia Steel Casting Company<br>Cleaner Air Oregon | KPDX Wind Rose<br>2015-2019 Data |
| Date: 04/26/2021 | FIGURE 7 |

**Figure 7. KPDX Wind Rose**




| | |
|---|---|
| Columbia Steel Casting Company<br>Cleaner Air Oregon | NLCD Surrounding Facility |
| Date: 05/11/2021 | FIGURE 8 |

**Figure 8. NLCD Surrounding Facility**




| | | |
|---|---|---|
| SLR | Columbia Steel Casting Company<br>Cleaner Air Oregon | NLCD Surrounding KPDX |
| | Date: 05/11/2021 | FIGURE 9 |

**Figure 9. NLCD Surrounding KPDX**

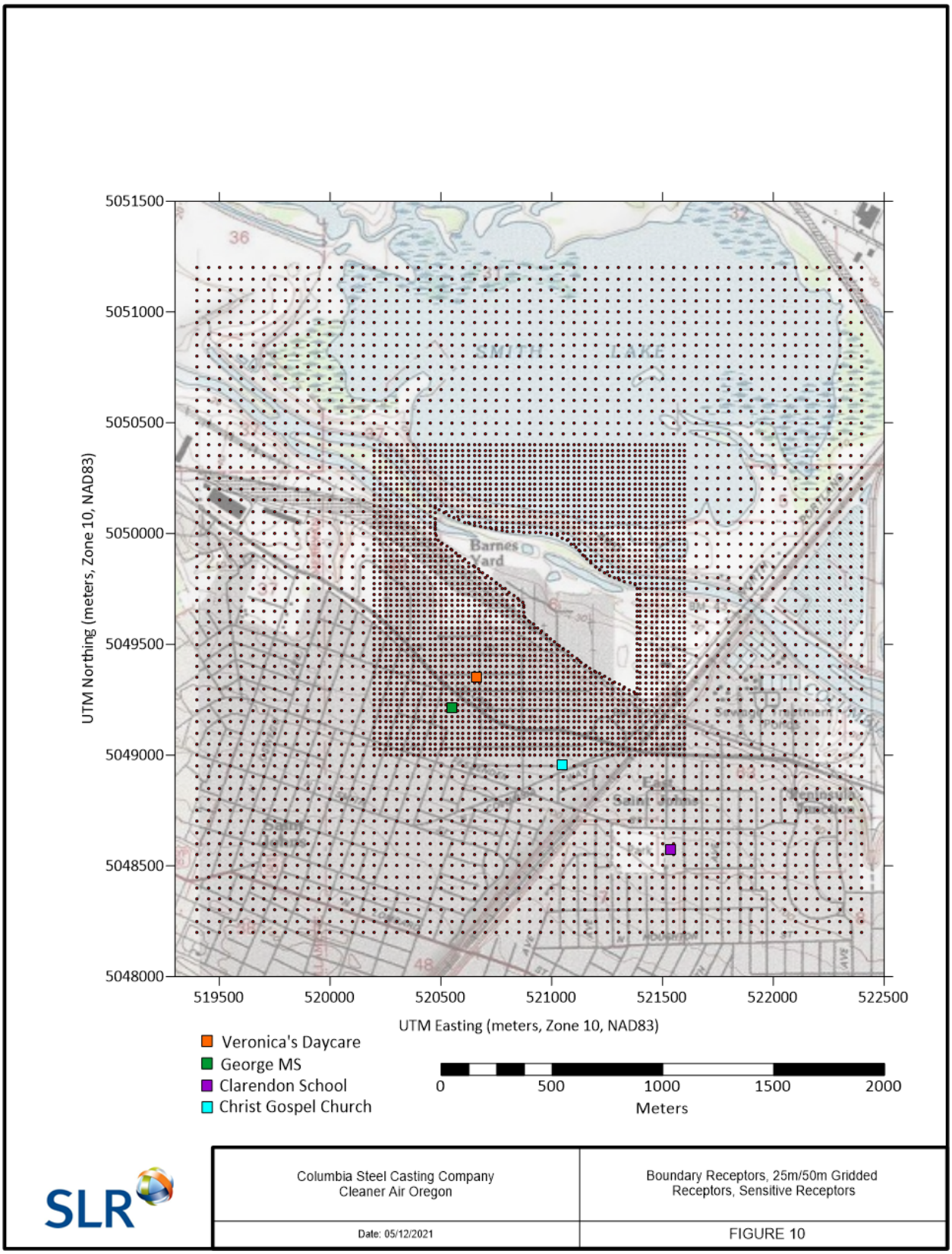
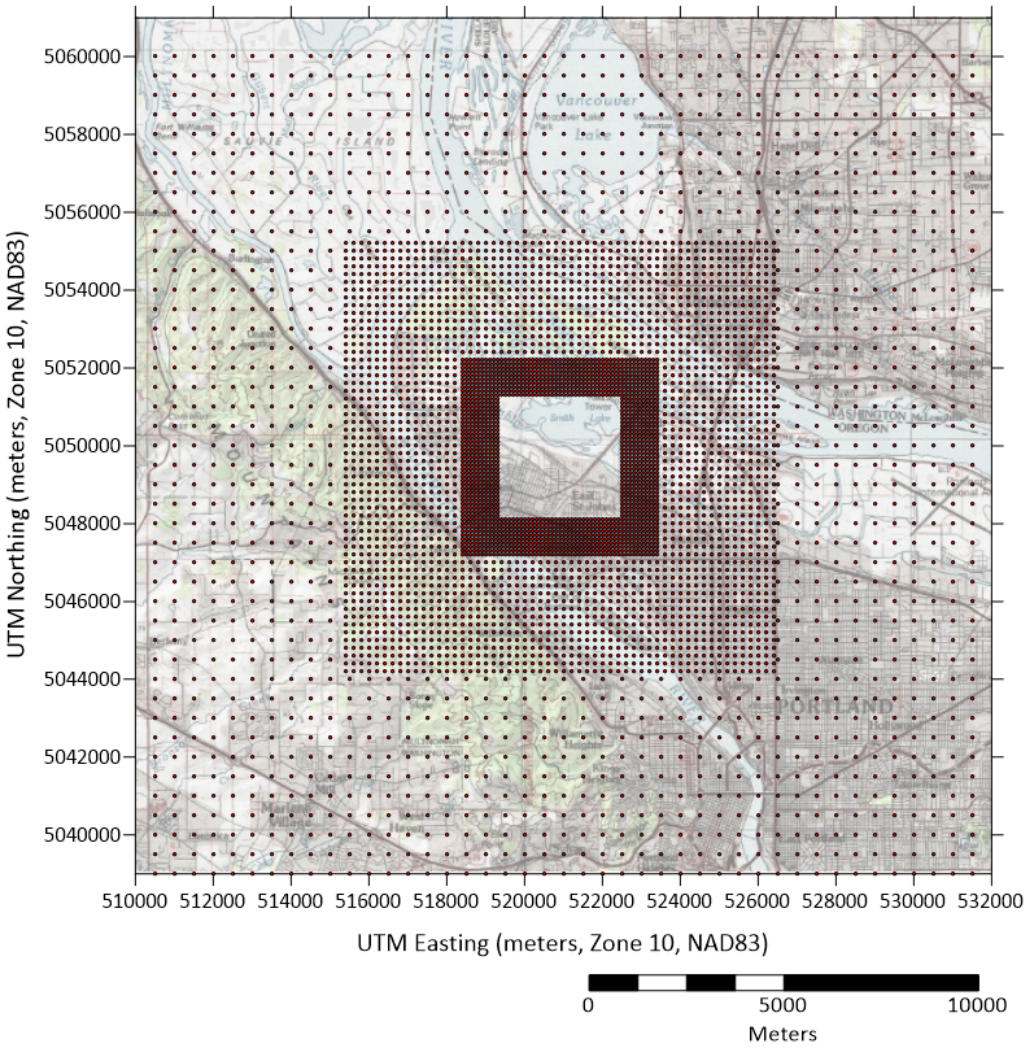



**Figure 10. Facility Boundary, 25m, 50m, and Sensitive Receptors**




| Columbia Steel Casting Company<br>Cleaner Air Oregon | 100m, 200m, 500m<br>Receptor Grids |
|---|---|
| Date: 04/28/2021 | FIGURE 11 |

**Figure 11. 100m, 200m, and 500m Receptor Grids**

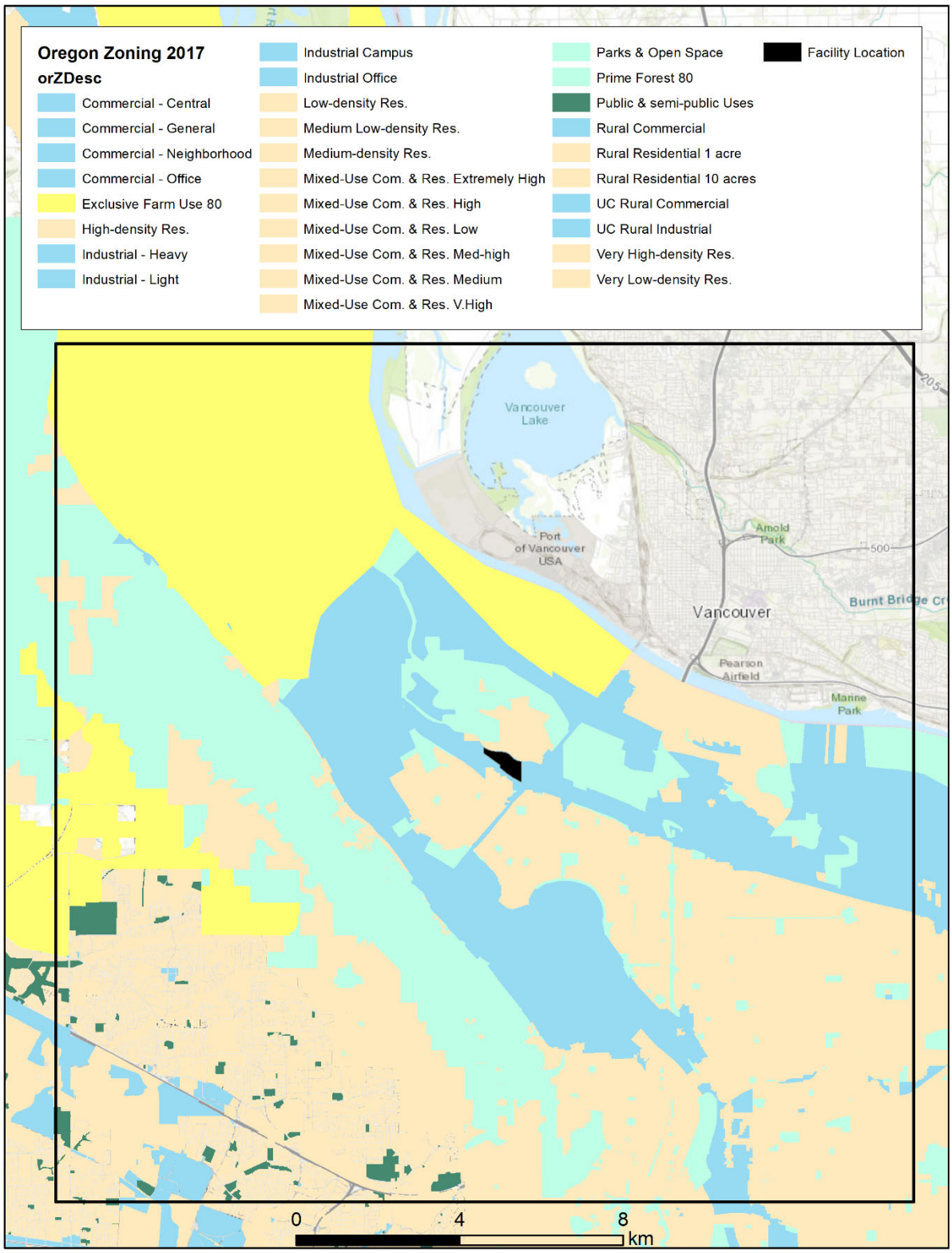



Figure 12. State-level Zoning Categories in Modeling Domain

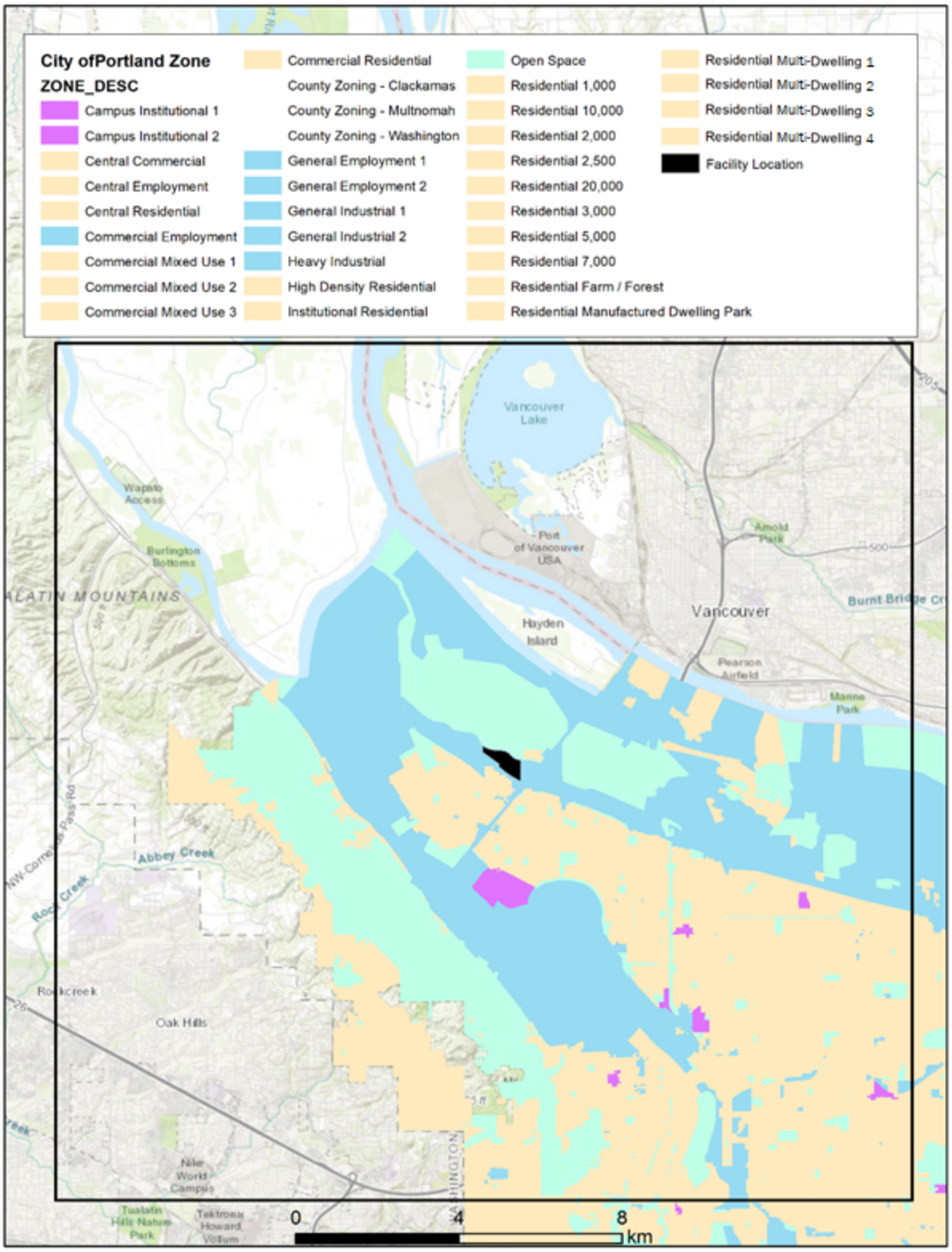



Figure 13. City-level Zoning Categories in Modeling Domain

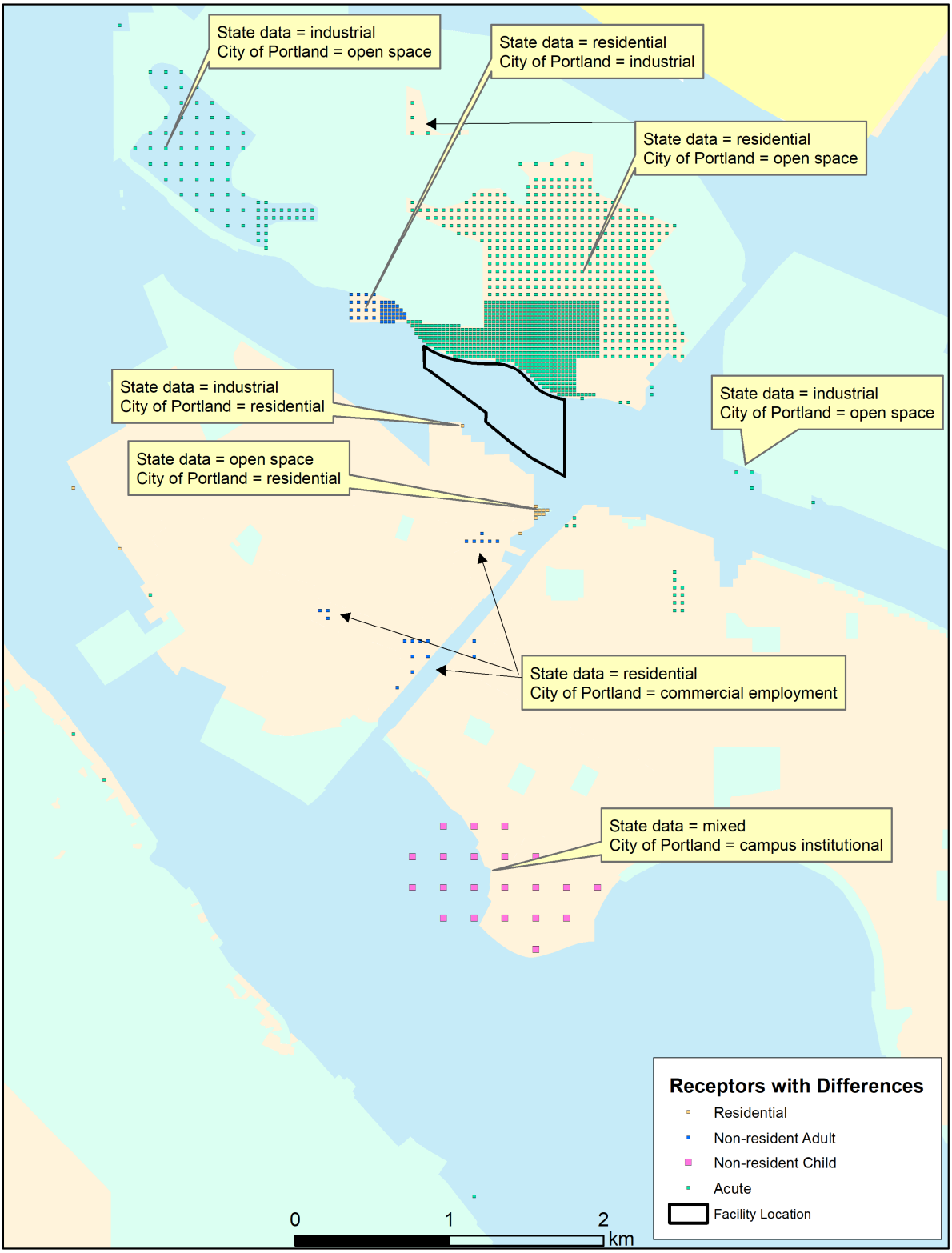



Figure 14. Differences between State- and City-level Zoning

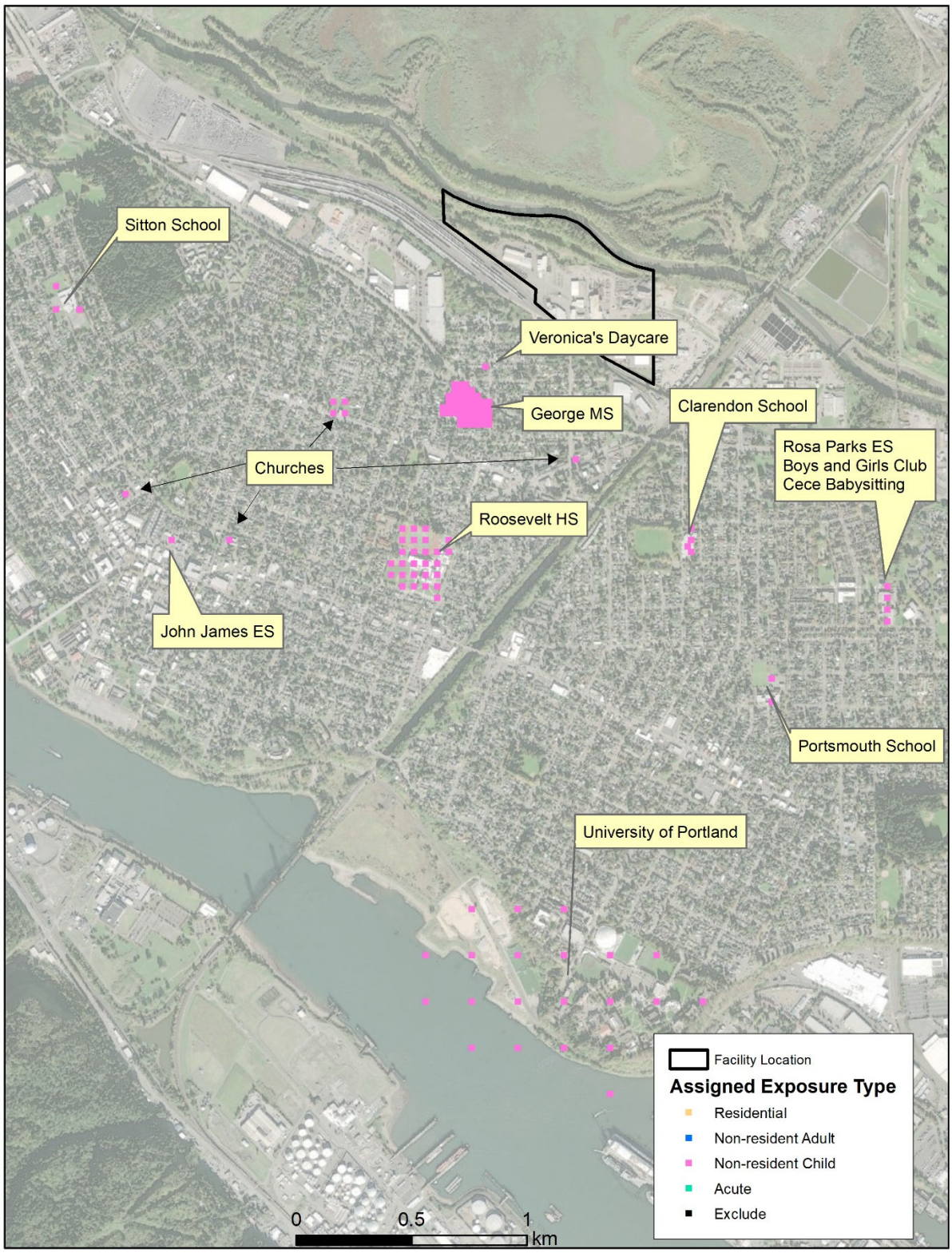



**Figure 15. Analysis of Nearby Sensitive Receptors**

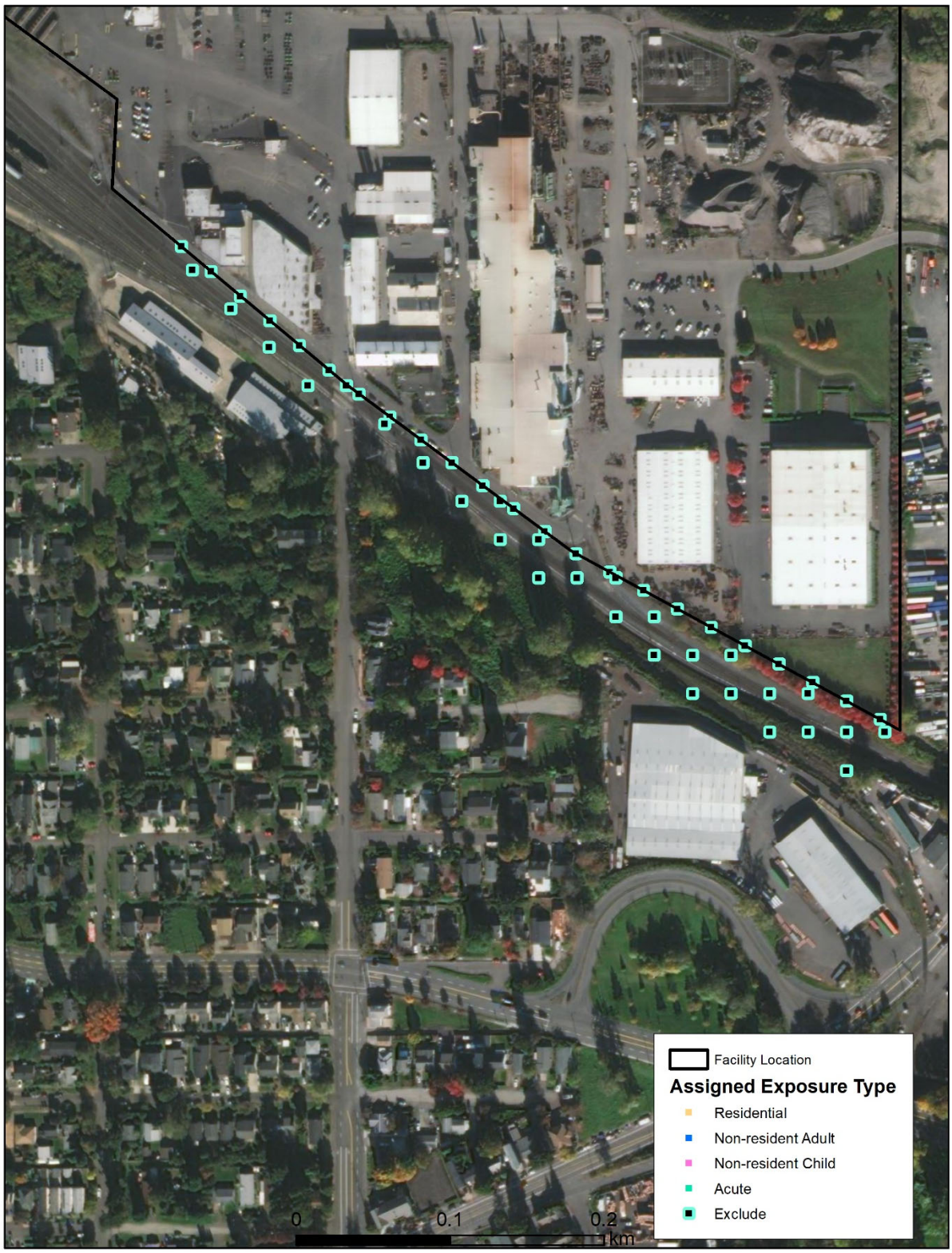



Figure 16. Excluded Receptors

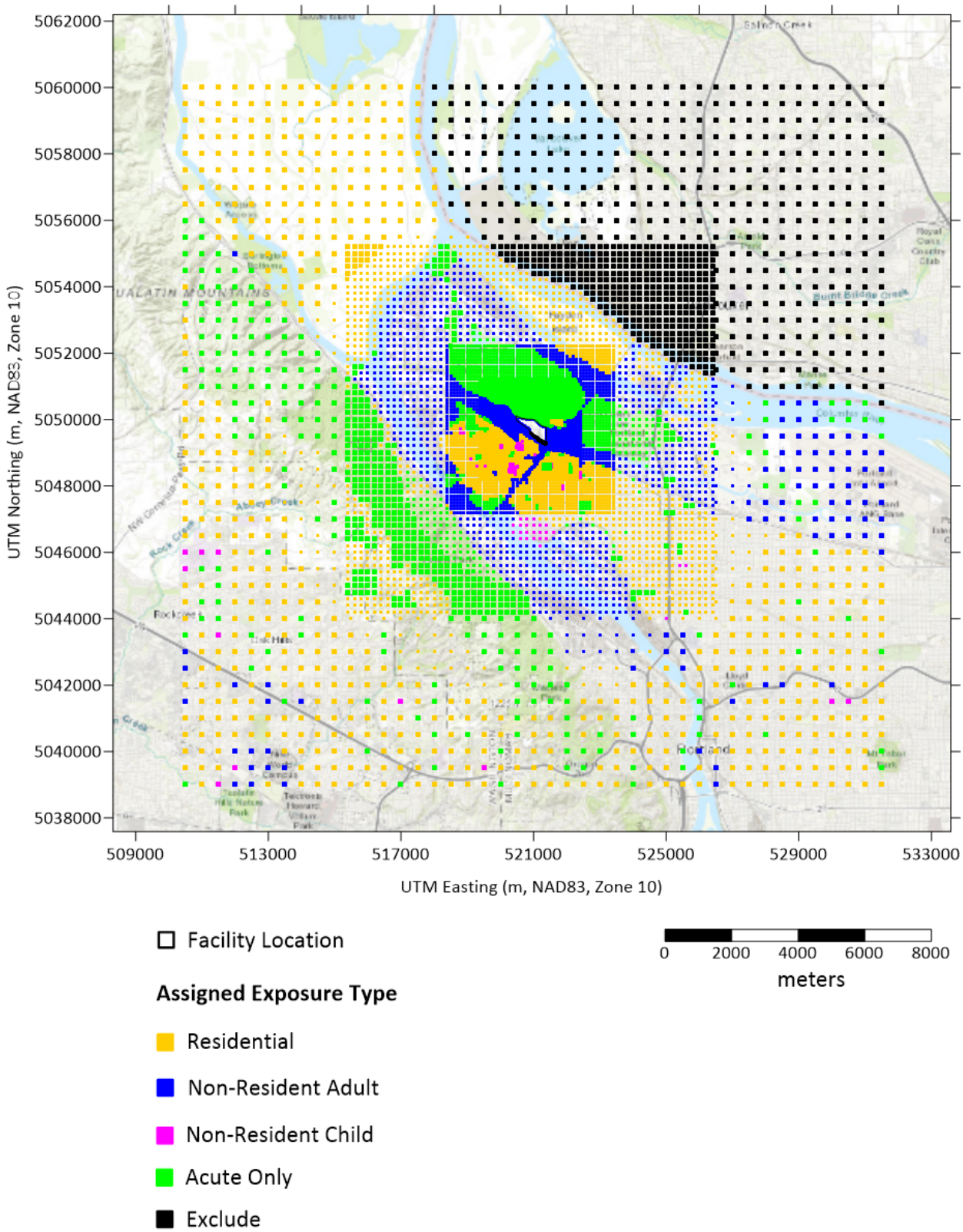



Figure 17. Final Exposure Type by Receptor

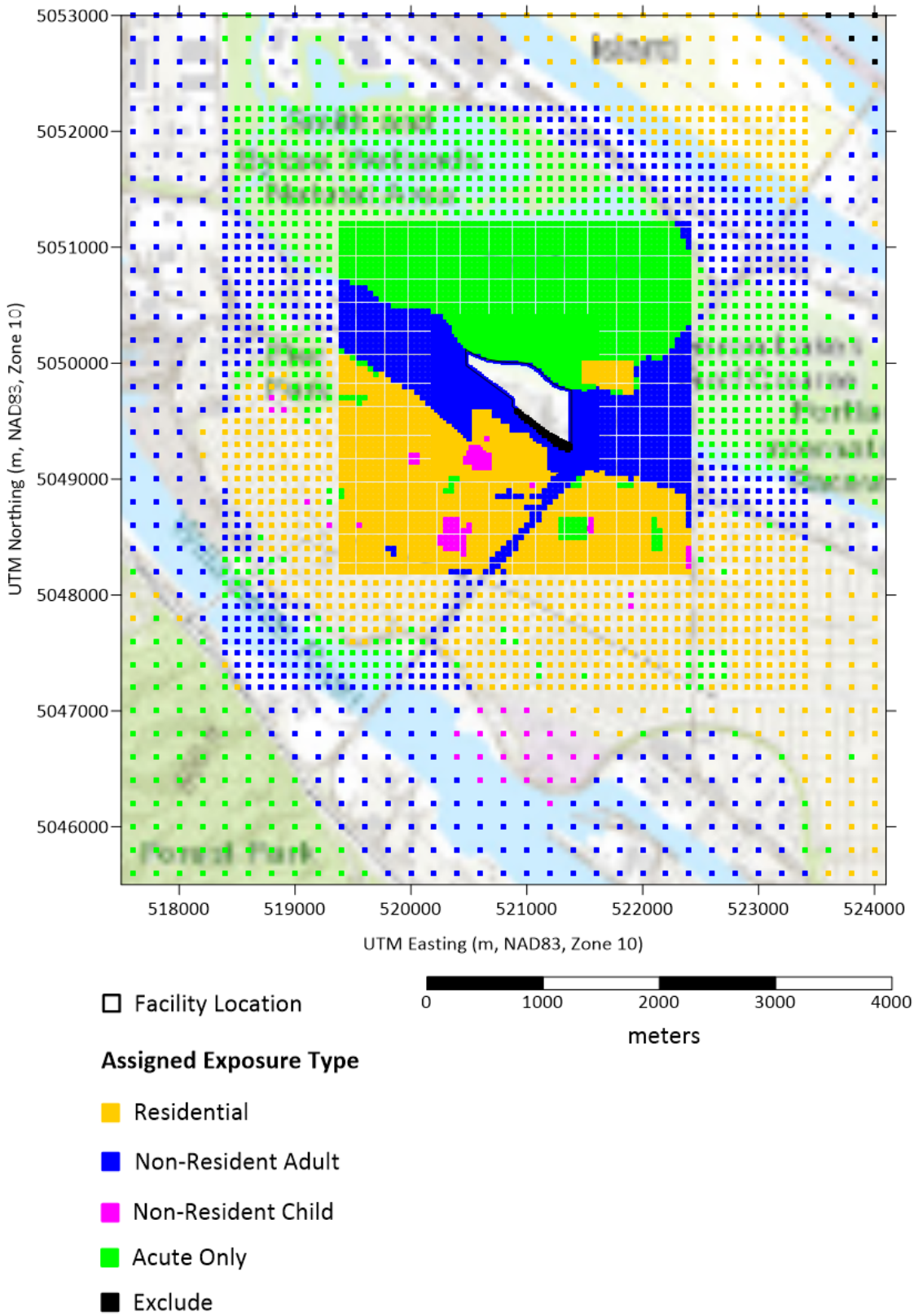



Figure 18. Final Exposure Type of Inner Grid

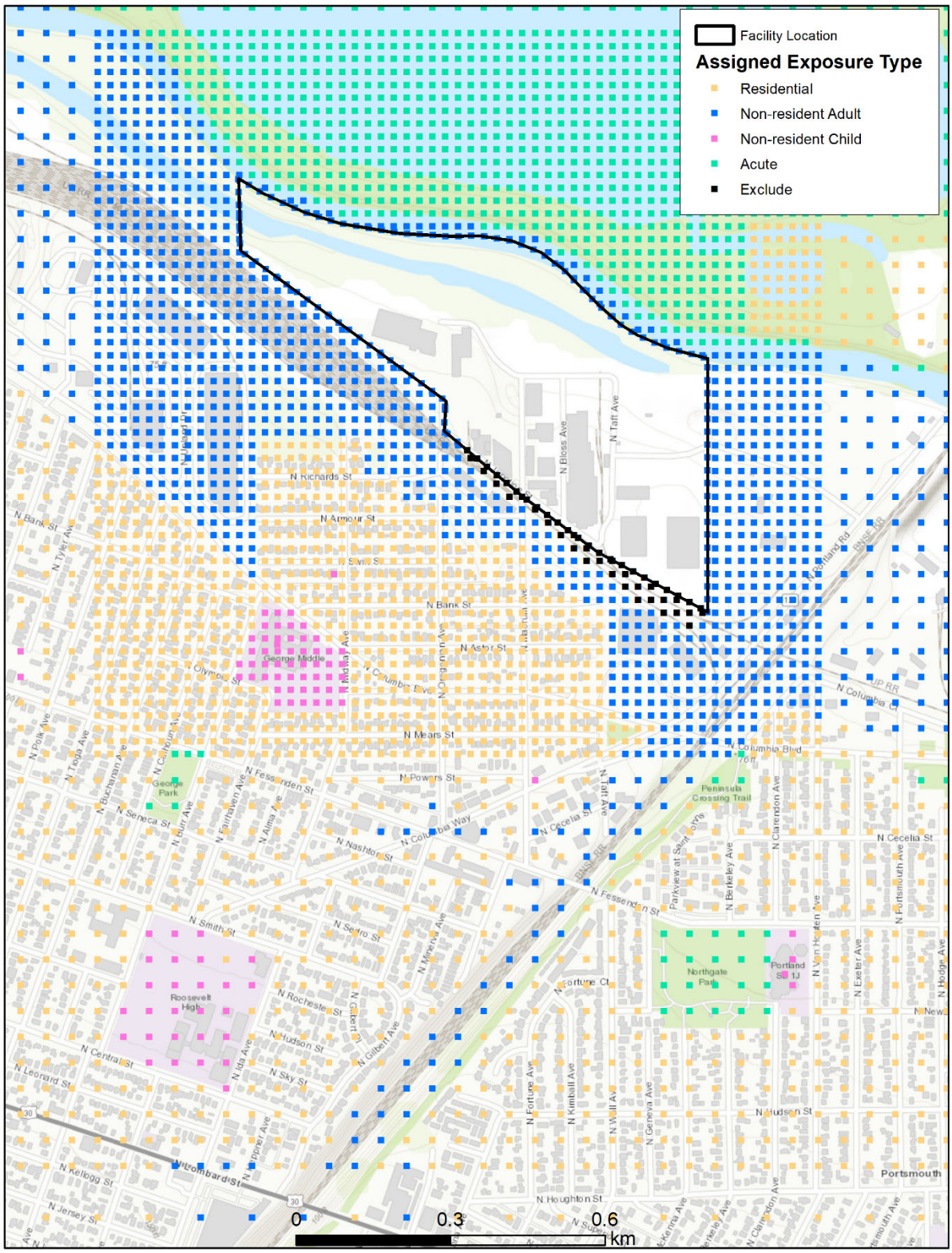



Figure 19. Final Exposure Type Within 1 km (topo)

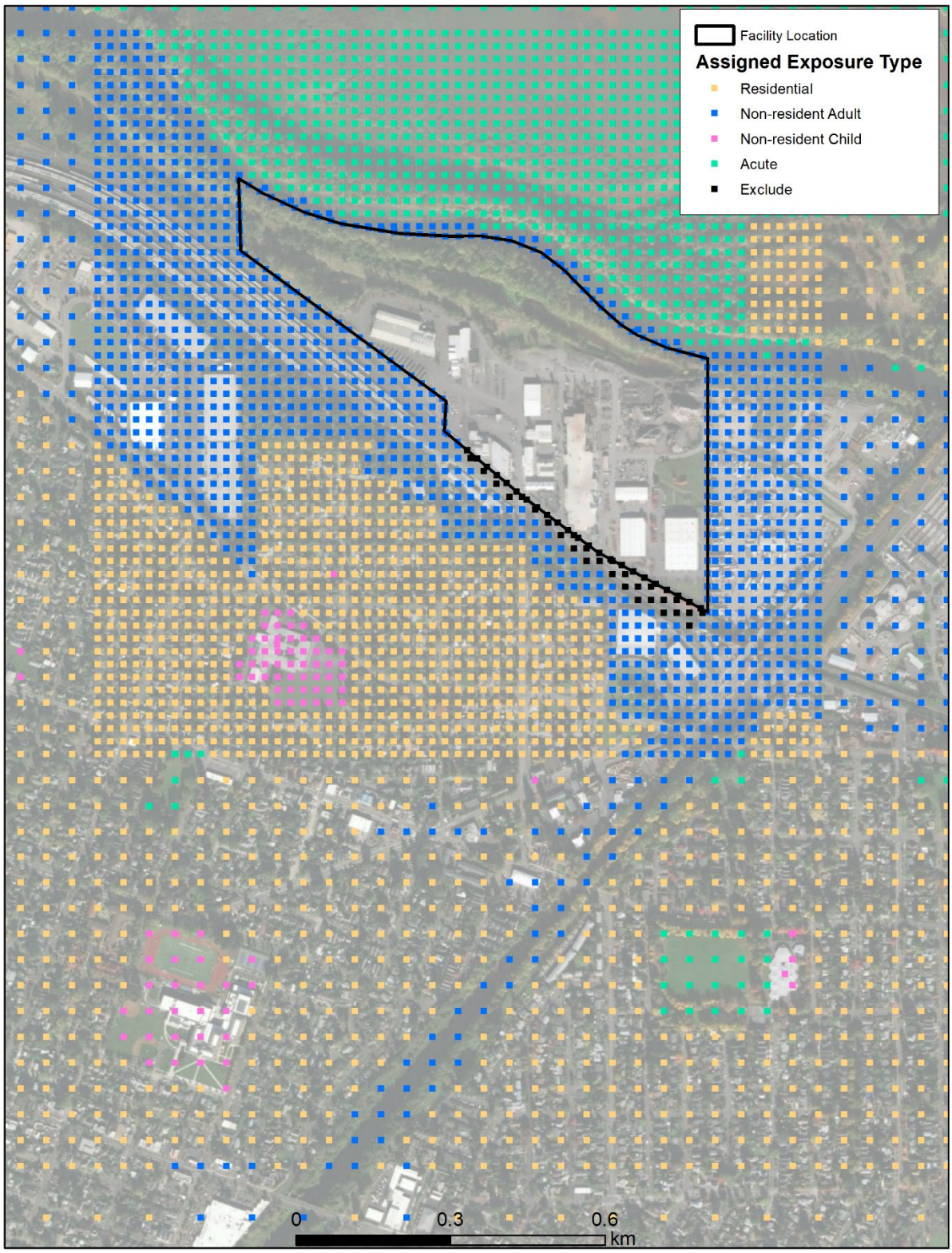



Figure 20. Final Exposure Type Within 1 km (aerial)

# APPENDIX A

# EMISSION RATES AND REER CALCULATIONS

## Modeling Protocol and Risk Assessment Work Plan

Columbia Steel Casting Co., Inc.
10425 N Bloss Ave.
Portland, OR 97203

November 2021

## Table A-1. Emission Rates and REER Calculations - Acute Exposure Scenario - Sources Not Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 365 | 100-41-4 | 100-42-5 | 101-68-8 | 106-99-0 | 107-02-8 | 108-88-3 | 108-95-2 | 110-54-3 | 110-82-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nickel compounds, insoluble | Ethyl benzene | Styrene | Methylene diphenyl diisocyanate (MDI) | 1,3-Butadiene | Acrolein | Toluene | Phenol | Hexane | Cyclohexane |
| | Exposure Scenario-specific RBC | (µg/m$^{3}$) | n/a | 0.200 | 22000.000 | 21000.000 | 12.000 | 660.000 | 6.900 | 7500.000 | 5800.000 | 0.000 | 0.000 |
| BH2 | Emission Rate | lb/day | | 0.000 | | | | | | | | | |
| BH2 | REER | (g/s)/(µg/m$^{3}$) | 2.719E-04 | 4.034E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | lb/day | | 0.001 | | | | | | | | | |
| BH1 | REER | (g/s)/(µg/m$^{3}$) | 5.357E-04 | 1.928E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/day | | 0.001 | 0.001 | 0.001 | | 0.005 | 0.005 | 0.094 | 0.044 | 0.004 | |
| Vent8_1 | REER | (g/s)/(µg/m$^{3}$) | 3.628E-03 | 2.306E-05 | 2.674E-10 | 1.867E-10 | 0.000E+00 | 4.346E-08 | 3.470E-06 | 6.589E-08 | 4.024E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/day | | 0.001 | 0.001 | 0.001 | | 0.005 | 0.005 | 0.094 | 0.044 | 0.004 | |
| Vent8_2 | REER | (g/s)/(µg/m$^{3}$) | 1.242E-03 | 2.269E-05 | 2.674E-10 | 1.867E-10 | 0.000E+00 | 4.346E-08 | 3.470E-06 | 6.589E-08 | 4.024E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/day | | 0.001 | 0.001 | 0.001 | | 0.005 | 0.005 | 0.094 | 0.044 | 0.004 | |
| Vent8_3 | REER | (g/s)/(µg/m$^{3}$) | 1.242E-03 | 2.269E-05 | 2.674E-10 | 1.867E-10 | 0.000E+00 | 4.346E-08 | 3.470E-06 | 6.589E-08 | 4.024E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/day | | 0.001 | 0.001 | 0.001 | | 0.005 | 0.005 | 0.094 | 0.044 | 0.004 | |
| Vent8_4 | REER | (g/s)/(µg/m$^{3}$) | 1.242E-03 | 2.269E-05 | 2.674E-10 | 1.867E-10 | 0.000E+00 | 4.346E-08 | 3.470E-06 | 6.589E-08 | 4.024E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/day | | 0.001 | 0.001 | 0.001 | | 0.005 | 0.005 | 0.094 | 0.044 | 0.004 | |
| Vent8_5 | REER | (g/s)/(µg/m$^{3}$) | 1.242E-03 | 2.269E-05 | 2.674E-10 | 1.867E-10 | 0.000E+00 | 4.346E-08 | 3.470E-06 | 6.589E-08 | 4.024E-08 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/day | | 0.007 | | | | | | | | | |
| Vent11_1 | REER | (g/s)/(µg/m$^{3}$) | 6.806E-02 | 1.745E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/day | | 0.007 | | | | | | | | | |
| Vent11_2 | REER | (g/s)/(µg/m$^{3}$) | 6.806E-02 | 1.745E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/day | | 0.011 | | | | | | | | | |
| Vent11_3 | REER | (g/s)/(µg/m$^{3}$) | 1.401E-02 | 2.840E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/day | | 0.011 | 0.020 | 0.005 | | 0.034 | 0.005 | 0.452 | 0.065 | 0.040 | |
| Vent11_4 | REER | (g/s)/(µg/m$^{3}$) | 1.427E-02 | 2.840E-04 | 4.733E-09 | 1.159E-09 | 0.000E+00 | 2.698E-07 | 3.762E-06 | 3.162E-07 | 5.917E-08 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/day | | 0.025 | 0.020 | 0.005 | | 0.034 | 0.005 | 0.452 | 0.065 | 0.040 | |
| Vent11_5 | REER | (g/s)/(µg/m$^{3}$) | 2.518E-02 | 6.600E-04 | 4.733E-09 | 1.159E-09 | 0.000E+00 | 2.698E-07 | 3.762E-06 | 3.162E-07 | 5.917E-08 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/day | | 0.034 | 0.020 | 0.005 | | 0.034 | 0.005 | 0.452 | 0.065 | 0.040 | |
| Vent11_6 | REER | (g/s)/(µg/m$^{3}$) | 1.652E-02 | 9.034E-04 | 4.733E-09 | 1.159E-09 | 0.000E+00 | 2.698E-07 | 3.762E-06 | 3.162E-07 | 5.917E-08 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/day | | 0.034 | 0.020 | 0.005 | | 0.034 | 0.005 | 0.452 | 0.065 | 0.040 | |
| Vent11_7 | REER | (g/s)/(µg/m$^{3}$) | 1.652E-02 | 9.034E-04 | 4.733E-09 | 1.159E-09 | 0.000E+00 | 2.698E-07 | 3.762E-06 | 3.162E-07 | 5.917E-08 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/day | | 0.069 | 0.020 | 0.005 | | 0.034 | 0.005 | 0.452 | 0.065 | 0.040 | |
| Vent11_8 | REER | (g/s)/(µg/m$^{3}$) | 1.384E-02 | 1.799E-03 | 4.733E-09 | 1.159E-09 | 0.000E+00 | 2.698E-07 | 3.762E-06 | 3.162E-07 | 5.917E-08 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/day | | 0.011 | 0.020 | 0.005 | | 0.034 | 0.005 | 0.452 | 0.065 | 0.040 | |
| Vent11_9 | REER | (g/s)/(µg/m$^{3}$) | 8.473E-03 | 2.989E-04 | 4.733E-09 | 1.159E-09 | 0.000E+00 | 2.698E-07 | 3.762E-06 | 3.162E-07 | 5.917E-08 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | lb/day | | 0.005 | | | | | | | | | |
| BH3 | REER | (g/s)/(µg/m$^{3}$) | 2.702E-04 | 1.345E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | lb/day | | 0.005 | | | | | | | | | |
| BH5 | REER | (g/s)/(µg/m$^{3}$) | 2.775E-04 | 1.381E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | lb/day | | 0.001 | | | | | | | | | |
| BH17 | REER | (g/s)/(µg/m$^{3}$) | 7.302E-05 | 3.634E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | lb/day | | 0.001 | | | | | | | | | |
| BH6 | REER | (g/s)/(µg/m$^{3}$) | 7.892E-05 | 3.928E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | lb/day | | 0.002 | | | | | | | | | |
| BH8 | REER | (g/s)/(µg/m$^{3}$) | 8.365E-05 | 4.163E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | lb/day | | 0.000 | | | | | | | | | |
| BH9 | REER | (g/s)/(µg/m$^{3}$) | 1.692E-05 | 8.422E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | lb/day | | 0.003 | | | | | | | | | |
| BH4 | REER | (g/s)/(µg/m$^{3}$) | 1.343E-04 | 6.683E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | lb/day | | 0.003 | | | | | | | | | |
| BH22 | REER | (g/s)/(µg/m$^{3}$) | 1.321E-04 | 6.574E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | lb/day | | 0.000 | | | | | | | | | |
| BH20 | REER | (g/s)/(µg/m$^{3}$) | 6.913E-07 | 3.441E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | lb/day | | 0.001 | | | | | | | | | |
| BH26 | REER | (g/s)/(µg/m$^{3}$) | 1.932E-04 | 3.922E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | lb/day | | 0.000 | | | | | | | | | |
| BH15 | REER | (g/s)/(µg/m$^{3}$) | 3.989E-04 | 1.075E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | lb/day | | | | | | | | | | | |
| BH7 | REER | (g/s)/(µg/m$^{3}$) | 1.154E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | lb/day | | | | | | | | | | | |
| BH24 | REER | (g/s)/(µg/m$^{3}$) | 6.924E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | lb/day | | | | | | | | | | | |
| BH16 | REER | (g/s)/(µg/m$^{3}$) | 1.154E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | lb/day | | | | | | | | | | | |
| BH19 | REER | (g/s)/(µg/m$^{3}$) | 7.574E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | lb/day | | | | | | | | | | | |
| BH10 | REER | (g/s)/(µg/m$^{3}$) | 1.223E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | lb/day | | | | | | | | | | | |
| RC18 | REER | (g/s)/(µg/m$^{3}$) | 2.490E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | lb/day | | 0.000 | | | | | | | | | |
| Fug01 | REER | (g/s)/(µg/m$^{3}$) | 4.270E-06 | 4.487E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | lb/day | | | | 0.295 | | 0.086 | 0.005 | 0.251 | 5.370 | 0.344 | 0.128 |
| Fug05 | REER | (g/s)/(µg/m$^{3}$) | 1.455E-04 | 0.000E+00 | 0.000E+00 | 7.382E-08 | 0.000E+00 | 6.843E-07 | 3.762E-06 | 1.756E-07 | 4.861E-06 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | lb/day | | | 0.000 | 0.424 | 0.155 | | | | | 0.003 | |
| Fug07 | REER | (g/s)/(µg/m$^{3}$) | 6.805E-05 | 0.000E+00 | 1.140E-10 | 1.059E-07 | 6.776E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/day | | | 0.050 | | | | | 0.023 | | | |
| Fug07N | REER | (g/s)/(µg/m$^{3}$) | 1.024E-04 | 0.000E+00 | 1.186E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.640E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | lb/day | | 0.000 | | | | | | | | | |
| Fug15 | REER | (g/s)/(µg/m$^{3}$) | 4.773E-07 | 4.608E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | Units | 111-76-2 | 1330-20-7 | 18540-29-9 | 26471-62-5 | 50-00-0 | 67-64-1 | 71-43-2 | 7429-90-5 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 7440-36-0 | 7440-38-2 | 7440-41-7 | 7440-43-9 | 7440-48-4 | 7440-50-8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ethylene glycol monobutyl ether | Xylene (mixture), including m-xylene, o-xylene, p-xylene | Chromium VI, chromate and dichromate particulate | Toluene diisocyanates (2,4- and 2,6-) | Formaldehyde | Acetone | Benzene | Aluminum and compounds | Lead and compounds | Manganese and compounds | Mercury and compounds | Antimony and compounds | Arsenic and compounds | Beryllium and compounds | Cadmium and compounds | Cobalt and compounds | Copper and compounds |
| | Exposure Scenario-specific RBC | (µg/m$^{3}$) | 29000.000 | 8700.000 | 0.300 | 0.071 | 49.000 | 62000.000 | 29.000 | 0.000 | 0.150 | 0.300 | 0.600 | 1.000 | 0.200 | 0.020 | 0.030 | 0.000 | 100.000 |
| BH2 | Emission Rate | lb/day | | | 0.000 | | | | | 0.008 | 0.000 | 0.015 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| BH2 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.133E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.053E-06 | 2.589E-04 | 1.385E-08 | 7.315E-07 | 2.842E-06 | 0.000E+00 | 1.921E-06 | 0.000E+00 | 3.616E-08 |
| BH1 | Emission Rate | lb/day | | | 0.000 | | | | | 0.005 | 0.000 | 0.029 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| BH1 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 2.071E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.338E-06 | 5.028E-04 | 1.593E-08 | 7.560E-07 | 5.328E-06 | 1.962E-06 | 5.206E-07 | 0.000E+00 | 5.629E-08 |
| Vent8_1 | Emission Rate | lb/day | | 0.033 | 0.000 | | 0.028 | 0.007 | 0.332 | 0.000 | 0.003 | 0.194 | | | 0.000 | | | | |
| Vent8_1 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 1.994E-08 | 1.646E-07 | 0.000E+00 | 2.970E-06 | 6.044E-10 | 6.006E-05 | 0.000E+00 | 9.440E-05 | 3.401E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/day | | 0.033 | 0.000 | | 0.028 | 0.007 | 0.332 | 0.000 | 0.001 | 0.062 | | | 0.000 | | | | |
| Vent8_2 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 1.994E-08 | 1.828E-08 | 0.000E+00 | 2.970E-06 | 6.044E-10 | 6.006E-05 | 0.000E+00 | 2.638E-05 | 1.083E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/day | | 0.033 | 0.000 | | 0.028 | 0.007 | 0.332 | 0.000 | 0.001 | 0.062 | | | 0.000 | | | | |
| Vent8_3 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 1.994E-08 | 1.828E-08 | 0.000E+00 | 2.970E-06 | 6.044E-10 | 6.006E-05 | 0.000E+00 | 2.638E-05 | 1.083E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/day | | 0.033 | 0.000 | | 0.028 | 0.007 | 0.332 | 0.000 | 0.001 | 0.062 | | | 0.000 | | | | |
| Vent8_4 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 1.994E-08 | 1.828E-08 | 0.000E+00 | 2.970E-06 | 6.044E-10 | 6.006E-05 | 0.000E+00 | 2.638E-05 | 1.083E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/day | | 0.033 | 0.000 | | 0.028 | 0.007 | 0.332 | 0.000 | 0.001 | 0.062 | | | 0.000 | | | | |
| Vent8_5 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 1.994E-08 | 1.828E-08 | 0.000E+00 | 2.970E-06 | 6.044E-10 | 6.006E-05 | 0.000E+00 | 2.638E-05 | 1.083E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/day | | | 0.000 | | | | | 0.009 | 0.028 | 3.823 | | | 0.000 | | | | |
| Vent11_1 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.470E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.845E-04 | 6.690E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/day | | | 0.000 | | | | | 0.009 | 0.028 | 3.823 | | | 0.000 | | | | |
| Vent11_2 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.470E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.845E-04 | 6.690E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/day | | | 0.001 | | | | | 0.009 | 0.005 | 0.773 | | | 0.000 | | | | |
| Vent11_3 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.406E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.893E-04 | 1.352E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/day | | 0.128 | 0.001 | | 0.060 | 0.044 | 1.127 | 0.009 | 0.005 | 0.773 | | | 0.000 | | | | |
| Vent11_4 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 7.743E-08 | 1.406E-05 | 0.000E+00 | 6.441E-06 | 3.752E-09 | 2.040E-04 | 0.000E+00 | 1.893E-04 | 1.352E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/day | | 0.128 | 0.002 | | 0.060 | 0.044 | 1.127 | 0.009 | 0.020 | 1.345 | | | 0.000 | | | | |
| Vent11_5 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 7.743E-08 | 4.066E-05 | 0.000E+00 | 6.441E-06 | 3.752E-09 | 2.040E-04 | 0.000E+00 | 6.942E-04 | 2.353E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/day | | 0.128 | 0.000 | | 0.060 | 0.044 | 1.127 | 0.009 | 0.009 | 0.860 | | | 0.000 | | | | |
| Vent11_6 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 7.743E-08 | 4.535E-06 | 0.000E+00 | 6.441E-06 | 3.752E-09 | 2.040E-04 | 0.000E+00 | 2.993E-04 | 1.506E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/day | | 0.128 | 0.000 | | 0.060 | 0.044 | 1.127 | 0.009 | 0.009 | 0.860 | | | 0.000 | | | | |
| Vent11_7 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 7.743E-08 | 4.535E-06 | 0.000E+00 | 6.441E-06 | 3.752E-09 | 2.040E-04 | 0.000E+00 | 2.993E-04 | 1.506E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/day | | 0.128 | 0.000 | | 0.060 | 0.044 | 1.127 | 0.009 | 0.004 | 0.665 | | | 0.000 | | | | |
| Vent11_8 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 7.743E-08 | 3.543E-06 | 0.000E+00 | 6.441E-06 | 3.752E-09 | 2.040E-04 | 0.000E+00 | 1.520E-04 | 1.163E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/day | | 0.128 | 0.000 | | 0.060 | 0.044 | 1.127 | 0.009 | 0.008 | 0.437 | | | 0.000 | | | | |
| Vent11_9 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 7.743E-08 | 3.651E-06 | 0.000E+00 | 6.441E-06 | 3.752E-09 | 2.040E-04 | 0.000E+00 | 2.687E-04 | 7.646E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH3 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 2.760E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.436E-06 | 1.338E-04 | 0.000E+00 | 5.255E-09 | 1.961E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.767E-08 |
| BH5 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH5 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 2.835E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.475E-06 | 1.374E-04 | 0.000E+00 | 5.397E-09 | 2.014E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.815E-08 |
| BH17 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH17 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 7.461E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.881E-07 | 3.615E-05 | 0.000E+00 | 1.420E-09 | 5.300E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.776E-09 |
| BH6 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH6 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 8.064E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.194E-07 | 3.907E-05 | 0.000E+00 | 1.535E-09 | 5.728E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.162E-09 |
| BH8 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH8 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 8.547E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.446E-07 | 4.141E-05 | 0.000E+00 | 1.627E-09 | 6.071E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.471E-09 |
| BH9 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH9 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.729E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.993E-08 | 8.377E-06 | 0.000E+00 | 3.292E-10 | 1.228E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.107E-09 |
| BH4 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH4 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.372E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.136E-07 | 6.648E-05 | 0.000E+00 | 2.612E-09 | 9.746E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.783E-09 |
| BH22 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH22 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.349E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.019E-07 | 6.539E-05 | 0.000E+00 | 2.569E-09 | 9.586E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.639E-09 |
| BH20 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH20 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 7.063E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.674E-09 | 3.423E-07 | 0.000E+00 | 1.345E-11 | 5.018E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.522E-11 |
| BH26 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.009 | 0.000 | | 0.000 | | 0.000 | | |
| BH26 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 3.697E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.462E-08 | 1.539E-04 | 0.000E+00 | 0.000E+00 | 9.286E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | 0.022 | 0.000 | | 0.000 | | 0.000 | | |
| BH15 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.971E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.667E-06 | 3.787E-04 | 0.000E+00 | 0.000E+00 | 1.620E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH7 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 7.257E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.939E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.344E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH24 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 4.354E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.164E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.406E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH16 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 7.257E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.939E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.344E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH19 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 4.762E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.273E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.538E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH10 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 3.924E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.600E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.701E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | lb/day | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| RC18 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 1.566E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.184E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.058E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | lb/day | 6.426 | | | | | | | 0.000 | | 0.000 | | | | | | 0.000 | 0.000 |
| Fug01 | REER | (g/s)/(µg/m$^{3}$) | 1.163E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.808E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.658E-12 |
| Fug05 | Emission Rate | lb/day | | 0.219 | | | 0.158 | 8.840 | 0.426 | | | | | | | | | | |
| Fug05 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 1.321E-07 | 0.000E+00 | 0.000E+00 | 1.695E-05 | 7.486E-07 | 7.710E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | lb/day | | 0.294 | | | | | | | | | | | | | | | |
| Fug07 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 1.777E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/day | 0.039 | 0.131 | | 0.001 | | 0.547 | | | | | | | | | | | |
| Fug07N | REER | (g/s)/(µg/m$^{3}$) | 7.067E-09 | 7.914E-08 | 0.000E+00 | 1.021E-04 | 0.000E+00 | 4.628E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | lb/day | | | | | | | | | | 0.000 | | | | | | | 0.000 |
| Fug15 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.727E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.371E-13 |

| TEU | Parameter | Units | 7440-62-2 | 74-87-3 | 74-90-8 | 75-07-0 | 75-09-2 | 75-15-0 | 7631-86-9 | 7664-41-7 | 7782-49-2 | 7783-06-4 | 78-92-2 | 78-93-3 | 91-20-3 | 95-63-6 | 67-63-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Vanadium (fume or dust) | Chloromethane (Methyl chloride) | Cyanide, Hydrogen | Acetaldehyde | Dichloromethane (Methylene chloride) | Carbon disulfide | Silica, crystalline (respirable) | Ammonia | Selenium and compounds | Hydrogen sulfide | sec-Butyl alcohol | 2-Butanone (Methyl ethyl ketone) | Naphthalene | 1,2,4-Trimethylbenzene | Isopropyl alcohol |
| | Exposure Scenario-specific RBC | (µg/m$^{3}$) | 0.800 | 1000.000 | 340.000 | 470.000 | 2100.000 | 6200.000 | 0.000 | 1200.000 | 2.000 | 98.000 | 0.000 | 5000.000 | 200.000 | 0.000 | 3200.000 |
| BH2 | Emission Rate | lb/day | 0.000 | | | | | | | | 0.000 | | | | | | |
| BH2 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.208E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | lb/day | 0.000 | | | | | | | | 0.000 | | | | | | |
| BH1 | REER | (g/s)/(µg/m$^{3}$) | 5.016E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/day | 0.001 | 0.001 | 0.029 | | 0.005 | 0.001 | | 0.006 | | 0.032 | | 0.001 | 0.001 | | 20.859 |
| Vent8_1 | REER | (g/s)/(µg/m$^{3}$) | 6.825E-06 | 7.334E-09 | 4.501E-07 | 0.000E+00 | 1.207E-08 | 7.496E-10 | 0.000E+00 | 2.708E-08 | 0.000E+00 | 1.719E-06 | 0.000E+00 | 7.262E-10 | 2.138E-08 | 0.000E+00 | 3.422E-05 |
| Vent8_2 | Emission Rate | lb/day | 0.001 | 0.001 | 0.029 | | 0.005 | 0.001 | | 0.006 | | 0.032 | | 0.001 | 0.001 | | 20.859 |
| Vent8_2 | REER | (g/s)/(µg/m$^{3}$) | 6.825E-06 | 7.334E-09 | 4.501E-07 | 0.000E+00 | 1.207E-08 | 7.496E-10 | 0.000E+00 | 2.708E-08 | 0.000E+00 | 1.719E-06 | 0.000E+00 | 7.262E-10 | 2.138E-08 | 0.000E+00 | 3.422E-05 |
| Vent8_3 | Emission Rate | lb/day | 0.001 | 0.001 | 0.029 | | 0.005 | 0.001 | | 0.006 | | 0.032 | | 0.001 | 0.001 | | 20.859 |
| Vent8_3 | REER | (g/s)/(µg/m$^{3}$) | 6.825E-06 | 7.334E-09 | 4.501E-07 | 0.000E+00 | 1.207E-08 | 7.496E-10 | 0.000E+00 | 2.708E-08 | 0.000E+00 | 1.719E-06 | 0.000E+00 | 7.262E-10 | 2.138E-08 | 0.000E+00 | 3.422E-05 |
| Vent8_4 | Emission Rate | lb/day | 0.001 | 0.001 | 0.029 | | 0.005 | 0.001 | | 0.006 | | 0.032 | | 0.001 | 0.001 | | 20.859 |
| Vent8_4 | REER | (g/s)/(µg/m$^{3}$) | 6.825E-06 | 7.334E-09 | 4.501E-07 | 0.000E+00 | 1.207E-08 | 7.496E-10 | 0.000E+00 | 2.708E-08 | 0.000E+00 | 1.719E-06 | 0.000E+00 | 7.262E-10 | 2.138E-08 | 0.000E+00 | 3.422E-05 |
| Vent8_5 | Emission Rate | lb/day | 0.001 | 0.001 | 0.029 | | 0.005 | 0.001 | | 0.006 | | 0.032 | | 0.001 | 0.001 | | 20.859 |
| Vent8_5 | REER | (g/s)/(µg/m$^{3}$) | 6.825E-06 | 7.334E-09 | 4.501E-07 | 0.000E+00 | 1.207E-08 | 7.496E-10 | 0.000E+00 | 2.708E-08 | 0.000E+00 | 1.719E-06 | 0.000E+00 | 7.262E-10 | 2.138E-08 | 0.000E+00 | 3.422E-05 |
| Vent11_1 | Emission Rate | lb/day | 0.000 | | | | | | | | | | | | | | |
| Vent11_1 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/day | 0.000 | | | | | | | | | | | | | | |
| Vent11_2 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/day | 0.000 | | | | | | | | | | | | | | |
| Vent11_3 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/day | 0.000 | 0.009 | 0.030 | 0.178 | 0.030 | 0.005 | | 0.006 | | 0.032 | | 0.004 | 0.017 | | 20.859 |
| Vent11_4 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 4.553E-08 | 4.572E-07 | 1.985E-06 | 7.492E-08 | 4.653E-09 | 0.000E+00 | 2.790E-08 | 0.000E+00 | 1.733E-06 | 0.000E+00 | 4.508E-09 | 4.558E-07 | 0.000E+00 | 3.422E-05 |
| Vent11_5 | Emission Rate | lb/day | 0.000 | 0.009 | 0.030 | 0.178 | 0.030 | 0.005 | | 0.006 | | 0.032 | | 0.004 | 0.017 | | 20.859 |
| Vent11_5 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 4.553E-08 | 4.572E-07 | 1.985E-06 | 7.492E-08 | 4.653E-09 | 0.000E+00 | 2.790E-08 | 0.000E+00 | 1.733E-06 | 0.000E+00 | 4.508E-09 | 4.558E-07 | 0.000E+00 | 3.422E-05 |
| Vent11_6 | Emission Rate | lb/day | 0.000 | 0.009 | 0.030 | 0.178 | 0.030 | 0.005 | | 0.006 | | 0.032 | | 0.004 | 0.017 | | 20.859 |
| Vent11_6 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 4.553E-08 | 4.572E-07 | 1.985E-06 | 7.492E-08 | 4.653E-09 | 0.000E+00 | 2.790E-08 | 0.000E+00 | 1.733E-06 | 0.000E+00 | 4.508E-09 | 4.558E-07 | 0.000E+00 | 3.422E-05 |
| Vent11_7 | Emission Rate | lb/day | 0.000 | 0.009 | 0.030 | 0.178 | 0.030 | 0.005 | | 0.006 | | 0.032 | | 0.004 | 0.017 | | 20.859 |
| Vent11_7 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 4.553E-08 | 4.572E-07 | 1.985E-06 | 7.492E-08 | 4.653E-09 | 0.000E+00 | 2.790E-08 | 0.000E+00 | 1.733E-06 | 0.000E+00 | 4.508E-09 | 4.558E-07 | 0.000E+00 | 3.422E-05 |
| Vent11_8 | Emission Rate | lb/day | 0.000 | 0.009 | 0.030 | 0.178 | 0.030 | 0.005 | | 0.006 | | 0.032 | | 0.004 | 0.017 | | 20.859 |
| Vent11_8 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 4.553E-08 | 4.572E-07 | 1.985E-06 | 7.492E-08 | 4.653E-09 | 0.000E+00 | 2.790E-08 | 0.000E+00 | 1.733E-06 | 0.000E+00 | 4.508E-09 | 4.558E-07 | 0.000E+00 | 3.422E-05 |
| Vent11_9 | Emission Rate | lb/day | 0.000 | 0.009 | 0.030 | 0.178 | 0.030 | 0.005 | | 0.006 | | 0.032 | | 0.004 | 0.017 | | 20.859 |
| Vent11_9 | REER | (g/s)/(µg/m$^{3}$) | 1.957E-06 | 4.553E-08 | 4.572E-07 | 1.985E-06 | 7.492E-08 | 4.653E-09 | 0.000E+00 | 2.790E-08 | 0.000E+00 | 1.733E-06 | 0.000E+00 | 4.508E-09 | 4.558E-07 | 0.000E+00 | 3.422E-05 |
| BH3 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH3 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.141E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH5 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.361E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH17 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.200E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH6 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.378E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH8 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.521E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH9 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.099E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH4 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.046E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH22 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.980E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH20 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.083E-11 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH26 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH15 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH7 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH24 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH16 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH19 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| BH10 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | lb/day | | | | | | | | | 0.000 | | | | | | |
| RC18 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | lb/day | 0.000 | | | | | | | 0.439 | | | 4.391 | | | | 0.097 |
| Fug01 | REER | (g/s)/(µg/m$^{3}$) | 7.942E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.921E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.590E-07 |
| Fug05 | Emission Rate | lb/day | | | 0.030 | | 0.588 | | | 0.705 | | 0.032 | | | 0.001 | 0.137 | 20.859 |
| Fug05 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 4.572E-07 | 0.000E+00 | 1.471E-06 | 0.000E+00 | 0.000E+00 | 3.083E-06 | 0.000E+00 | 1.733E-06 | 0.000E+00 | 0.000E+00 | 2.751E-08 | 0.000E+00 | 3.422E-05 |
| Fug07 | Emission Rate | lb/day | | | | | | | | | | | | 0.001 | | | |
| Fug07 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.037E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/day | | | | | | | | | | | | | | | 0.075 |
| Fug07N | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.229E-07 |
| Fug15 | Emission Rate | lb/day | | | | | | | 0.000 | | | | | | | | |
| Fug15 | REER | (g/s)/(µg/m$^{3}$) | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

## Table A-2. Emission Rates and REER Calculations - Resident Chronic Cancer Exposure Scenario - Sources Not Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 365 | 100-41-4 | 100-42-5 | 101-68-8 | 106-99-0 | 107-02-8 | 108-88-3 | 108-95-2 | 110-54-3 | 110-82-7 | 111-76-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nickel compounds, insoluble | Ethyl benzene | Styrene | Methylene diphenyl diisocyanate (MDI) | 1,3-Butadiene | Acrolein | Toluene | Phenol | Hexane | Cyclohexane | Ethylene glycol monobutyl ether |
| | Exposure Scenario-specific RBC | (µg/m$^3$) | n/a | 0.004 | 0.400 | 0.000 | 0.000 | 0.033 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| BH2 | Emission Rate | lb/yr | | 0.040 | | | | | | | | | | |
| BH2 | REER | (g/s)/(µg/m$^3$) | 1.787E-02 | 1.512E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | lb/yr | | 0.191 | | | | | | | | | | |
| BH1 | REER | (g/s)/(µg/m$^3$) | 4.671E-02 | 7.228E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/yr | | 0.228 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_1 | REER | (g/s)/(µg/m$^3$) | 1.289E-02 | 8.644E-04 | 1.047E-05 | 0.000E+00 | 0.000E+00 | 6.192E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_2 | REER | (g/s)/(µg/m$^3$) | 1.187E-02 | 8.508E-04 | 1.047E-05 | 0.000E+00 | 0.000E+00 | 6.192E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_3 | REER | (g/s)/(µg/m$^3$) | 1.187E-02 | 8.508E-04 | 1.047E-05 | 0.000E+00 | 0.000E+00 | 6.192E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_4 | REER | (g/s)/(µg/m$^3$) | 1.187E-02 | 8.508E-04 | 1.047E-05 | 0.000E+00 | 0.000E+00 | 6.192E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_5 | REER | (g/s)/(µg/m$^3$) | 1.187E-02 | 8.508E-04 | 1.047E-05 | 0.000E+00 | 0.000E+00 | 6.192E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | |
| Vent11_1 | REER | (g/s)/(µg/m$^3$) | 1.667E-02 | 6.541E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | |
| Vent11_2 | REER | (g/s)/(µg/m$^3$) | 1.667E-02 | 6.541E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/yr | | 2.813 | | | | | | | | | | |
| Vent11_3 | REER | (g/s)/(µg/m$^3$) | 1.076E-01 | 1.065E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/yr | | 2.813 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_4 | REER | (g/s)/(µg/m$^3$) | 1.491E-01 | 1.065E-02 | 1.854E-04 | 0.000E+00 | 0.000E+00 | 3.844E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/yr | | 6.537 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_5 | REER | (g/s)/(µg/m$^3$) | 3.465E-01 | 2.474E-02 | 1.854E-04 | 0.000E+00 | 0.000E+00 | 3.844E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_6 | REER | (g/s)/(µg/m$^3$) | 1.066E-01 | 3.387E-02 | 1.854E-04 | 0.000E+00 | 0.000E+00 | 3.844E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_7 | REER | (g/s)/(µg/m$^3$) | 1.066E-01 | 3.387E-02 | 1.854E-04 | 0.000E+00 | 0.000E+00 | 3.844E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/yr | | 17.816 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_8 | REER | (g/s)/(µg/m$^3$) | 1.333E-01 | 6.743E-02 | 1.854E-04 | 0.000E+00 | 0.000E+00 | 3.844E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/yr | | 2.960 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_9 | REER | (g/s)/(µg/m$^3$) | 7.787E-02 | 1.121E-02 | 1.854E-04 | 0.000E+00 | 0.000E+00 | 3.844E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | lb/yr | | 1.332 | | | | | | | | | | |
| BH3 | REER | (g/s)/(µg/m$^3$) | 8.108E-03 | 5.041E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | lb/yr | | 1.368 | | | | | | | | | | |
| BH5 | REER | (g/s)/(µg/m$^3$) | 8.327E-03 | 5.178E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | lb/yr | | 0.360 | | | | | | | | | | |
| BH17 | REER | (g/s)/(µg/m$^3$) | 2.191E-03 | 1.363E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | lb/yr | | 0.389 | | | | | | | | | | |
| BH6 | REER | (g/s)/(µg/m$^3$) | 2.369E-03 | 1.473E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | lb/yr | | 0.412 | | | | | | | | | | |
| BH8 | REER | (g/s)/(µg/m$^3$) | 2.510E-03 | 1.561E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | lb/yr | | 0.083 | | | | | | | | | | |
| BH9 | REER | (g/s)/(µg/m$^3$) | 5.079E-04 | 3.158E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | lb/yr | | 0.662 | | | | | | | | | | |
| BH4 | REER | (g/s)/(µg/m$^3$) | 4.030E-03 | 2.506E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | lb/yr | | 0.651 | | | | | | | | | | |
| BH22 | REER | (g/s)/(µg/m$^3$) | 3.964E-03 | 2.465E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | lb/yr | | 0.003 | | | | | | | | | | |
| BH20 | REER | (g/s)/(µg/m$^3$) | 2.075E-05 | 1.290E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | lb/yr | | 0.388 | | | | | | | | | | |
| BH26 | REER | (g/s)/(µg/m$^3$) | 2.047E-03 | 1.470E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | lb/yr | | 0.106 | | | | | | | | | | |
| BH15 | REER | (g/s)/(µg/m$^3$) | 1.138E-02 | 4.031E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH7 | REER | (g/s)/(µg/m$^3$) | 6.394E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH24 | REER | (g/s)/(µg/m$^3$) | 3.837E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH16 | REER | (g/s)/(µg/m$^3$) | 6.394E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH19 | REER | (g/s)/(µg/m$^3$) | 4.196E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH10 | REER | (g/s)/(µg/m$^3$) | 4.902E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | lb/yr | | | | | | | | | | | | |
| RC18 | REER | (g/s)/(µg/m$^3$) | 1.380E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | 1670.760 |
| Fug01 | REER | (g/s)/(µg/m$^3$) | 1.682E-06 | 1.682E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | lb/yr | | | | 76.778 | | 22.368 | 1.286 | 65.242 | 1396.174 | 89.473 | 33.250 | |
| Fug05 | REER | (g/s)/(µg/m$^3$) | 2.565E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.749E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | lb/yr | | | 0.124 | 110.163 | 40.271 | | | | | 0.840 | | |
| Fug07 | REER | (g/s)/(µg/m$^3$) | 4.465E-06 | 0.000E+00 | 4.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/yr | | | 12.922 | | | | | 6.090 | | | | 10.150 |
| Fug07N | REER | (g/s)/(µg/m$^3$) | 5.214E-04 | 0.000E+00 | 4.646E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | |
| Fug15 | REER | (g/s)/(µg/m$^3$) | 1.728E-07 | 1.728E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 1330-20-7 | 18540-29-9 | 26471-62-5 | 50-00-0 | 67-64-1 | 71-43-2 | 7429-90-5 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 7440-36-0 | 7440-38-2 | 7440-41-7 | 7440-43-9 | 7440-48-4 | 7440-50-8 | 7440-62-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Xylene (mixture), including m-xylene, o-xylene, p-xylene | Chromium VI, chromate and dichromate particulate | Toluene diisocyanates (2,4- and 2,6-) | Formaldehyde | Acetone | Benzene | Aluminum and compounds | Lead and compounds | Manganese and compounds | Mercury and compounds | Antimony and compounds | Arsenic and compounds | Beryllium and compounds | Cadmium and compounds | Cobalt and compounds | Copper and compounds | Vanadium (fume or dust) |
| | Exposure Scenario-specific RBC | 0.000 | 0.000 | 0.091 | 0.170 | 0.000 | 0.130 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 |
| BH2 | Emission Rate | | 0.002 | | | | | 2.205 | 0.015 | 3.847 | 0.000 | 0.036 | 0.028 | 0.000 | 0.003 | 0.018 | 0.179 | 0.000 |
| BH2 | REER | 0.000E+00 | 7.808E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.687E-02 | 0.000E+00 | 7.331E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | 0.031 | | | | | 1.191 | 0.017 | 7.471 | 0.000 | 0.037 | 0.053 | 0.002 | 0.001 | 0.004 | 0.279 | 0.020 |
| BH1 | REER | 0.000E+00 | 1.428E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.163E-02 | 6.655E-05 | 1.987E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 8.590 | 0.002 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.701 | 50.528 | | | 0.000 | | | | | 0.270 |
| Vent8_1 | REER | 0.000E+00 | 1.135E-03 | 0.000E+00 | 6.097E-04 | 0.000E+00 | 9.544E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_2 | REER | 0.000E+00 | 1.260E-04 | 0.000E+00 | 6.097E-04 | 0.000E+00 | 9.544E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_3 | REER | 0.000E+00 | 1.260E-04 | 0.000E+00 | 6.097E-04 | 0.000E+00 | 9.544E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_4 | REER | 0.000E+00 | 1.260E-04 | 0.000E+00 | 6.097E-04 | 0.000E+00 | 9.544E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_5 | REER | 0.000E+00 | 1.260E-04 | 0.000E+00 | 6.097E-04 | 0.000E+00 | 9.544E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_1 | REER | 0.000E+00 | 1.013E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_2 | REER | 0.000E+00 | 1.013E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | 0.209 | | | | | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_3 | REER | 0.000E+00 | 9.696E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 33.362 | 0.209 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_4 | REER | 0.000E+00 | 9.696E-02 | 0.000E+00 | 1.322E-03 | 0.000E+00 | 3.242E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | 33.362 | 0.604 | | 15.630 | 11.520 | 293.020 | 2.394 | 5.157 | 349.619 | | | 0.000 | | | | | 0.078 |
| Vent11_5 | REER | 0.000E+00 | 2.803E-01 | 0.000E+00 | 1.322E-03 | 0.000E+00 | 3.242E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_6 | REER | 0.000E+00 | 3.126E-02 | 0.000E+00 | 1.322E-03 | 0.000E+00 | 3.242E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_7 | REER | 0.000E+00 | 3.126E-02 | 0.000E+00 | 1.322E-03 | 0.000E+00 | 3.242E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | 33.362 | 0.053 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.129 | 172.800 | | | 0.000 | | | | | 0.078 |
| Vent11_8 | REER | 0.000E+00 | 2.443E-02 | 0.000E+00 | 1.322E-03 | 0.000E+00 | 3.242E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | 33.362 | 0.054 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.996 | 113.593 | | | 0.000 | | | | | 0.078 |
| Vent11_9 | REER | 0.000E+00 | 2.517E-02 | 0.000E+00 | 1.322E-03 | 0.000E+00 | 3.242E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | 0.004 | | | | | | 0.011 | 1.987 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.088 | |
| BH3 | REER | 0.000E+00 | 1.903E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.164E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | 0.004 | | | | | | 0.011 | 2.041 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.090 | |
| BH5 | REER | 0.000E+00 | 1.954E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.195E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | 0.001 | | | | | | 0.003 | 0.537 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.024 | |
| BH17 | REER | 0.000E+00 | 5.143E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.146E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | 0.001 | | | | | | 0.003 | 0.581 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.026 | |
| BH6 | REER | 0.000E+00 | 5.559E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.400E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | 0.001 | | | | | | 0.003 | 0.615 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.027 | |
| BH8 | REER | 0.000E+00 | 5.892E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.604E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | 0.000 | | | | | | 0.001 | 0.124 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.005 | |
| BH9 | REER | 0.000E+00 | 1.192E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.291E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | 0.002 | | | | | | 0.005 | 0.988 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH4 | REER | 0.000E+00 | 9.458E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.785E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | 0.002 | | | | | | 0.005 | 0.971 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH22 | REER | 0.000E+00 | 9.303E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.691E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | 0.000 | | | | | | 0.000 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 | |
| BH20 | REER | 0.000E+00 | 4.869E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.979E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | 0.000 | | | | | | 0.000 | 2.286 | 0.000 | | 0.001 | | 0.000 | | | |
| BH26 | REER | 0.000E+00 | 2.548E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.513E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | 0.003 | | | | | | 0.057 | 5.626 | 0.000 | | 0.016 | | 0.000 | | | |
| BH15 | REER | 0.000E+00 | 1.359E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.616E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | 0.011 | | | | | | 0.001 | | 0.000 | | 0.002 | | 0.000 | | | |
| BH7 | REER | 0.000E+00 | 5.003E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.392E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | 0.065 | | | | | | 0.009 | | 0.000 | | 0.014 | | 0.000 | | | |
| BH24 | REER | 0.000E+00 | 3.002E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.349E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | 0.001 | | | | | | 0.000 | | 0.000 | | 0.002 | | 0.000 | | | |
| BH16 | REER | 0.000E+00 | 5.003E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.392E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| BH19 | REER | 0.000E+00 | 3.283E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.132E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | 0.006 | | | | | | 0.003 | | 0.000 | | 0.004 | | 0.000 | | | |
| BH10 | REER | 0.000E+00 | 2.705E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.197E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| RC18 | REER | 0.000E+00 | 1.079E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.002E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | | | | 0.000 | | 0.015 | | | | | | 0.000 | 0.000 | 0.000 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | 56.898 | | | 41.135 | 2298.491 | 110.736 | | | | | | | | | | | |
| Fug05 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.480E-03 | 0.000E+00 | 1.225E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | 76.552 | | | | | | | | | | | | | | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | 34.100 | | 0.359 | | 142.100 | | | | | | | | | | | | |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 5.675E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | | | | 0.007 | | | | | | | 0.000 | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 74-87-3 | 74-90-8 | 75-07-0 | 75-09-2 | 75-15-0 | 7631-86-9 | 7664-41-7 | 7782-49-2 | 7783-06-4 | 78-92-2 | 78-93-3 | 91-20-3 | 95-63-6 | 67-63-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Chloromethane (Methyl chloride) | Cyanide, Hydrogen | Acetaldehyde | Dichloromethane (Methylene chloride) | Carbon disulfide | Silica, crystalline (respirable) | Ammonia | Selenium and compounds | Hydrogen sulfide | sec-Butyl alcohol | 2-Butanone (Methyl ethyl ketone) | Naphthalene | 1,2,4-Trimethylbenzene | Isopropyl alcohol |
| | Exposure Scenario-specific RBC | 0.000 | 0.000 | 0.450 | 59.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.029 | 0.000 | 0.000 |
| BH2 | Emission Rate | | | | | | | | 0.120 | | | | | | |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.060E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.050E-04 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.060E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.050E-04 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.060E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.050E-04 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.060E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.050E-04 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.060E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.050E-04 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_4 | REER | 0.000E+00 | 0.000E+00 | 1.477E-03 | 1.899E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.239E-03 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_5 | REER | 0.000E+00 | 0.000E+00 | 1.477E-03 | 1.899E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.239E-03 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_6 | REER | 0.000E+00 | 0.000E+00 | 1.477E-03 | 1.899E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.239E-03 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_7 | REER | 0.000E+00 | 0.000E+00 | 1.477E-03 | 1.899E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.239E-03 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_8 | REER | 0.000E+00 | 0.000E+00 | 1.477E-03 | 1.899E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.239E-03 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_9 | REER | 0.000E+00 | 0.000E+00 | 1.477E-03 | 1.899E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.239E-03 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | | | | 114.156 | | | 1141.560 | | | | 25.200 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | | 7.698 | | 152.951 | | | 183.204 | | 8.411 | | | 0.273 | 35.668 | 5423.220 |
| Fug05 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.729E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.352E-04 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | | | | | | | | | | | 0.257 | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | | | | | | | | | | | | | 19.481 |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | 0.002 | | | | | | | | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

**Table A-3. Emission Rates and REER Calculations - Resident Chronic Non-Cancer Exposure Scenario - Sources Not Combusting Natural Gas**

| TEU | Parameter | Units | All Compounds | 365 | 100-41-4 | 100-42-5 | 101-68-8 | 106-99-0 | 107-02-8 | 108-88-3 | 108-95-2 | 110-54-3 | 110-82-7 | 111-76-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nickel compounds, insoluble | Ethyl benzene | Styrene | Methylene diphenyl diisocyanate (MDI) | 1,3-Butadiene | Acrolein | Toluene | Phenol | Hexane | Cyclohexane | Ethylene glycol monobutyl ether |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 0.014 | 260.000 | 1000.000 | 0.080 | 2.000 | 0.350 | 5000.000 | 200.000 | 700.000 | 6000.000 | 82.000 |
| BH2 | Emission Rate | lb/yr | | 0.040 | | | | | | | | | | |
| BH2 | REER | (g/s)/(µg/m³) | 3.058E-03 | 4.105E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | lb/yr | | 0.191 | | | | | | | | | | |
| BH1 | REER | (g/s)/(µg/m³) | 5.877E-03 | 1.962E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/yr | | 0.228 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_1 | REER | (g/s)/(µg/m³) | 9.489E-03 | 2.346E-04 | 1.611E-08 | 2.793E-09 | 0.000E+00 | 1.022E-05 | 4.872E-05 | 7.040E-08 | 8.314E-07 | 1.929E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_2 | REER | (g/s)/(µg/m³) | 3.934E-03 | 2.309E-04 | 1.611E-08 | 2.793E-09 | 0.000E+00 | 1.022E-05 | 4.872E-05 | 7.040E-08 | 8.314E-07 | 1.929E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_3 | REER | (g/s)/(µg/m³) | 3.934E-03 | 2.309E-04 | 1.611E-08 | 2.793E-09 | 0.000E+00 | 1.022E-05 | 4.872E-05 | 7.040E-08 | 8.314E-07 | 1.929E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_4 | REER | (g/s)/(µg/m³) | 3.934E-03 | 2.309E-04 | 1.611E-08 | 2.793E-09 | 0.000E+00 | 1.022E-05 | 4.872E-05 | 7.040E-08 | 8.314E-07 | 1.929E-08 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | |
| Vent8_5 | REER | (g/s)/(µg/m³) | 3.934E-03 | 2.309E-04 | 1.611E-08 | 2.793E-09 | 0.000E+00 | 1.022E-05 | 4.872E-05 | 7.040E-08 | 8.314E-07 | 1.929E-08 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | |
| Vent11_1 | REER | (g/s)/(µg/m³) | 1.613E-01 | 1.775E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | |
| Vent11_2 | REER | (g/s)/(µg/m³) | 1.613E-01 | 1.775E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/yr | | 2.813 | | | | | | | | | | |
| Vent11_3 | REER | (g/s)/(µg/m³) | 3.519E-02 | 2.890E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/yr | | 2.813 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_4 | REER | (g/s)/(µg/m³) | 3.735E-02 | 2.890E-03 | 2.853E-07 | 1.734E-08 | 0.000E+00 | 6.342E-05 | 5.283E-05 | 3.379E-07 | 1.222E-06 | 2.161E-07 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/yr | | 6.537 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_5 | REER | (g/s)/(µg/m³) | 6.537E-02 | 6.716E-03 | 2.853E-07 | 1.734E-08 | 0.000E+00 | 6.342E-05 | 5.283E-05 | 3.379E-07 | 1.222E-06 | 2.161E-07 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_6 | REER | (g/s)/(µg/m³) | 4.735E-02 | 9.193E-03 | 2.853E-07 | 1.734E-08 | 0.000E+00 | 6.342E-05 | 5.283E-05 | 3.379E-07 | 1.222E-06 | 2.161E-07 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_7 | REER | (g/s)/(µg/m³) | 4.735E-02 | 9.193E-03 | 2.853E-07 | 1.734E-08 | 0.000E+00 | 6.342E-05 | 5.283E-05 | 3.379E-07 | 1.222E-06 | 2.161E-07 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/yr | | 17.816 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_8 | REER | (g/s)/(µg/m³) | 4.822E-02 | 1.830E-02 | 2.853E-07 | 1.734E-08 | 0.000E+00 | 6.342E-05 | 5.283E-05 | 3.379E-07 | 1.222E-06 | 2.161E-07 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/yr | | 2.960 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | |
| Vent11_9 | REER | (g/s)/(µg/m³) | 2.358E-02 | 3.041E-03 | 2.853E-07 | 1.734E-08 | 0.000E+00 | 6.342E-05 | 5.283E-05 | 3.379E-07 | 1.222E-06 | 2.161E-07 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | lb/yr | | 1.332 | | | | | | | | | | |
| BH3 | REER | (g/s)/(µg/m³) | 1.852E-03 | 1.368E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | lb/yr | | 1.368 | | | | | | | | | | |
| BH5 | REER | (g/s)/(µg/m³) | 1.902E-03 | 1.405E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | lb/yr | | 0.360 | | | | | | | | | | |
| BH17 | REER | (g/s)/(µg/m³) | 5.005E-04 | 3.698E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | lb/yr | | 0.389 | | | | | | | | | | |
| BH6 | REER | (g/s)/(µg/m³) | 5.410E-04 | 3.997E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | lb/yr | | 0.412 | | | | | | | | | | |
| BH8 | REER | (g/s)/(µg/m³) | 5.734E-04 | 4.237E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | lb/yr | | 0.083 | | | | | | | | | | |
| BH9 | REER | (g/s)/(µg/m³) | 1.160E-04 | 8.571E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | lb/yr | | 0.662 | | | | | | | | | | |
| BH4 | REER | (g/s)/(µg/m³) | 9.205E-04 | 6.801E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | lb/yr | | 0.651 | | | | | | | | | | |
| BH22 | REER | (g/s)/(µg/m³) | 9.054E-04 | 6.689E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | lb/yr | | 0.003 | | | | | | | | | | |
| BH20 | REER | (g/s)/(µg/m³) | 4.739E-06 | 3.501E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | lb/yr | | 0.388 | | | | | | | | | | |
| BH26 | REER | (g/s)/(µg/m³) | 8.423E-04 | 3.991E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | lb/yr | | 0.106 | | | | | | | | | | |
| BH15 | REER | (g/s)/(µg/m³) | 2.372E-03 | 1.094E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH7 | REER | (g/s)/(µg/m³) | 1.985E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH24 | REER | (g/s)/(µg/m³) | 1.191E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH16 | REER | (g/s)/(µg/m³) | 1.985E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH19 | REER | (g/s)/(µg/m³) | 1.302E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | lb/yr | | | | | | | | | | | | |
| BH10 | REER | (g/s)/(µg/m³) | 3.115E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | lb/yr | | | | | | | | | | | | |
| RC18 | REER | (g/s)/(µg/m³) | 4.282E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | 1670.760 |
| Fug01 | REER | (g/s)/(µg/m³) | 3.015E-04 | 4.566E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.931E-04 |
| Fug05 | Emission Rate | lb/yr | | | | 76.778 | | 22.368 | 1.286 | 65.242 | 1396.174 | 89.473 | 33.250 | |
| Fug05 | REER | (g/s)/(µg/m³) | 1.526E-03 | 0.000E+00 | 0.000E+00 | 1.104E-06 | 0.000E+00 | 1.609E-04 | 5.283E-05 | 1.877E-07 | 1.004E-04 | 1.838E-06 | 7.971E-08 | 0.000E+00 |
| Fug07 | Emission Rate | lb/yr | | | 0.124 | 110.163 | 40.271 | | | | | 0.840 | | |
| Fug07 | REER | (g/s)/(µg/m³) | 7.247E-03 | 0.000E+00 | 6.870E-09 | 1.585E-06 | 7.240E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.726E-08 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/yr | | | 12.922 | | | | | 6.090 | | | | 10.150 |
| Fug07N | REER | (g/s)/(µg/m³) | 2.521E-04 | 0.000E+00 | 7.148E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.752E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.780E-06 |
| Fug15 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | |
| Fug15 | REER | (g/s)/(µg/m³) | 1.180E-06 | 4.689E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 1330-20-7 | 18540-29-9 | 26471-62-5 | 50-00-0 | 67-64-1 | 71-43-2 | 7429-90-5 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 7440-36-0 | 7440-38-2 | 7440-41-7 | 7440-43-9 | 7440-48-4 | 7440-50-8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Xylene (mixture), including m-xylene, o-xylene, p-xylene | Chromium VI, chromate and dichromate particulate | Toluene diisocyanates (2,4- and 2,6-) | Formaldehyde | Acetone | Benzene | Aluminum and compounds | Lead and compounds | Manganese and compounds | Mercury and compounds | Antimony and compounds | Arsenic and compounds | Beryllium and compounds | Cadmium and compounds | Cobalt and compounds | Copper and compounds |
| | Exposure Scenario-specific RBC | 220.000 | 0.083 | 0.021 | 9.000 | 31000.000 | 3.000 | 5.000 | 0.150 | 0.090 | 0.077 | 0.300 | 0.000 | 0.007 | 0.005 | 0.100 | 0.000 |
| BH2 | Emission Rate | | 0.002 | | | | | 2.205 | 0.015 | 3.847 | 0.000 | 0.036 | 0.028 | 0.000 | 0.003 | 0.018 | 0.179 |
| BH2 | REER | 0.000E+00 | 2.916E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.344E-06 | 1.463E-06 | 6.147E-04 | 7.689E-08 | 1.737E-06 | 2.381E-03 | 0.000E+00 | 8.211E-06 | 2.545E-06 | 0.000E+00 |
| BH1 | Emission Rate | | 0.031 | | | | | 1.191 | 0.017 | 7.471 | 0.000 | 0.037 | 0.053 | 0.002 | 0.001 | 0.004 | 0.279 |
| BH1 | REER | 0.000E+00 | 5.332E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.425E-06 | 1.666E-06 | 1.194E-03 | 8.842E-08 | 1.795E-06 | 4.465E-03 | 3.993E-06 | 2.225E-06 | 6.415E-07 | 0.000E+00 |
| Vent8_1 | Emission Rate | 8.590 | 0.002 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.701 | 50.528 | | | 0.000 | | | | |
| Vent8_1 | REER | 5.616E-07 | 4.238E-07 | 0.000E+00 | 1.152E-05 | 8.610E-10 | 4.136E-04 | 1.070E-07 | 6.725E-05 | 8.075E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_2 | REER | 5.616E-07 | 4.705E-08 | 0.000E+00 | 1.152E-05 | 8.610E-10 | 4.136E-04 | 1.070E-07 | 1.879E-05 | 2.572E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_3 | REER | 5.616E-07 | 4.705E-08 | 0.000E+00 | 1.152E-05 | 8.610E-10 | 4.136E-04 | 1.070E-07 | 1.879E-05 | 2.572E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_4 | REER | 5.616E-07 | 4.705E-08 | 0.000E+00 | 1.152E-05 | 8.610E-10 | 4.136E-04 | 1.070E-07 | 1.879E-05 | 2.572E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_5 | REER | 5.616E-07 | 4.705E-08 | 0.000E+00 | 1.152E-05 | 8.610E-10 | 4.136E-04 | 1.070E-07 | 1.879E-05 | 2.572E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | |
| Vent11_1 | REER | 0.000E+00 | 3.784E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.888E-06 | 7.013E-04 | 1.588E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | |
| Vent11_2 | REER | 0.000E+00 | 3.784E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.888E-06 | 7.013E-04 | 1.588E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | 0.209 | | | | | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | |
| Vent11_3 | REER | 0.000E+00 | 3.621E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.888E-06 | 1.349E-04 | 3.211E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 33.362 | 0.209 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | |
| Vent11_4 | REER | 2.181E-06 | 3.621E-05 | 0.000E+00 | 2.498E-05 | 5.345E-09 | 1.405E-03 | 6.888E-06 | 1.349E-04 | 3.211E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | 33.362 | 0.604 | | 15.630 | 11.520 | 293.020 | 2.394 | 5.157 | 349.619 | | | 0.000 | | | | |
| Vent11_5 | REER | 2.181E-06 | 1.047E-04 | 0.000E+00 | 2.498E-05 | 5.345E-09 | 1.405E-03 | 6.888E-06 | 4.945E-04 | 5.587E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | |
| Vent11_6 | REER | 2.181E-06 | 1.168E-05 | 0.000E+00 | 2.498E-05 | 5.345E-09 | 1.405E-03 | 6.888E-06 | 2.132E-04 | 3.575E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | |
| Vent11_7 | REER | 2.181E-06 | 1.168E-05 | 0.000E+00 | 2.498E-05 | 5.345E-09 | 1.405E-03 | 6.888E-06 | 2.132E-04 | 3.575E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | 33.362 | 0.053 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.129 | 172.800 | | | 0.000 | | | | |
| Vent11_8 | REER | 2.181E-06 | 9.123E-06 | 0.000E+00 | 2.498E-05 | 5.345E-09 | 1.405E-03 | 6.888E-06 | 1.083E-04 | 2.762E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | 33.362 | 0.054 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.996 | 113.593 | | | 0.000 | | | | |
| Vent11_9 | REER | 2.181E-06 | 9.401E-06 | 0.000E+00 | 2.498E-05 | 5.345E-09 | 1.405E-03 | 6.888E-06 | 1.914E-04 | 1.815E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | 0.004 | | | | | | 0.011 | 1.987 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.088 |
| BH3 | REER | 0.000E+00 | 7.107E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.023E-06 | 3.176E-04 | 0.000E+00 | 1.248E-08 | 1.643E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | 0.004 | | | | | | 0.011 | 2.041 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.090 |
| BH5 | REER | 0.000E+00 | 7.299E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.050E-06 | 3.262E-04 | 0.000E+00 | 1.282E-08 | 1.688E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | 0.001 | | | | | | 0.003 | 0.537 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.024 |
| BH17 | REER | 0.000E+00 | 1.921E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.764E-07 | 8.583E-05 | 0.000E+00 | 3.372E-09 | 4.441E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | 0.001 | | | | | | 0.003 | 0.581 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.026 |
| BH6 | REER | 0.000E+00 | 2.076E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.988E-07 | 9.278E-05 | 0.000E+00 | 3.645E-09 | 4.801E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | 0.001 | | | | | | 0.003 | 0.615 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.027 |
| BH8 | REER | 0.000E+00 | 2.201E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.167E-07 | 9.833E-05 | 0.000E+00 | 3.863E-09 | 5.088E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | 0.000 | | | | | | 0.001 | 0.124 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.005 |
| BH9 | REER | 0.000E+00 | 4.452E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.406E-08 | 1.989E-05 | 0.000E+00 | 7.816E-10 | 1.029E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | 0.002 | | | | | | 0.005 | 0.988 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 |
| BH4 | REER | 0.000E+00 | 3.532E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.083E-07 | 1.578E-04 | 0.000E+00 | 6.202E-09 | 8.168E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | 0.002 | | | | | | 0.005 | 0.971 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 |
| BH22 | REER | 0.000E+00 | 3.475E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.000E-07 | 1.553E-04 | 0.000E+00 | 6.100E-09 | 8.034E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | 0.000 | | | | | | 0.000 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH20 | REER | 0.000E+00 | 1.819E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.617E-09 | 8.126E-07 | 0.000E+00 | 3.193E-11 | 4.205E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | 0.000 | | | | | | 0.000 | 2.286 | 0.000 | | 0.001 | | 0.000 | | |
| BH26 | REER | 0.000E+00 | 9.517E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.466E-08 | 3.654E-04 | 0.000E+00 | 0.000E+00 | 7.782E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | 0.003 | | | | | | 0.057 | 5.626 | 0.000 | | 0.016 | | 0.000 | | |
| BH15 | REER | 0.000E+00 | 5.076E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.461E-06 | 8.991E-04 | 0.000E+00 | 0.000E+00 | 1.358E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | 0.011 | | | | | | 0.001 | | 0.000 | | 0.002 | | 0.000 | | |
| BH7 | REER | 0.000E+00 | 1.868E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.382E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.964E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | 0.065 | | | | | | 0.009 | | 0.000 | | 0.014 | | 0.000 | | |
| BH24 | REER | 0.000E+00 | 1.121E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.289E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.179E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | 0.001 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH16 | REER | 0.000E+00 | 1.868E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.382E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.964E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH19 | REER | 0.000E+00 | 1.226E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.066E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.289E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | 0.006 | | | | | | 0.003 | | 0.000 | | 0.004 | | 0.000 | | |
| BH10 | REER | 0.000E+00 | 1.010E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.277E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.102E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| RC18 | REER | 0.000E+00 | 4.031E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.981E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.238E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | | | | 0.000 | | 0.015 | | | | | | 0.000 | 0.000 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.052E-11 | 0.000E+00 | 2.329E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.526E-09 | 0.000E+00 |
| Fug05 | Emission Rate | 56.898 | | | 41.135 | 2298.491 | 110.736 | | | | | | | | | | |
| Fug05 | REER | 3.720E-06 | 0.000E+00 | 0.000E+00 | 6.574E-05 | 1.066E-06 | 5.309E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | 76.552 | | | | | | | | | | | | | | | |
| Fug07 | REER | 5.005E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | 34.100 | | 0.359 | | 142.100 | | | | | | | | | | | |
| Fug07N | REER | 2.229E-06 | 0.000E+00 | 2.459E-04 | 0.000E+00 | 6.593E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | | | | 0.007 | | | | | | | 0.000 |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.122E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 7440-62-2 | 74-87-3 | 74-90-8 | 75-07-0 | 75-09-2 | 75-15-0 | 7631-86-9 | 7664-41-7 | 7782-49-2 | 7783-06-4 | 78-92-2 | 78-93-3 | 91-20-3 | 95-63-6 | 67-63-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Vanadium (fume or dust) | Chloromethane (Methyl chloride) | Cyanide, Hydrogen | Acetaldehyde | Dichloromethane (Methylene chloride) | Carbon disulfide | Silica, crystalline (respirable) | Ammonia | Selenium and compounds | Hydrogen sulfide | sec-Butyl alcohol | 2-Butanone (Methyl ethyl ketone) | Naphthalene | 1,2,4-Trimethylbenzene | Isopropyl alcohol |
| | Exposure Scenario-specific RBC | 0.100 | 90.000 | 0.800 | 140.000 | 600.000 | 800.000 | 3.000 | 500.000 | 0.000 | 2.000 | 30000.000 | 5000.000 | 3.700 | 60.000 | 200.000 |
| BH2 | Emission Rate | 0.000 | | | | | | | | 0.120 | | | | | | |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | 0.020 | | | | | | | | 0.000 | | | | | | |
| BH1 | REER | 2.858E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_1 | REER | 3.889E-05 | 5.805E-08 | 1.363E-04 | 0.000E+00 | 3.009E-08 | 4.138E-09 | 0.000E+00 | 4.629E-08 | 0.000E+00 | 5.999E-05 | 0.000E+00 | 5.173E-10 | 8.230E-07 | 0.000E+00 | 3.900E-04 |
| Vent8_2 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_2 | REER | 3.889E-05 | 5.805E-08 | 1.363E-04 | 0.000E+00 | 3.009E-08 | 4.138E-09 | 0.000E+00 | 4.629E-08 | 0.000E+00 | 5.999E-05 | 0.000E+00 | 5.173E-10 | 8.230E-07 | 0.000E+00 | 3.900E-04 |
| Vent8_3 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_3 | REER | 3.889E-05 | 5.805E-08 | 1.363E-04 | 0.000E+00 | 3.009E-08 | 4.138E-09 | 0.000E+00 | 4.629E-08 | 0.000E+00 | 5.999E-05 | 0.000E+00 | 5.173E-10 | 8.230E-07 | 0.000E+00 | 3.900E-04 |
| Vent8_4 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_4 | REER | 3.889E-05 | 5.805E-08 | 1.363E-04 | 0.000E+00 | 3.009E-08 | 4.138E-09 | 0.000E+00 | 4.629E-08 | 0.000E+00 | 5.999E-05 | 0.000E+00 | 5.173E-10 | 8.230E-07 | 0.000E+00 | 3.900E-04 |
| Vent8_5 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_5 | REER | 3.889E-05 | 5.805E-08 | 1.363E-04 | 0.000E+00 | 3.009E-08 | 4.138E-09 | 0.000E+00 | 4.629E-08 | 0.000E+00 | 5.999E-05 | 0.000E+00 | 5.173E-10 | 8.230E-07 | 0.000E+00 | 3.900E-04 |
| Vent11_1 | Emission Rate | 0.078 | | | | | | | | | | | | | | |
| Vent11_1 | REER | 1.115E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | 0.078 | | | | | | | | | | | | | | |
| Vent11_2 | REER | 1.115E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | 0.078 | | | | | | | | | | | | | | |
| Vent11_3 | REER | 1.115E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_4 | REER | 1.115E-05 | 3.604E-07 | 1.384E-04 | 4.748E-06 | 1.868E-07 | 2.569E-08 | 0.000E+00 | 4.769E-08 | 0.000E+00 | 6.049E-05 | 0.000E+00 | 3.211E-09 | 1.755E-05 | 0.000E+00 | 3.900E-04 |
| Vent11_5 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_5 | REER | 1.115E-05 | 3.604E-07 | 1.384E-04 | 4.748E-06 | 1.868E-07 | 2.569E-08 | 0.000E+00 | 4.769E-08 | 0.000E+00 | 6.049E-05 | 0.000E+00 | 3.211E-09 | 1.755E-05 | 0.000E+00 | 3.900E-04 |
| Vent11_6 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_6 | REER | 1.115E-05 | 3.604E-07 | 1.384E-04 | 4.748E-06 | 1.868E-07 | 2.569E-08 | 0.000E+00 | 4.769E-08 | 0.000E+00 | 6.049E-05 | 0.000E+00 | 3.211E-09 | 1.755E-05 | 0.000E+00 | 3.900E-04 |
| Vent11_7 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_7 | REER | 1.115E-05 | 3.604E-07 | 1.384E-04 | 4.748E-06 | 1.868E-07 | 2.569E-08 | 0.000E+00 | 4.769E-08 | 0.000E+00 | 6.049E-05 | 0.000E+00 | 3.211E-09 | 1.755E-05 | 0.000E+00 | 3.900E-04 |
| Vent11_8 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_8 | REER | 1.115E-05 | 3.604E-07 | 1.384E-04 | 4.748E-06 | 1.868E-07 | 2.569E-08 | 0.000E+00 | 4.769E-08 | 0.000E+00 | 6.049E-05 | 0.000E+00 | 3.211E-09 | 1.755E-05 | 0.000E+00 | 3.900E-04 |
| Vent11_9 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_9 | REER | 1.115E-05 | 3.604E-07 | 1.384E-04 | 4.748E-06 | 1.868E-07 | 2.569E-08 | 0.000E+00 | 4.769E-08 | 0.000E+00 | 6.049E-05 | 0.000E+00 | 3.211E-09 | 1.755E-05 | 0.000E+00 | 3.900E-04 |
| BH3 | Emission Rate | | | | | | | | | 0.001 | | | | | | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | | | | | 0.001 | | | | | | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | 0.000 | | | | | | | 114.156 | | | 1141.560 | | | | 25.200 |
| Fug01 | REER | 4.526E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.284E-06 | 0.000E+00 | 0.000E+00 | 5.473E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.812E-06 |
| Fug05 | Emission Rate | | | 7.698 | | 152.951 | | | 183.204 | | 8.411 | | | 0.273 | 35.668 | 5423.220 |
| Fug05 | REER | 0.000E+00 | 0.000E+00 | 1.384E-04 | 0.000E+00 | 3.667E-06 | 0.000E+00 | 0.000E+00 | 5.270E-06 | 0.000E+00 | 6.049E-05 | 0.000E+00 | 0.000E+00 | 1.059E-06 | 8.550E-06 | 3.900E-04 |
| Fug07 | Emission Rate | | | | | | | | | | | | 0.257 | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.389E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | | | | | | | | | | | | | | 19.481 |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.401E-06 |
| Fug15 | Emission Rate | | | | | | | 0.002 | | | | | | | | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.088E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

**Table A-4. Emission Rates and REER Calculations - Non-Resident Child Chronic Cancer Exposure Scenario - Sources Not Combusting Natural Gas**

| TEU | Parameter | Units | All Compounds | 365 Nickel compounds, insoluble | 100-41-4 Ethyl benzene | 100-42-5 Styrene | 101-68-8 Methylene diphenyl diisocyanate (MDI) | 106-99-0 1,3-Butadiene | 107-02-8 Acrolein | 108-88-3 Toluene | 108-95-2 Phenol | 110-54-3 Hexane | 110-82-7 Cyclohexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Exposure Scenario-specific RBC | (µg/m$^3$) | n/a | 0.100 | 10.000 | 0.000 | 0.000 | 0.860 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| BH2 | Emission Rate | lb/yr | | 0.040 | | | | | | | | | |
| BH2 | REER | (g/s)/(µg/m$^3$) | 3.666E-04 | 5.747E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | lb/yr | | 0.191 | | | | | | | | | |
| BH1 | REER | (g/s)/(µg/m$^3$) | 1.466E-03 | 2.747E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/yr | | 0.228 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_1 | REER | (g/s)/(µg/m$^3$) | 5.288E-04 | 3.285E-05 | 4.190E-07 | 0.000E+00 | 0.000E+00 | 2.376E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_2 | REER | (g/s)/(µg/m$^3$) | 4.681E-04 | 3.233E-05 | 4.190E-07 | 0.000E+00 | 0.000E+00 | 2.376E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_3 | REER | (g/s)/(µg/m$^3$) | 4.681E-04 | 3.233E-05 | 4.190E-07 | 0.000E+00 | 0.000E+00 | 2.376E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_4 | REER | (g/s)/(µg/m$^3$) | 4.681E-04 | 3.233E-05 | 4.190E-07 | 0.000E+00 | 0.000E+00 | 2.376E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_5 | REER | (g/s)/(µg/m$^3$) | 4.681E-04 | 3.233E-05 | 4.190E-07 | 0.000E+00 | 0.000E+00 | 2.376E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | |
| Vent11_1 | REER | (g/s)/(µg/m$^3$) | 8.525E-04 | 2.485E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | |
| Vent11_2 | REER | (g/s)/(µg/m$^3$) | 8.525E-04 | 2.485E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/yr | | 2.813 | | | | | | | | | |
| Vent11_3 | REER | (g/s)/(µg/m$^3$) | 6.185E-03 | 4.046E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/yr | | 2.813 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_4 | REER | (g/s)/(µg/m$^3$) | 7.810E-03 | 4.046E-04 | 7.418E-06 | 0.000E+00 | 0.000E+00 | 1.475E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/yr | | 6.537 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_5 | REER | (g/s)/(µg/m$^3$) | 1.928E-02 | 9.402E-04 | 7.418E-06 | 0.000E+00 | 0.000E+00 | 1.475E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_6 | REER | (g/s)/(µg/m$^3$) | 4.776E-03 | 1.287E-03 | 7.418E-06 | 0.000E+00 | 0.000E+00 | 1.475E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_7 | REER | (g/s)/(µg/m$^3$) | 4.776E-03 | 1.287E-03 | 7.418E-06 | 0.000E+00 | 0.000E+00 | 1.475E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/yr | | 17.816 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_8 | REER | (g/s)/(µg/m$^3$) | 5.644E-03 | 2.563E-03 | 7.418E-06 | 0.000E+00 | 0.000E+00 | 1.475E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/yr | | 2.960 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_9 | REER | (g/s)/(µg/m$^3$) | 3.552E-03 | 4.258E-04 | 7.418E-06 | 0.000E+00 | 0.000E+00 | 1.475E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | lb/yr | | 1.332 | | | | | | | | | |
| BH3 | REER | (g/s)/(µg/m$^3$) | 3.265E-04 | 1.916E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | lb/yr | | 1.368 | | | | | | | | | |
| BH5 | REER | (g/s)/(µg/m$^3$) | 3.353E-04 | 1.967E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | lb/yr | | 0.360 | | | | | | | | | |
| BH17 | REER | (g/s)/(µg/m$^3$) | 8.824E-05 | 5.178E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | lb/yr | | 0.389 | | | | | | | | | |
| BH6 | REER | (g/s)/(µg/m$^3$) | 9.538E-05 | 5.596E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | lb/yr | | 0.412 | | | | | | | | | |
| BH8 | REER | (g/s)/(µg/m$^3$) | 1.011E-04 | 5.931E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | lb/yr | | 0.083 | | | | | | | | | |
| BH9 | REER | (g/s)/(µg/m$^3$) | 2.045E-05 | 1.200E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | lb/yr | | 0.662 | | | | | | | | | |
| BH4 | REER | (g/s)/(µg/m$^3$) | 1.623E-04 | 9.521E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | lb/yr | | 0.651 | | | | | | | | | |
| BH22 | REER | (g/s)/(µg/m$^3$) | 1.596E-04 | 9.365E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | lb/yr | | 0.003 | | | | | | | | | |
| BH20 | REER | (g/s)/(µg/m$^3$) | 8.355E-07 | 4.902E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | lb/yr | | 0.388 | | | | | | | | | |
| BH26 | REER | (g/s)/(µg/m$^3$) | 6.757E-05 | 5.587E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | lb/yr | | 0.106 | | | | | | | | | |
| BH15 | REER | (g/s)/(µg/m$^3$) | 2.739E-04 | 1.532E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH7 | REER | (g/s)/(µg/m$^3$) | 3.239E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH24 | REER | (g/s)/(µg/m$^3$) | 1.944E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH16 | REER | (g/s)/(µg/m$^3$) | 3.239E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH19 | REER | (g/s)/(µg/m$^3$) | 2.126E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH10 | REER | (g/s)/(µg/m$^3$) | 2.018E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | lb/yr | | | | | | | | | | | |
| RC18 | REER | (g/s)/(µg/m$^3$) | 6.989E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | |
| Fug01 | REER | (g/s)/(µg/m$^3$) | 6.393E-08 | 6.393E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | lb/yr | | | | 76.778 | | 22.368 | 1.286 | 65.242 | 1396.174 | 89.473 | 33.250 |
| Fug05 | REER | (g/s)/(µg/m$^3$) | 1.003E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.741E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | lb/yr | | | 0.124 | 110.163 | 40.271 | | | | | 0.840 | |
| Fug07 | REER | (g/s)/(µg/m$^3$) | 1.786E-07 | 0.000E+00 | 1.786E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/yr | | | 12.922 | | | | | 6.090 | | | |
| Fug07N | REER | (g/s)/(µg/m$^3$) | 2.074E-05 | 0.000E+00 | 1.859E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | |
| Fug15 | REER | (g/s)/(µg/m$^3$) | 6.565E-09 | 6.565E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 111-76-2 Ethylene glycol monobutyl ether | 1330-20-7 Xylene (mixture), including m-xylene, o-xylene, p-xylene | 18540-29-9 Chromium VI, chromate and dichromate particulate | 26471-62-5 Toluene diisocyanates (2,4- and 2,6-) | 50-00-0 Formaldehyde | 67-64-1 Acetone | 71-43-2 Benzene | 7429-90-5 Aluminum and compounds | 7439-92-1 Lead and compounds | 7439-96-5 Manganese and compounds | 7439-97-6 Mercury and compounds | 7440-36-0 Antimony and compounds | 7440-38-2 Arsenic and compounds | 7440-41-7 Beryllium and compounds | 7440-43-9 Cadmium and compounds | 7440-48-4 Cobalt and compounds | 7440-50-8 Copper and compounds | 7440-62-2 Vanadium (fume or dust) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Exposure Scenario-specific RBC | 0.000 | 0.000 | 0.001 | 2.400 | 4.300 | 0.000 | 3.300 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.011 | 0.014 | 0.000 | 0.000 | 0.000 |
| BH2 | Emission Rate | | | 0.002 | | | | | 2.205 | 0.015 | 3.847 | 0.000 | 0.036 | 0.028 | 0.000 | 0.003 | 0.018 | 0.179 | 0.000 |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 4.655E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.114E-04 | 0.000E+00 | 2.932E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | | 0.031 | | | | | 1.191 | 0.017 | 7.471 | 0.000 | 0.037 | 0.053 | 0.002 | 0.001 | 0.004 | 0.279 | 0.020 |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 8.511E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.839E-04 | 2.541E-06 | 7.947E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | | 8.590 | 0.002 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.701 | 50.528 | | | 0.000 | | | | | 0.270 |
| Vent8_1 | REER | 0.000E+00 | 0.000E+00 | 6.764E-05 | 0.000E+00 | 2.411E-05 | 0.000E+00 | 3.760E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_2 | REER | 0.000E+00 | 0.000E+00 | 7.510E-06 | 0.000E+00 | 2.411E-05 | 0.000E+00 | 3.760E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_3 | REER | 0.000E+00 | 0.000E+00 | 7.510E-06 | 0.000E+00 | 2.411E-05 | 0.000E+00 | 3.760E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_4 | REER | 0.000E+00 | 0.000E+00 | 7.510E-06 | 0.000E+00 | 2.411E-05 | 0.000E+00 | 3.760E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_5 | REER | 0.000E+00 | 0.000E+00 | 7.510E-06 | 0.000E+00 | 2.411E-05 | 0.000E+00 | 3.760E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 6.039E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 6.039E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | | 0.209 | | | | | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 5.780E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | | 33.362 | 0.209 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_4 | REER | 0.000E+00 | 0.000E+00 | 5.780E-03 | 0.000E+00 | 5.228E-05 | 0.000E+00 | 1.277E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | | 33.362 | 0.604 | | 15.630 | 11.520 | 293.020 | 2.394 | 5.157 | 349.619 | | | 0.000 | | | | | 0.078 |
| Vent11_5 | REER | 0.000E+00 | 0.000E+00 | 1.671E-02 | 0.000E+00 | 5.228E-05 | 0.000E+00 | 1.277E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_6 | REER | 0.000E+00 | 0.000E+00 | 1.864E-03 | 0.000E+00 | 5.228E-05 | 0.000E+00 | 1.277E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_7 | REER | 0.000E+00 | 0.000E+00 | 1.864E-03 | 0.000E+00 | 5.228E-05 | 0.000E+00 | 1.277E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | | 33.362 | 0.053 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.129 | 172.800 | | | 0.000 | | | | | 0.078 |
| Vent11_8 | REER | 0.000E+00 | 0.000E+00 | 1.456E-03 | 0.000E+00 | 5.228E-05 | 0.000E+00 | 1.277E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | | 33.362 | 0.054 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.996 | 113.593 | | | 0.000 | | | | | 0.078 |
| Vent11_9 | REER | 0.000E+00 | 0.000E+00 | 1.501E-03 | 0.000E+00 | 5.228E-05 | 0.000E+00 | 1.277E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | | 0.004 | | | | | | 0.011 | 1.987 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.088 | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 1.134E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.149E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | 0.004 | | | | | | 0.011 | 2.041 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.090 | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 1.165E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.207E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | 0.001 | | | | | | 0.003 | 0.537 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.024 | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 3.066E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.808E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | 0.001 | | | | | | 0.003 | 0.581 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.026 | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 3.314E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.278E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | 0.001 | | | | | | 0.003 | 0.615 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.027 | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 3.512E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.654E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | 0.000 | | | | | | 0.001 | 0.124 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.005 | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 7.105E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.346E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | 0.002 | | | | | | 0.005 | 0.988 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 5.638E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.068E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | 0.002 | | | | | | 0.005 | 0.971 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 5.546E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.051E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | 0.000 | | | | | | 0.000 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 2.903E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.499E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | 0.000 | | | | | | 0.000 | 2.286 | 0.000 | | 0.001 | | 0.000 | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 1.519E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.018E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | 0.003 | | | | | | 0.057 | 5.626 | 0.000 | | 0.016 | | 0.000 | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 8.102E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.775E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | 0.011 | | | | | | 0.001 | | 0.000 | | 0.002 | | 0.000 | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 2.982E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.569E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | 0.065 | | | | | | 0.009 | | 0.000 | | 0.014 | | 0.000 | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 1.789E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.541E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | 0.001 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 2.982E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.569E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 1.957E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.686E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | 0.006 | | | | | | 0.003 | | 0.000 | | 0.004 | | 0.000 | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 1.613E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.056E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 6.435E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.543E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | 1670.760 | | | | | | | 0.000 | | 0.015 | | | | | | 0.000 | 0.000 | 0.000 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | | 56.898 | | | 41.135 | 2298.491 | 110.736 | | | | | | | | | | | |
| Fug05 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.376E-04 | 0.000E+00 | 4.827E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | | 76.552 | | | | | | | | | | | | | | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | 10.150 | 34.100 | | 0.359 | | 142.100 | | | | | | | | | | | | |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.152E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | | | | | 0.007 | | | | | | | 0.000 | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 74-87-3 Chloromethane (Methyl chloride) | 74-90-8 Cyanide, Hydrogen | 75-07-0 Acetaldehyde | 75-09-2 Dichloromethane (Methylene chloride) | 75-15-0 Carbon disulfide | 7631-86-9 Silica, crystalline (respirable) | 7664-41-7 Ammonia | 7782-49-2 Selenium and compounds | 7783-06-4 Hydrogen sulfide | 78-92-2 sec-Butyl alcohol | 78-93-3 2-Butanone (Methyl ethyl ketone) | 91-20-3 Naphthalene | 95-63-6 1,2,4-Trimethylbenzene | 67-63-0 Isopropyl alcohol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Exposure Scenario-specific RBC | 0.000 | 0.000 | 12.000 | 620.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.760 | 0.000 | 0.000 |
| BH2 | Emission Rate | | | | | | | | 0.120 | | | | | | |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.912E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.007E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.912E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.007E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.912E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.007E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.912E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.007E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.912E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.007E-06 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_4 | REER | 0.000E+00 | 0.000E+00 | 5.539E-05 | 1.808E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.544E-05 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_5 | REER | 0.000E+00 | 0.000E+00 | 5.539E-05 | 1.808E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.544E-05 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_6 | REER | 0.000E+00 | 0.000E+00 | 5.539E-05 | 1.808E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.544E-05 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_7 | REER | 0.000E+00 | 0.000E+00 | 5.539E-05 | 1.808E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.544E-05 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_8 | REER | 0.000E+00 | 0.000E+00 | 5.539E-05 | 1.808E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.544E-05 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_9 | REER | 0.000E+00 | 0.000E+00 | 5.539E-05 | 1.808E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.544E-05 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | | | | 114.156 | | | 1141.560 | | | | 25.200 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | | 7.698 | | 152.951 | | | 183.204 | | 8.411 | | | 0.273 | 35.668 | 5423.220 |
| Fug05 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.548E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.157E-06 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | | | | | | | | | | | 0.257 | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | | | | | | | | | | | | | 19.481 |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | 0.002 | | | | | | | | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

## Table A-5. Emission Rates and REER Calculations - Non-Resident Child Chronic Non-Cancer Exposure Scenario - Sources Not Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 365 | 100-41-4 | 100-42-5 | 101-68-8 | 106-99-0 | 107-02-8 | 108-88-3 | 108-95-2 | 110-54-3 | 110-82-7 | 111-76-2 | 1330-20-7 | 18540-29-9 | 26471-62-5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nickel compounds, insoluble | Ethyl benzene | Styrene | Methylene diphenyl diisocyanate (MDI) | 1,3-Butadiene | Acrolein | Toluene | Phenol | Hexane | Cyclohexane | Ethylene glycol monobutyl ether | Xylene (mixture), including m-xylene, o-xylene, p-xylene | Chromium VI, chromate and dichromate particulate | Toluene diisocyanates (2,4- and 2,6-) |
| | Exposure Scenario-specific RBC | (µg/m$^3$) | n/a | 0.062 | 1100.000 | 4400.000 | 0.350 | 8.800 | 1.500 | 22000.000 | 880.000 | 3100.000 | 26000.000 | 360.000 | 970.000 | 0.880 | 0.092 |
| BH2 | Emission Rate | lb/yr | | 0.040 | | | | | | | | | | | | 0.002 | |
| BH2 | REER | (g/s)/(µg/m$^3$) | 3.202E-04 | 9.270E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.751E-08 | 0.000E+00 |
| BH1 | Emission Rate | lb/yr | | 0.191 | | | | | | | | | | | | 0.031 | |
| BH1 | REER | (g/s)/(µg/m$^3$) | 6.333E-04 | 4.430E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.029E-07 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/yr | | 0.228 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.002 | |
| Vent8_1 | REER | (g/s)/(µg/m$^3$) | 2.140E-03 | 5.298E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 | 0.000E+00 | 1.274E-07 | 3.997E-08 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_2 | REER | (g/s)/(µg/m$^3$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_3 | REER | (g/s)/(µg/m$^3$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_4 | REER | (g/s)/(µg/m$^3$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_5 | REER | (g/s)/(µg/m$^3$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | | | 0.022 | |
| Vent11_1 | REER | (g/s)/(µg/m$^3$) | 3.631E-02 | 4.009E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.569E-07 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | | | 0.022 | |
| Vent11_2 | REER | (g/s)/(µg/m$^3$) | 3.631E-02 | 4.009E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.569E-07 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/yr | | 2.813 | | | | | | | | | | | | 0.209 | |
| Vent11_3 | REER | (g/s)/(µg/m$^3$) | 7.916E-03 | 6.526E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.416E-06 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/yr | | 2.813 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.209 | |
| Vent11_4 | REER | (g/s)/(µg/m$^3$) | 8.413E-03 | 6.526E-04 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 | 0.000E+00 | 4.947E-07 | 3.416E-06 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/yr | | 6.537 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.604 | |
| Vent11_5 | REER | (g/s)/(µg/m$^3$) | 1.471E-02 | 1.516E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 | 0.000E+00 | 4.947E-07 | 9.874E-06 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.067 | |
| Vent11_6 | REER | (g/s)/(µg/m$^3$) | 1.067E-02 | 2.076E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 | 0.000E+00 | 4.947E-07 | 1.101E-06 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.067 | |
| Vent11_7 | REER | (g/s)/(µg/m$^3$) | 1.067E-02 | 2.076E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 | 0.000E+00 | 4.947E-07 | 1.101E-06 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/yr | | 17.816 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.053 | |
| Vent11_8 | REER | (g/s)/(µg/m$^3$) | 1.087E-02 | 4.133E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 | 0.000E+00 | 4.947E-07 | 8.604E-07 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/yr | | 2.960 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.054 | |
| Vent11_9 | REER | (g/s)/(µg/m$^3$) | 5.317E-03 | 6.868E-04 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 | 0.000E+00 | 4.947E-07 | 8.867E-07 | 0.000E+00 |
| BH3 | Emission Rate | lb/yr | | 1.332 | | | | | | | | | | | | 0.004 | |
| BH3 | REER | (g/s)/(µg/m$^3$) | 3.924E-04 | 3.090E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.703E-08 | 0.000E+00 |
| BH5 | Emission Rate | lb/yr | | 1.368 | | | | | | | | | | | | 0.004 | |
| BH5 | REER | (g/s)/(µg/m$^3$) | 4.030E-04 | 3.173E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.885E-08 | 0.000E+00 |
| BH17 | Emission Rate | lb/yr | | 0.360 | | | | | | | | | | | | 0.001 | |
| BH17 | REER | (g/s)/(µg/m$^3$) | 1.060E-04 | 8.351E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.812E-08 | 0.000E+00 |
| BH6 | Emission Rate | lb/yr | | 0.389 | | | | | | | | | | | | 0.001 | |
| BH6 | REER | (g/s)/(µg/m$^3$) | 1.146E-04 | 9.026E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.958E-08 | 0.000E+00 |
| BH8 | Emission Rate | lb/yr | | 0.412 | | | | | | | | | | | | 0.001 | |
| BH8 | REER | (g/s)/(µg/m$^3$) | 1.215E-04 | 9.567E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.075E-08 | 0.000E+00 |
| BH9 | Emission Rate | lb/yr | | 0.083 | | | | | | | | | | | | 0.000 | |
| BH9 | REER | (g/s)/(µg/m$^3$) | 2.458E-05 | 1.935E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.199E-09 | 0.000E+00 |
| BH4 | Emission Rate | lb/yr | | 0.662 | | | | | | | | | | | | 0.002 | |
| BH4 | REER | (g/s)/(µg/m$^3$) | 1.950E-04 | 1.536E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.332E-08 | 0.000E+00 |
| BH22 | Emission Rate | lb/yr | | 0.651 | | | | | | | | | | | | 0.002 | |
| BH22 | REER | (g/s)/(µg/m$^3$) | 1.918E-04 | 1.511E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.277E-08 | 0.000E+00 |
| BH20 | Emission Rate | lb/yr | | 0.003 | | | | | | | | | | | | 0.000 | |
| BH20 | REER | (g/s)/(µg/m$^3$) | 1.004E-06 | 7.906E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.715E-10 | 0.000E+00 |
| BH26 | Emission Rate | lb/yr | | 0.388 | | | | | | | | | | | | 0.000 | |
| BH26 | REER | (g/s)/(µg/m$^3$) | 1.778E-04 | 9.012E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.977E-10 | 0.000E+00 |
| BH15 | Emission Rate | lb/yr | | 0.106 | | | | | | | | | | | | 0.003 | |
| BH15 | REER | (g/s)/(µg/m$^3$) | 3.245E-04 | 2.470E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.788E-08 | 0.000E+00 |
| BH7 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.011 | |
| BH7 | REER | (g/s)/(µg/m$^3$) | 1.412E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.762E-07 | 0.000E+00 |
| BH24 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.065 | |
| BH24 | REER | (g/s)/(µg/m$^3$) | 8.474E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.057E-06 | 0.000E+00 |
| BH16 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.001 | |
| BH16 | REER | (g/s)/(µg/m$^3$) | 1.412E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.762E-08 | 0.000E+00 |
| BH19 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.000 | |
| BH19 | REER | (g/s)/(µg/m$^3$) | 9.268E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.157E-09 | 0.000E+00 |
| BH10 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.006 | |
| BH10 | REER | (g/s)/(µg/m$^3$) | 2.214E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.530E-08 | 0.000E+00 |
| RC18 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.000 | |
| RC18 | REER | (g/s)/(µg/m$^3$) | 3.047E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.802E-10 | 0.000E+00 |
| Fug01 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | 1670.760 | | | |
| Fug01 | REER | (g/s)/(µg/m$^3$) | 6.867E-05 | 1.031E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.675E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | lb/yr | | | | 76.778 | | 22.368 | 1.286 | 65.242 | 1396.174 | 89.473 | 33.250 | | 56.898 | | |
| Fug05 | REER | (g/s)/(µg/m$^3$) | 3.491E-04 | 0.000E+00 | 0.000E+00 | 2.510E-07 | 0.000E+00 | 3.656E-05 | 1.233E-05 | 4.265E-08 | 2.282E-05 | 4.151E-07 | 1.839E-08 | 0.000E+00 | 8.437E-07 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | lb/yr | | | 0.124 | 110.163 | 40.271 | | | | | 0.840 | | | 76.552 | | |
| Fug07 | REER | (g/s)/(µg/m$^3$) | 1.656E-03 | 0.000E+00 | 1.624E-09 | 3.601E-07 | 1.655E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.897E-09 | 0.000E+00 | 0.000E+00 | 1.135E-06 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/yr | | | 12.922 | | | | | 6.090 | | | | 10.150 | 34.100 | | 0.359 |
| Fug07N | REER | (g/s)/(µg/m$^3$) | 5.755E-05 | 0.000E+00 | 1.690E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.982E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.055E-07 | 5.056E-07 | 0.000E+00 | 5.613E-05 |
| Fug15 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | | | | |
| Fug15 | REER | (g/s)/(µg/m$^3$) | 2.657E-07 | 1.059E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 50-00-0 | 67-64-1 | 71-43-2 | 7429-90-5 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 7440-36-0 | 7440-38-2 | 7440-41-7 | 7440-43-9 | 7440-48-4 | 7440-50-8 | 7440-62-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Formaldehyde | Acetone | Benzene | Aluminum and compounds | Lead and compounds | Manganese and compounds | Mercury and compounds | Antimony and compounds | Arsenic and compounds | Beryllium and compounds | Cadmium and compounds | Cobalt and compounds | Copper and compounds | Vanadium (fume or dust) |
| | Exposure Scenario-specific RBC | 40.000 | 140000.000 | 13.000 | 22.000 | 0.660 | 0.400 | 0.630 | 1.300 | 0.002 | 0.031 | 0.037 | 0.440 | 0.000 | 0.440 |
| BH2 | Emission Rate | | | | 2.205 | 0.015 | 3.847 | 0.000 | 0.036 | 0.028 | 0.000 | 0.003 | 0.018 | 0.179 | 0.000 |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.442E-06 | 3.324E-07 | 1.383E-04 | 9.398E-09 | 4.008E-07 | 1.687E-04 | 0.000E+00 | 1.110E-06 | 5.784E-07 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | | | 1.191 | 0.017 | 7.471 | 0.000 | 0.037 | 0.053 | 0.002 | 0.001 | 0.004 | 0.279 | 0.020 |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.784E-07 | 3.785E-07 | 2.686E-04 | 1.081E-08 | 4.142E-07 | 3.163E-04 | 9.016E-07 | 3.007E-07 | 1.458E-07 | 0.000E+00 | 6.496E-07 |
| Vent8_1 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.701 | 50.528 | | | 0.000 | | | | | 0.270 |
| Vent8_1 | REER | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 1.528E-05 | 1.817E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.839E-06 |
| Vent8_2 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_2 | REER | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.839E-06 |
| Vent8_3 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_3 | REER | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.839E-06 |
| Vent8_4 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_4 | REER | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.839E-06 |
| Vent8_5 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_5 | REER | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.839E-06 |
| Vent11_1 | Emission Rate | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.565E-06 | 1.594E-04 | 3.574E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_2 | Emission Rate | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.565E-06 | 1.594E-04 | 3.574E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_3 | Emission Rate | | | | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.565E-06 | 3.065E-05 | 7.225E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_4 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_4 | REER | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 3.065E-05 | 7.225E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_5 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 5.157 | 349.619 | | | 0.000 | | | | | 0.078 |
| Vent11_5 | REER | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 1.124E-04 | 1.257E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_6 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_6 | REER | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 4.846E-05 | 8.044E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_7 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_7 | REER | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 4.846E-05 | 8.044E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_8 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 1.129 | 172.800 | | | 0.000 | | | | | 0.078 |
| Vent11_8 | REER | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 2.461E-05 | 6.214E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| Vent11_9 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 1.996 | 113.593 | | | 0.000 | | | | | 0.078 |
| Vent11_9 | REER | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 4.350E-05 | 4.085E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.535E-06 |
| BH3 | Emission Rate | | | | | 0.011 | 1.987 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.088 | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.325E-07 | 7.146E-05 | 0.000E+00 | 2.880E-09 | 1.164E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | 0.011 | 2.041 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.090 | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.387E-07 | 7.339E-05 | 0.000E+00 | 2.957E-09 | 1.195E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | 0.003 | 0.537 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.024 | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.282E-08 | 1.931E-05 | 0.000E+00 | 7.783E-10 | 3.146E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | 0.003 | 0.581 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.026 | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.791E-08 | 2.087E-05 | 0.000E+00 | 8.412E-10 | 3.400E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | 0.003 | 0.615 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.027 | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.197E-08 | 2.212E-05 | 0.000E+00 | 8.916E-10 | 3.604E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | 0.001 | 0.124 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.005 | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.456E-08 | 4.476E-06 | 0.000E+00 | 1.804E-10 | 7.291E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | 0.005 | 0.988 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.155E-07 | 3.552E-05 | 0.000E+00 | 1.431E-09 | 5.785E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | 0.005 | 0.971 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.136E-07 | 3.493E-05 | 0.000E+00 | 1.408E-09 | 5.691E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | 0.000 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.948E-10 | 1.828E-07 | 0.000E+00 | 7.368E-12 | 2.979E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | 0.000 | 2.286 | 0.000 | | 0.001 | | 0.000 | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.605E-09 | 8.221E-05 | 0.000E+00 | 0.000E+00 | 5.513E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | 0.057 | 5.626 | 0.000 | | 0.016 | | 0.000 | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.241E-06 | 2.023E-04 | 0.000E+00 | 0.000E+00 | 9.616E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | 0.001 | | 0.000 | | 0.002 | | 0.000 | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.140E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.392E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | 0.009 | | 0.000 | | 0.014 | | 0.000 | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.884E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.349E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | 0.000 | | 0.000 | | 0.001 | | 0.000 | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.140E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.392E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.061E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.132E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | 0.003 | | 0.000 | | 0.004 | | 0.000 | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.447E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.197E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.774E-11 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.002E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | 0.000 | | 0.015 | | | | | | 0.000 | 0.000 | 0.000 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.057E-11 | 0.000E+00 | 5.240E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.029E-09 | 0.000E+00 | 1.029E-09 |
| Fug05 | Emission Rate | 41.135 | 2298.491 | 110.736 | | | | | | | | | | | |
| Fug05 | REER | 1.479E-05 | 2.361E-07 | 1.225E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | | | | | | | | | | | | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | 142.100 | | | | | | | | | | | | |
| Fug07N | REER | 0.000E+00 | 1.460E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | 0.007 | | | | | | | 0.000 | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.526E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 74-87-3 | 74-90-8 | 75-07-0 | 75-09-2 | 75-15-0 | 7631-86-9 | 7664-41-7 | 7782-49-2 | 7783-06-4 | 78-92-2 | 78-93-3 | 91-20-3 | 95-63-6 | 67-63-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Chloromethane (Methyl chloride) | Cyanide, Hydrogen | Acetaldehyde | Dichloromethane (Methylene chloride) | Carbon disulfide | Silica, crystalline (respirable) | Ammonia | Selenium and compounds | Hydrogen sulfide | sec-Butyl alcohol | 2-Butanone (Methyl ethyl ketone) | Naphthalene | 1,2,4-Trimethylbenzene | Isopropyl alcohol |
| | Exposure Scenario-specific RBC | 400.000 | 3.500 | 620.000 | 2600.000 | 3500.000 | 13.000 | 2200.000 | 0.000 | 8.800 | 130000.000 | 22000.000 | 16.000 | 260.000 | 880.000 |
| BH2 | Emission Rate | | | | | | | | 0.120 | | | | | | |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_1 | REER | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_2 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_2 | REER | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_3 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_3 | REER | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_4 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_4 | REER | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_5 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_5 | REER | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent11_1 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_4 | REER | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_5 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_5 | REER | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_6 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_6 | REER | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_7 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_7 | REER | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_8 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_8 | REER | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_9 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_9 | REER | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| BH3 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | | | | 114.156 | | | 1141.560 | | | | 25.200 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.463E-07 | 0.000E+00 | 0.000E+00 | 1.263E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.119E-07 |
| Fug05 | Emission Rate | | 7.698 | | 152.951 | | | 183.204 | | 8.411 | | | 0.273 | 35.668 | 5423.220 |
| Fug05 | REER | 0.000E+00 | 3.163E-05 | 0.000E+00 | 8.461E-07 | 0.000E+00 | 0.000E+00 | 1.198E-06 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 0.000E+00 | 2.450E-07 | 1.973E-06 | 8.864E-05 |
| Fug07 | Emission Rate | | | | | | | | | | | 0.257 | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.679E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | | | | | | | | | | | | | 19.481 |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.184E-07 |
| Fug15 | Emission Rate | | | | | | 0.002 | | | | | | | | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.512E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

## Table A-6. Emission Rates and REER Calculations - Non-Resident Worker Chronic Cancer Exposure Scenario - Sources Not Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 365 | 100-41-4 | 100-42-5 | 101-68-8 | 106-99-0 | 107-02-8 | 108-88-3 | 108-95-2 | 110-54-3 | 110-82-7 | 111-76-2 | 1330-20-7 | 18540-29-9 | 26471-62-5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Nickel compounds, insoluble | Ethyl benzene | Styrene | Methylene diphenyl diisocyanate (MDI) | 1,3-Butadiene | Acrolein | Toluene | Phenol | Hexane | Cyclohexane | Ethylene glycol monobutyl ether | Xylene (mixture), including m-xylene, o-xylene, p-xylene | Chromium VI, chromate and dichromate particulate | Toluene diisocyanates (2,4- and 2,6-) |
| | Exposure Scenario-specific RBC | $(\mu g/m^3)$ | n/a | 0.046 | 4.800 | 0.000 | 0.000 | 0.400 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 1.100 |
| BH2 | Emission Rate | lb/yr | | 0.040 | | | | | | | | | | | | 0.002 | |
| BH2 | REER | $(g/s)/(\mu g/m^3)$ | 6.958E-04 | 1.249E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.421E-05 | 0.000E+00 |
| BH1 | Emission Rate | lb/yr | | 0.191 | | | | | | | | | | | | 0.031 | |
| BH1 | REER | $(g/s)/(\mu g/m^3)$ | 1.734E-03 | 5.971E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.426E-04 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/yr | | 0.228 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.002 | |
| Vent8_1 | REER | $(g/s)/(\mu g/m^3)$ | 1.046E-03 | 7.141E-05 | 8.729E-07 | 0.000E+00 | 0.000E+00 | 5.108E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.517E-05 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_2 | REER | $(g/s)/(\mu g/m^3)$ | 1.014E-03 | 7.028E-05 | 8.729E-07 | 0.000E+00 | 0.000E+00 | 5.108E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.905E-06 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_3 | REER | $(g/s)/(\mu g/m^3)$ | 1.014E-03 | 7.028E-05 | 8.729E-07 | 0.000E+00 | 0.000E+00 | 5.108E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.905E-06 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_4 | REER | $(g/s)/(\mu g/m^3)$ | 1.014E-03 | 7.028E-05 | 8.729E-07 | 0.000E+00 | 0.000E+00 | 5.108E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.905E-06 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | | | 8.590 | 0.000 | |
| Vent8_5 | REER | $(g/s)/(\mu g/m^3)$ | 1.014E-03 | 7.028E-05 | 8.729E-07 | 0.000E+00 | 0.000E+00 | 5.108E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.905E-06 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | | | 0.022 | |
| Vent11_1 | REER | $(g/s)/(\mu g/m^3)$ | 8.544E-04 | 5.403E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.141E-04 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | | | | 0.022 | |
| Vent11_2 | REER | $(g/s)/(\mu g/m^3)$ | 8.544E-04 | 5.403E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.141E-04 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/yr | | 2.813 | | | | | | | | | | | | 0.209 | |
| Vent11_3 | REER | $(g/s)/(\mu g/m^3)$ | 3.885E-03 | 8.796E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.006E-03 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/yr | | 2.813 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.209 | |
| Vent11_4 | REER | $(g/s)/(\mu g/m^3)$ | 7.446E-03 | 8.796E-04 | 1.545E-05 | 0.000E+00 | 0.000E+00 | 3.171E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.006E-03 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/yr | | 6.537 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.604 | |
| Vent11_5 | REER | $(g/s)/(\mu g/m^3)$ | 1.429E-02 | 2.044E-03 | 1.545E-05 | 0.000E+00 | 0.000E+00 | 3.171E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.689E-03 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.067 | |
| Vent11_6 | REER | $(g/s)/(\mu g/m^3)$ | 7.328E-03 | 2.798E-03 | 1.545E-05 | 0.000E+00 | 0.000E+00 | 3.171E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.691E-04 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.067 | |
| Vent11_7 | REER | $(g/s)/(\mu g/m^3)$ | 7.328E-03 | 2.798E-03 | 1.545E-05 | 0.000E+00 | 0.000E+00 | 3.171E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.691E-04 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/yr | | 17.816 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.053 | |
| Vent11_8 | REER | $(g/s)/(\mu g/m^3)$ | 9.889E-03 | 5.571E-03 | 1.545E-05 | 0.000E+00 | 0.000E+00 | 3.171E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.572E-04 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/yr | | 2.960 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | | | 33.362 | 0.054 | |
| Vent11_9 | REER | $(g/s)/(\mu g/m^3)$ | 5.267E-03 | 9.257E-04 | 1.545E-05 | 0.000E+00 | 0.000E+00 | 3.171E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.803E-04 | 0.000E+00 |
| BH3 | Emission Rate | lb/yr | | 1.332 | | | | | | | | | | | | 0.004 | |
| BH3 | REER | $(g/s)/(\mu g/m^3)$ | 5.205E-04 | 4.165E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.899E-05 | 0.000E+00 |
| BH5 | Emission Rate | lb/yr | | 1.368 | | | | | | | | | | | | 0.004 | |
| BH5 | REER | $(g/s)/(\mu g/m^3)$ | 5.346E-04 | 4.277E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.058E-05 | 0.000E+00 |
| BH17 | Emission Rate | lb/yr | | 0.360 | | | | | | | | | | | | 0.001 | |
| BH17 | REER | $(g/s)/(\mu g/m^3)$ | 1.407E-04 | 1.126E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.594E-05 | 0.000E+00 |
| BH6 | Emission Rate | lb/yr | | 0.389 | | | | | | | | | | | | 0.001 | |
| BH6 | REER | $(g/s)/(\mu g/m^3)$ | 1.521E-04 | 1.217E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.723E-05 | 0.000E+00 |
| BH8 | Emission Rate | lb/yr | | 0.412 | | | | | | | | | | | | 0.001 | |
| BH8 | REER | $(g/s)/(\mu g/m^3)$ | 1.612E-04 | 1.289E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.826E-05 | 0.000E+00 |
| BH9 | Emission Rate | lb/yr | | 0.083 | | | | | | | | | | | | 0.000 | |
| BH9 | REER | $(g/s)/(\mu g/m^3)$ | 3.260E-05 | 2.608E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.695E-06 | 0.000E+00 |
| BH4 | Emission Rate | lb/yr | | 0.662 | | | | | | | | | | | | 0.002 | |
| BH4 | REER | $(g/s)/(\mu g/m^3)$ | 2.587E-04 | 2.070E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.932E-05 | 0.000E+00 |
| BH22 | Emission Rate | lb/yr | | 0.651 | | | | | | | | | | | | 0.002 | |
| BH22 | REER | $(g/s)/(\mu g/m^3)$ | 2.545E-04 | 2.036E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.884E-05 | 0.000E+00 |
| BH20 | Emission Rate | lb/yr | | 0.003 | | | | | | | | | | | | 0.000 | |
| BH20 | REER | $(g/s)/(\mu g/m^3)$ | 1.332E-06 | 1.066E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.509E-07 | 0.000E+00 |
| BH26 | Emission Rate | lb/yr | | 0.388 | | | | | | | | | | | | 0.000 | |
| BH26 | REER | $(g/s)/(\mu g/m^3)$ | 1.436E-04 | 1.215E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.899E-07 | 0.000E+00 |
| BH15 | Emission Rate | lb/yr | | 0.106 | | | | | | | | | | | | 0.003 | |
| BH15 | REER | $(g/s)/(\mu g/m^3)$ | 4.476E-04 | 3.330E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.213E-05 | 0.000E+00 |
| BH7 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.011 | |
| BH7 | REER | $(g/s)/(\mu g/m^3)$ | 2.089E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.551E-04 | 0.000E+00 |
| BH24 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.065 | |
| BH24 | REER | $(g/s)/(\mu g/m^3)$ | 1.254E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.305E-04 | 0.000E+00 |
| BH16 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.001 | |
| BH16 | REER | $(g/s)/(\mu g/m^3)$ | 2.089E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.551E-05 | 0.000E+00 |
| BH19 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.000 | |
| BH19 | REER | $(g/s)/(\mu g/m^3)$ | 1.371E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.018E-06 | 0.000E+00 |
| BH10 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.006 | |
| BH10 | REER | $(g/s)/(\mu g/m^3)$ | 1.689E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.386E-05 | 0.000E+00 |
| RC18 | Emission Rate | lb/yr | | | | | | | | | | | | | | 0.000 | |
| RC18 | REER | $(g/s)/(\mu g/m^3)$ | 4.508E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.346E-07 | 0.000E+00 |
| Fug01 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | 1670.760 | | | |
| Fug01 | REER | $(g/s)/(\mu g/m^3)$ | 1.390E-07 | 1.390E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | lb/yr | | | | 76.778 | | 22.368 | 1.286 | 65.242 | 1396.174 | 89.473 | 33.250 | | 56.898 | | |
| Fug05 | REER | $(g/s)/(\mu g/m^3)$ | 2.175E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.043E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | lb/yr | | | 0.124 | 110.163 | 40.271 | | | | | 0.840 | | | 76.552 | | |
| Fug07 | REER | $(g/s)/(\mu g/m^3)$ | 3.721E-07 | 0.000E+00 | 3.721E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | lb/yr | | | 12.922 | | | | | 6.090 | | | | 10.150 | 34.100 | | 0.359 |
| Fug07N | REER | $(g/s)/(\mu g/m^3)$ | 4.342E-05 | 0.000E+00 | 3.872E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.695E-06 |
| Fug15 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | | | | | |
| Fug15 | REER | $(g/s)/(\mu g/m^3)$ | 1.427E-08 | 1.427E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 50-00-0 | 67-64-1 | 71-43-2 | 7429-90-5 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 7440-36-0 | 7440-38-2 | 7440-41-7 | 7440-43-9 | 7440-48-4 | 7440-50-8 | 7440-62-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Formaldehyde | Acetone | Benzene | Aluminum and compounds | Lead and compounds | Manganese and compounds | Mercury and compounds | Antimony and compounds | Arsenic and compounds | Beryllium and compounds | Cadmium and compounds | Cobalt and compounds | Copper and compounds | Vanadium (fume or dust) |
| | Exposure Scenario-specific RBC | 2.000 | 0.000 | 1.500 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.005 | 0.007 | 0.000 | 0.000 | 0.000 |
| BH2 | Emission Rate | | | | 2.205 | 0.015 | 3.847 | 0.000 | 0.036 | 0.028 | 0.000 | 0.003 | 0.018 | 0.179 | 0.000 |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.529E-04 | 0.000E+00 | 6.127E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | | | 1.191 | 0.017 | 7.471 | 0.000 | 0.037 | 0.053 | 0.002 | 0.001 | 0.004 | 0.279 | 0.020 |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.224E-03 | 5.590E-06 | 1.661E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.701 | 50.528 | | | 0.000 | | | | | 0.270 |
| Vent8_1 | REER | 5.183E-05 | 0.000E+00 | 8.271E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_2 | REER | 5.183E-05 | 0.000E+00 | 8.271E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_3 | REER | 5.183E-05 | 0.000E+00 | 8.271E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_4 | REER | 5.183E-05 | 0.000E+00 | 8.271E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | | 0.270 |
| Vent8_5 | REER | 5.183E-05 | 0.000E+00 | 8.271E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | | 0.078 |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | | | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | | 0.078 |
| Vent11_4 | REER | 1.124E-04 | 0.000E+00 | 2.810E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 5.157 | 349.619 | | | 0.000 | | | | | 0.078 |
| Vent11_5 | REER | 1.124E-04 | 0.000E+00 | 2.810E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_6 | REER | 1.124E-04 | 0.000E+00 | 2.810E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | | 0.078 |
| Vent11_7 | REER | 1.124E-04 | 0.000E+00 | 2.810E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 1.129 | 172.800 | | | 0.000 | | | | | 0.078 |
| Vent11_8 | REER | 1.124E-04 | 0.000E+00 | 2.810E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | 15.630 | 11.520 | 293.020 | 2.394 | 1.996 | 113.593 | | | 0.000 | | | | | 0.078 |
| Vent11_9 | REER | 1.124E-04 | 0.000E+00 | 2.810E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | | | | 0.011 | 1.987 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.088 | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.506E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | 0.011 | 2.041 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.090 | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.628E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | 0.003 | 0.537 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.024 | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.218E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | 0.003 | 0.581 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.026 | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.316E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | 0.003 | 0.615 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.027 | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.395E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | 0.001 | 0.124 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.005 | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.822E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | 0.005 | 0.988 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.240E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | 0.005 | 0.971 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.203E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | 0.000 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.153E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | 0.000 | 2.286 | 0.000 | | 0.001 | | 0.000 | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.134E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | 0.057 | 5.626 | 0.000 | | 0.016 | | 0.000 | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.722E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | 0.001 | | 0.000 | | 0.002 | | 0.000 | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.386E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | 0.009 | | 0.000 | | 0.014 | | 0.000 | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.232E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.386E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.535E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | 0.003 | | 0.000 | | 0.004 | | 0.000 | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.505E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.162E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | 0.000 | | 0.015 | | | | | | 0.000 | 0.000 | 0.000 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | 41.135 | 2298.491 | 110.736 | | | | | | | | | | | |
| Fug05 | REER | 2.958E-04 | 0.000E+00 | 1.062E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | | | | | | | | | | | | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | 142.100 | | | | | | | | | | | | |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | 0.007 | | | | | | | 0.000 | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 74-87-3 | 74-90-8 | 75-07-0 | 75-09-2 | 75-15-0 | 7631-86-9 | 7664-41-7 | 7782-49-2 | 7783-06-4 | 78-92-2 | 78-93-3 | 91-20-3 | 95-63-6 | 67-63-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Chloromethane (Methyl chloride) | Cyanide, Hydrogen | Acetaldehyde | Dichloromethane (Methylene chloride) | Carbon disulfide | Silica, crystalline (respirable) | Ammonia | Selenium and compounds | Hydrogen sulfide | sec-Butyl alcohol | 2-Butanone (Methyl ethyl ketone) | Naphthalene | 1,2,4-Trimethylbenzene | Isopropyl alcohol |
| | Exposure Scenario-specific RBC | 0.000 | 0.000 | 5.500 | 1200.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.350 | 0.000 | 0.000 |
| BH2 | Emission Rate | | | | | | | | 0.120 | | | | | | |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.504E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.701E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.504E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.701E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.504E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.701E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.504E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.701E-06 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.504E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.701E-06 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | | | | | | | | | | | | | |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_4 | REER | 0.000E+00 | 0.000E+00 | 1.209E-04 | 9.339E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.855E-04 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_5 | REER | 0.000E+00 | 0.000E+00 | 1.209E-04 | 9.339E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.855E-04 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_6 | REER | 0.000E+00 | 0.000E+00 | 1.209E-04 | 9.339E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.855E-04 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_7 | REER | 0.000E+00 | 0.000E+00 | 1.209E-04 | 9.339E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.855E-04 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_8 | REER | 0.000E+00 | 0.000E+00 | 1.209E-04 | 9.339E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.855E-04 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_9 | REER | 0.000E+00 | 0.000E+00 | 1.209E-04 | 9.339E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.855E-04 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | | | | 0.001 | | | | | | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | | | | 0.000 | | | | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | | | | | | | 114.156 | | | 1141.560 | | | | 25.200 |
| Fug01 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | | 7.698 | | 152.951 | | | 183.204 | | 8.411 | | | 0.273 | 35.668 | 5423.220 |
| Fug05 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.833E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.120E-05 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | | | | | | | | | | | 0.257 | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | | | | | | | | | | | | | 19.481 |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | 0.002 | | | | | | | | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

## Table A-7. Emission Rates and REER Calculations - Non-Resident Worker Chronic Non-Cancer Exposure Scenario - Sources Not Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 365 Nickel compounds, insoluble | 100-41-4 Ethyl benzene | 100-42-5 Styrene | 101-68-8 Methylene diphenyl diisocyanate (MDI) | 106-99-0 1,3-Butadiene | 107-02-8 Acrolein | 108-88-3 Toluene | 108-95-2 Phenol | 110-54-3 Hexane | 110-82-7 Cyclohexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Exposure Scenario-specific RBC | (µg/m$^{3}$) | n/a | 0.062 | 1100.000 | 4400.000 | 0.350 | 8.800 | 1.500 | 22000.000 | 880.000 | 3100.000 | 26000.000 |
| BH2 | Emission Rate | lb/yr | | 0.040 | | | | | | | | | |
| BH2 | REER | (g/s)/(µg/m$^{3}$) | 3.202E-04 | 9.270E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | lb/yr | | 0.191 | | | | | | | | | |
| BH1 | REER | (g/s)/(µg/m$^{3}$) | 6.333E-04 | 4.430E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | lb/yr | | 0.228 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_1 | REER | (g/s)/(µg/m$^{3}$) | 2.140E-03 | 5.298E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 |
| Vent8_2 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_2 | REER | (g/s)/(µg/m$^{3}$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 |
| Vent8_3 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_3 | REER | (g/s)/(µg/m$^{3}$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 |
| Vent8_4 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_4 | REER | (g/s)/(µg/m$^{3}$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 |
| Vent8_5 | Emission Rate | lb/yr | | 0.225 | 0.291 | 0.194 | | 1.421 | 1.186 | 24.474 | 11.560 | 0.939 | |
| Vent8_5 | REER | (g/s)/(µg/m$^{3}$) | 8.897E-04 | 5.214E-05 | 3.809E-09 | 6.348E-10 | 0.000E+00 | 2.322E-06 | 1.137E-05 | 1.600E-08 | 1.889E-07 | 4.355E-09 | 0.000E+00 |
| Vent11_1 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | |
| Vent11_1 | REER | (g/s)/(µg/m$^{3}$) | 3.631E-02 | 4.009E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | lb/yr | | 1.728 | | | | | | | | | |
| Vent11_2 | REER | (g/s)/(µg/m$^{3}$) | 3.631E-02 | 4.009E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | lb/yr | | 2.813 | | | | | | | | | |
| Vent11_3 | REER | (g/s)/(µg/m$^{3}$) | 7.916E-03 | 6.526E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | lb/yr | | 2.813 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_4 | REER | (g/s)/(µg/m$^{3}$) | 8.413E-03 | 6.526E-04 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 |
| Vent11_5 | Emission Rate | lb/yr | | 6.537 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_5 | REER | (g/s)/(µg/m$^{3}$) | 1.471E-02 | 1.516E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 |
| Vent11_6 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_6 | REER | (g/s)/(µg/m$^{3}$) | 1.067E-02 | 2.076E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 |
| Vent11_7 | Emission Rate | lb/yr | | 8.948 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_7 | REER | (g/s)/(µg/m$^{3}$) | 1.067E-02 | 2.076E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 |
| Vent11_8 | Emission Rate | lb/yr | | 17.816 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_8 | REER | (g/s)/(µg/m$^{3}$) | 1.087E-02 | 4.133E-03 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 |
| Vent11_9 | Emission Rate | lb/yr | | 2.960 | 5.157 | 1.206 | | 8.819 | 1.286 | 117.466 | 16.996 | 10.515 | |
| Vent11_9 | REER | (g/s)/(µg/m$^{3}$) | 5.317E-03 | 6.868E-04 | 6.743E-08 | 3.941E-09 | 0.000E+00 | 1.441E-05 | 1.233E-05 | 7.680E-08 | 2.778E-07 | 4.879E-08 | 0.000E+00 |
| BH3 | Emission Rate | lb/yr | | 1.332 | | | | | | | | | |
| BH3 | REER | (g/s)/(µg/m$^{3}$) | 3.924E-04 | 3.090E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | lb/yr | | 1.368 | | | | | | | | | |
| BH5 | REER | (g/s)/(µg/m$^{3}$) | 4.030E-04 | 3.173E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | lb/yr | | 0.360 | | | | | | | | | |
| BH17 | REER | (g/s)/(µg/m$^{3}$) | 1.060E-04 | 8.351E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | lb/yr | | 0.389 | | | | | | | | | |
| BH6 | REER | (g/s)/(µg/m$^{3}$) | 1.146E-04 | 9.026E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | lb/yr | | 0.412 | | | | | | | | | |
| BH8 | REER | (g/s)/(µg/m$^{3}$) | 1.215E-04 | 9.567E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | lb/yr | | 0.083 | | | | | | | | | |
| BH9 | REER | (g/s)/(µg/m$^{3}$) | 2.458E-05 | 1.935E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | lb/yr | | 0.662 | | | | | | | | | |
| BH4 | REER | (g/s)/(µg/m$^{3}$) | 1.950E-04 | 1.536E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | lb/yr | | 0.651 | | | | | | | | | |
| BH22 | REER | (g/s)/(µg/m$^{3}$) | 1.918E-04 | 1.511E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | lb/yr | | 0.003 | | | | | | | | | |
| BH20 | REER | (g/s)/(µg/m$^{3}$) | 1.004E-06 | 7.906E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | lb/yr | | 0.388 | | | | | | | | | |
| BH26 | REER | (g/s)/(µg/m$^{3}$) | 1.778E-04 | 9.012E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | lb/yr | | 0.106 | | | | | | | | | |
| BH15 | REER | (g/s)/(µg/m$^{3}$) | 3.245E-04 | 2.470E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH7 | REER | (g/s)/(µg/m$^{3}$) | 1.412E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH24 | REER | (g/s)/(µg/m$^{3}$) | 8.474E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH16 | REER | (g/s)/(µg/m$^{3}$) | 1.412E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH19 | REER | (g/s)/(µg/m$^{3}$) | 9.268E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | lb/yr | | | | | | | | | | | |
| BH10 | REER | (g/s)/(µg/m$^{3}$) | 2.214E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | lb/yr | | | | | | | | | | | |
| RC18 | REER | (g/s)/(µg/m$^{3}$) | 3.047E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | |
| Fug01 | REER | (g/s)/(µg/m$^{3}$) | 6.867E-05 | 1.031E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug05 | Emission Rate | lb/yr | | | | 76.778 | | 22.368 | 1.286 | 65.242 | 1396.174 | 89.473 | 33.250 |
| Fug05 | REER | (g/s)/(µg/m$^{3}$) | 3.491E-04 | 0.000E+00 | 0.000E+00 | 2.510E-07 | 0.000E+00 | 3.656E-05 | 1.233E-05 | 4.265E-08 | 2.282E-05 | 4.151E-07 | 1.839E-08 |
| Fug07 | Emission Rate | lb/yr | | | 0.124 | 110.163 | 40.271 | | | | | 0.840 | |
| Fug07 | REER | (g/s)/(µg/m$^{3}$) | 1.656E-03 | 0.000E+00 | 1.624E-09 | 3.601E-07 | 1.655E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.897E-09 | 0.000E+00 |
| Fug07N | Emission Rate | lb/yr | | | 12.922 | | | | | 6.090 | | | |
| Fug07N | REER | (g/s)/(µg/m$^{3}$) | 5.755E-05 | 0.000E+00 | 1.690E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.982E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | lb/yr | | 0.000 | | | | | | | | | |
| Fug15 | REER | (g/s)/(µg/m$^{3}$) | 2.657E-07 | 1.059E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 111-76-2 Ethylene glycol monobutyl ether | 1330-20-7 Xylene (mixture), including m-xylene, o-xylene, p-xylene | 18540-29-9 Chromium VI, chromate and dichromate particulate | 26471-62-5 Toluene diisocyanates (2,4- and 2,6-) | 50-00-0 Formaldehyde | 67-64-1 Acetone | 71-43-2 Benzene | 7429-90-5 Aluminum and compounds | 7439-92-1 Lead and compounds | 7439-96-5 Manganese and compounds | 7439-97-6 Mercury and compounds | 7440-36-0 Antimony and compounds | 7440-38-2 Arsenic and compounds | 7440-41-7 Beryllium and compounds | 7440-43-9 Cadmium and compounds | 7440-48-4 Cobalt and compounds | 7440-50-8 Copper and compounds |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Exposure Scenario-specific RBC | 360.000 | 970.000 | 0.880 | 0.092 | 40.000 | 140000.000 | 13.000 | 22.000 | 0.660 | 0.400 | 0.630 | 1.300 | 0.002 | 0.031 | 0.037 | 0.440 | 0.000 |
| BH2 | Emission Rate | | | 0.002 | | | | | 2.205 | 0.015 | 3.847 | 0.000 | 0.036 | 0.028 | 0.000 | 0.003 | 0.018 | 0.179 |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 2.751E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.442E-06 | 3.324E-07 | 1.383E-04 | 9.398E-09 | 4.008E-07 | 1.687E-04 | 0.000E+00 | 1.110E-06 | 5.784E-07 | 0.000E+00 |
| BH1 | Emission Rate | | | 0.031 | | | | | 1.191 | 0.017 | 7.471 | 0.000 | 0.037 | 0.053 | 0.002 | 0.001 | 0.004 | 0.279 |
| BH1 | REER | 0.000E+00 | 0.000E+00 | 5.029E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.784E-07 | 3.785E-07 | 2.686E-04 | 1.081E-08 | 4.142E-07 | 3.163E-04 | 9.016E-07 | 3.007E-07 | 1.458E-07 | 0.000E+00 |
| Vent8_1 | Emission Rate | | 8.590 | 0.002 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.701 | 50.528 | | | 0.000 | | | | |
| Vent8_1 | REER | 0.000E+00 | 1.274E-07 | 3.997E-08 | 0.000E+00 | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 1.528E-05 | 1.817E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_2 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_2 | REER | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_3 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_3 | REER | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_4 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_4 | REER | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_5 | Emission Rate | | 8.590 | 0.000 | | 7.207 | 1.856 | 86.261 | 0.037 | 0.196 | 16.094 | | | 0.000 | | | | |
| Vent8_5 | REER | 0.000E+00 | 1.274E-07 | 4.438E-09 | 0.000E+00 | 2.591E-06 | 1.907E-10 | 9.544E-05 | 2.432E-08 | 4.271E-06 | 5.787E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_1 | Emission Rate | | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | |
| Vent11_1 | REER | 0.000E+00 | 0.000E+00 | 3.569E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.565E-06 | 1.594E-04 | 3.574E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | | | 0.022 | | | | | 2.394 | 7.314 | 993.937 | | | 0.000 | | | | |
| Vent11_2 | REER | 0.000E+00 | 0.000E+00 | 3.569E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.565E-06 | 1.594E-04 | 3.574E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | | | 0.209 | | | | | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | |
| Vent11_3 | REER | 0.000E+00 | 0.000E+00 | 3.416E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.565E-06 | 3.065E-05 | 7.225E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | | 33.362 | 0.209 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.407 | 200.931 | | | 0.000 | | | | |
| Vent11_4 | REER | 0.000E+00 | 4.947E-07 | 3.416E-06 | 0.000E+00 | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 3.065E-05 | 7.225E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_5 | Emission Rate | | 33.362 | 0.604 | | 15.630 | 11.520 | 293.020 | 2.394 | 5.157 | 349.619 | | | 0.000 | | | | |
| Vent11_5 | REER | 0.000E+00 | 4.947E-07 | 9.874E-06 | 0.000E+00 | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 1.124E-04 | 1.257E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_6 | Emission Rate | | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | |
| Vent11_6 | REER | 0.000E+00 | 4.947E-07 | 1.101E-06 | 0.000E+00 | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 4.846E-05 | 8.044E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_7 | Emission Rate | | 33.362 | 0.067 | | 15.630 | 11.520 | 293.020 | 2.394 | 2.224 | 223.703 | | | 0.000 | | | | |
| Vent11_7 | REER | 0.000E+00 | 4.947E-07 | 1.101E-06 | 0.000E+00 | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 4.846E-05 | 8.044E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_8 | Emission Rate | | 33.362 | 0.053 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.129 | 172.800 | | | 0.000 | | | | |
| Vent11_8 | REER | 0.000E+00 | 4.947E-07 | 8.604E-07 | 0.000E+00 | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 2.461E-05 | 6.214E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_9 | Emission Rate | | 33.362 | 0.054 | | 15.630 | 11.520 | 293.020 | 2.394 | 1.996 | 113.593 | | | 0.000 | | | | |
| Vent11_9 | REER | 0.000E+00 | 4.947E-07 | 8.867E-07 | 0.000E+00 | 5.620E-06 | 1.184E-09 | 3.242E-04 | 1.565E-06 | 4.350E-05 | 4.085E-03 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH3 | Emission Rate | | | 0.004 | | | | | | 0.011 | 1.987 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.088 |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 6.703E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.325E-07 | 7.146E-05 | 0.000E+00 | 2.880E-09 | 1.164E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | 0.004 | | | | | | 0.011 | 2.041 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | | 0.090 |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 6.885E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.387E-07 | 7.339E-05 | 0.000E+00 | 2.957E-09 | 1.195E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | 0.001 | | | | | | 0.003 | 0.537 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.024 |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 1.812E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.282E-08 | 1.931E-05 | 0.000E+00 | 7.783E-10 | 3.146E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | 0.001 | | | | | | 0.003 | 0.581 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.026 |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 1.958E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.791E-08 | 2.087E-05 | 0.000E+00 | 8.412E-10 | 3.400E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | 0.001 | | | | | | 0.003 | 0.615 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.027 |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 2.075E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.197E-08 | 2.212E-05 | 0.000E+00 | 8.916E-10 | 3.604E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | 0.000 | | | | | | 0.001 | 0.124 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.005 |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 4.199E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.456E-08 | 4.476E-06 | 0.000E+00 | 1.804E-10 | 7.291E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | 0.002 | | | | | | 0.005 | 0.988 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 3.332E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.155E-07 | 3.552E-05 | 0.000E+00 | 1.431E-09 | 5.785E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | 0.002 | | | | | | 0.005 | 0.971 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | | 0.043 |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 3.277E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.136E-07 | 3.493E-05 | 0.000E+00 | 1.408E-09 | 5.691E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | 0.000 | | | | | | 0.000 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 1.715E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.948E-10 | 1.828E-07 | 0.000E+00 | 7.368E-12 | 2.979E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | 0.000 | | | | | | 0.000 | 2.286 | 0.000 | | 0.001 | | 0.000 | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 8.977E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.605E-09 | 8.221E-05 | 0.000E+00 | 0.000E+00 | 5.513E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | 0.003 | | | | | | 0.057 | 5.626 | 0.000 | | 0.016 | | 0.000 | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 4.788E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.241E-06 | 2.023E-04 | 0.000E+00 | 0.000E+00 | 9.616E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | 0.011 | | | | | | 0.001 | | 0.000 | | 0.002 | | 0.000 | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 1.762E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.140E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.392E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | 0.065 | | | | | | 0.009 | | 0.000 | | 0.014 | | 0.000 | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 1.057E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.884E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 8.349E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | 0.001 | | | | | | 0.000 | | 0.000 | | 0.001 | | 0.000 | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 1.762E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.140E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.392E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 1.157E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.061E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.132E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | 0.006 | | | | | | 0.003 | | 0.000 | | 0.004 | | 0.000 | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 9.530E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.447E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.197E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | 0.000 | | | | | | 0.000 | | 0.000 | | 0.000 | | 0.000 | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 3.802E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 6.774E-11 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.002E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | 1670.760 | | | | | | | 0.000 | | 0.015 | | | | | | 0.000 | 0.000 |
| Fug01 | REER | 6.675E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.057E-11 | 0.000E+00 | 5.240E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.029E-09 | 0.000E+00 |
| Fug05 | Emission Rate | | 56.898 | | | 41.135 | 2298.491 | 110.736 | | | | | | | | | | |
| Fug05 | REER | 0.000E+00 | 8.437E-07 | 0.000E+00 | 0.000E+00 | 1.479E-05 | 2.361E-07 | 1.225E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07 | Emission Rate | | 76.552 | | | | | | | | | | | | | | | |
| Fug07 | REER | 0.000E+00 | 1.135E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | 10.150 | 34.100 | | 0.359 | | 142.100 | | | | | | | | | | | |
| Fug07N | REER | 4.055E-07 | 5.056E-07 | 0.000E+00 | 5.613E-05 | 0.000E+00 | 1.460E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug15 | Emission Rate | | | | | | | | | | 0.007 | | | | | | | 0.000 |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.526E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

| TEU | Parameter | 7440-62-2 Vanadium (fume or dust) | 74-87-3 Chloromethane (Methyl chloride) | 74-90-8 Cyanide, Hydrogen | 75-07-0 Acetaldehyde | 75-09-2 Dichloromethane (Methylene chloride) | 75-15-0 Carbon disulfide | 7631-86-9 Silica, crystalline (respirable) | 7664-41-7 Ammonia | 7782-49-2 Selenium and compounds | 7783-06-4 Hydrogen sulfide | 78-92-2 sec-Butyl alcohol | 78-93-3 2-Butanone (Methyl ethyl ketone) | 91-20-3 Naphthalene | 95-63-6 1,2,4-Trimethylbenzene | 67-63-0 Isopropyl alcohol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Exposure Scenario-specific RBC | 0.440 | 400.000 | 3.500 | 620.000 | 2600.000 | 3500.000 | 13.000 | 2200.000 | 0.000 | 8.800 | 130000.000 | 22000.000 | 16.000 | 260.000 | 880.000 |
| BH2 | Emission Rate | 0.000 | | | | | | | | 0.120 | | | | | | |
| BH2 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH1 | Emission Rate | 0.020 | | | | | | | | 0.000 | | | | | | |
| BH1 | REER | 6.496E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent8_1 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_1 | REER | 8.839E-06 | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_2 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_2 | REER | 8.839E-06 | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_3 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_3 | REER | 8.839E-06 | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_4 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_4 | REER | 8.839E-06 | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent8_5 | Emission Rate | 0.270 | 0.363 | 7.580 | | 1.255 | 0.230 | | 1.609 | | 8.342 | | 0.180 | 0.212 | | 5423.220 |
| Vent8_5 | REER | 8.839E-06 | 1.306E-08 | 3.115E-05 | 0.000E+00 | 6.943E-09 | 9.459E-10 | 0.000E+00 | 1.052E-08 | 0.000E+00 | 1.363E-05 | 0.000E+00 | 1.176E-10 | 1.903E-07 | 0.000E+00 | 8.864E-05 |
| Vent11_1 | Emission Rate | 0.078 | | | | | | | | | | | | | | |
| Vent11_1 | REER | 2.535E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_2 | Emission Rate | 0.078 | | | | | | | | | | | | | | |
| Vent11_2 | REER | 2.535E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_3 | Emission Rate | 0.078 | | | | | | | | | | | | | | |
| Vent11_3 | REER | 2.535E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Vent11_4 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_4 | REER | 2.535E-06 | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_5 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_5 | REER | 2.535E-06 | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_6 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_6 | REER | 2.535E-06 | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_7 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_7 | REER | 2.535E-06 | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_8 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_8 | REER | 2.535E-06 | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| Vent11_9 | Emission Rate | 0.078 | 2.255 | 7.698 | 46.214 | 7.792 | 1.429 | | 1.658 | | 8.411 | | 1.116 | 4.514 | | 5423.220 |
| Vent11_9 | REER | 2.535E-06 | 8.108E-08 | 3.163E-05 | 1.072E-06 | 4.310E-08 | 5.872E-09 | 0.000E+00 | 1.084E-08 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 7.298E-10 | 4.058E-06 | 0.000E+00 | 8.864E-05 |
| BH3 | Emission Rate | | | | | | | | | 0.001 | | | | | | |
| BH3 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH5 | Emission Rate | | | | | | | | | 0.001 | | | | | | |
| BH5 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH17 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH17 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH6 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH6 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH8 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH8 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH9 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH9 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH4 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH4 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH22 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH22 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH20 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH20 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH26 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH26 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH15 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH7 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH7 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH24 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH24 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH16 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH16 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH19 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH19 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| BH10 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| BH10 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| RC18 | Emission Rate | | | | | | | | | 0.000 | | | | | | |
| RC18 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug01 | Emission Rate | 0.000 | | | | | | | 114.156 | | | 1141.560 | | | | 25.200 |
| Fug01 | REER | 1.029E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.463E-07 | 0.000E+00 | 0.000E+00 | 1.263E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.119E-07 |
| Fug05 | Emission Rate | | | 7.698 | | 152.951 | | | 183.204 | | 8.411 | | | 0.273 | 35.668 | 5423.220 |
| Fug05 | REER | 0.000E+00 | 0.000E+00 | 3.163E-05 | 0.000E+00 | 8.461E-07 | 0.000E+00 | 0.000E+00 | 1.198E-06 | 0.000E+00 | 1.375E-05 | 0.000E+00 | 0.000E+00 | 2.450E-07 | 1.973E-06 | 8.864E-05 |
| Fug07 | Emission Rate | | | | | | | | | | | | 0.257 | | | |
| Fug07 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.679E-10 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Fug07N | Emission Rate | | | | | | | | | | | | | | | 19.481 |
| Fug07N | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.184E-07 |
| Fug15 | Emission Rate | | | | | | | 0.002 | | | | | | | | |
| Fug15 | REER | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.512E-09 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

# Table A-8. Emission Rates and REER Calculations - Acute Exposure Scenario - Sources Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 75-07-0 | 107-02-8 | 7664-41-7 | 7440-38-2 | 71-43-2 | 7440-41-7 | 7440-43-9 | 18540-29-9 | 7440-48-4 | 7440-50-8 | 100-41-4 | 50-00-0 | 110-54-3 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 365 | 401 | 50-32-8 | 91-20-3 | 7782-49-2 | 108-88-3 | 7440-62-2 | 1330-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Acetaldehyde | Acrolein | Ammonia | Arsenic and compounds | Benzene | Beryllium and compounds | Cadmium and compounds | Chromium VI, chromate and dichromate particulate | Cobalt and compounds | Copper and compounds | Ethyl benzene | Formaldehyde | Hexane | Lead and compounds | Manganese and compounds | Mercury and compounds | Nickel compounds, insoluble | Polycyclic aromatic hydrocarbons (PAHs) | Benzo[a]pyrene | Naphthalene | Selenium and compounds | Toluene | Vanadium (fume or dust) | Xylene (mixture), including m-xylene, o-xylene, p-xylene |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 470.000 | 6.900 | 1200.000 | 0.200 | 29.000 | 0.020 | 0.030 | 0.300 | 0.000 | 100.000 | 22000.000 | 49.000 | 0.000 | 0.150 | 0.300 | 0.600 | 0.200 | 0.000 | 0.002 | 200.000 | 2.000 | 7500.000 | 0.800 | 8700.000 |
| OVEN102 | Emission Rate | lb/day | | 0.002 | 0.002 | 10.702 | 0.000 | 0.003 | 0.000 | 0.001 | 0.001 | 0.000 | 0.003 | 0.004 | 0.007 | 0.003 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.016 | 0.001 | 0.013 |
| OVEN102 | REER | (g/s)/(µg/m³) | 2.429E-04 | 2.059E-08 | 1.221E-06 | 4.682E-05 | 3.121E-06 | 6.243E-07 | 1.873E-06 | 1.145E-04 | 1.457E-05 | 0.000E+00 | 2.653E-08 | 9.790E-10 | 7.835E-07 | 0.000E+00 | 1.040E-05 | 3.954E-06 | 1.353E-06 | 3.278E-05 | 0.000E+00 | 1.873E-06 | 4.682E-09 | 3.746E-08 | 1.103E-08 | 8.974E-06 | 7.068E-09 |
| OVEN1_A | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN1_A | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN1_B | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN1_B | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN2_A | Emission Rate | lb/day | | 0.001 | 0.001 | 3.567 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.005 |
| OVEN2_A | REER | (g/s)/(µg/m³) | 8.115E-05 | 9.519E-09 | 4.071E-07 | 1.561E-05 | 1.040E-06 | 2.870E-07 | 6.243E-07 | 3.815E-05 | 4.856E-06 | 0.000E+00 | 8.844E-09 | 4.493E-10 | 3.610E-07 | 0.000E+00 | 3.468E-06 | 1.318E-06 | 4.509E-07 | 1.093E-05 | 0.000E+00 | 6.243E-07 | 1.561E-09 | 1.249E-08 | 5.078E-09 | 2.991E-06 | 3.253E-09 |
| OVEN2_B | Emission Rate | lb/day | | 0.001 | 0.001 | 3.567 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.005 |
| OVEN2_B | REER | (g/s)/(µg/m³) | 8.115E-05 | 9.519E-09 | 4.071E-07 | 1.561E-05 | 1.040E-06 | 2.870E-07 | 6.243E-07 | 3.815E-05 | 4.856E-06 | 0.000E+00 | 8.844E-09 | 4.493E-10 | 3.610E-07 | 0.000E+00 | 3.468E-06 | 1.318E-06 | 4.509E-07 | 1.093E-05 | 0.000E+00 | 6.243E-07 | 1.561E-09 | 1.249E-08 | 5.078E-09 | 2.991E-06 | 3.253E-09 |
| OVEN3_A | Emission Rate | lb/day | | 0.001 | 0.000 | 2.676 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN3_A | REER | (g/s)/(µg/m³) | 6.086E-05 | 7.139E-09 | 3.054E-07 | 1.171E-05 | 7.804E-07 | 2.153E-07 | 4.682E-07 | 2.861E-05 | 3.642E-06 | 0.000E+00 | 6.633E-09 | 3.370E-10 | 2.707E-07 | 0.000E+00 | 2.601E-06 | 9.885E-07 | 3.382E-07 | 8.194E-06 | 0.000E+00 | 4.682E-07 | 1.171E-09 | 9.364E-09 | 3.808E-09 | 2.244E-06 | 2.440E-09 |
| OVEN3_B | Emission Rate | lb/day | | 0.001 | 0.000 | 2.676 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN3_B | REER | (g/s)/(µg/m³) | 6.086E-05 | 7.139E-09 | 3.054E-07 | 1.171E-05 | 7.804E-07 | 2.153E-07 | 4.682E-07 | 2.861E-05 | 3.642E-06 | 0.000E+00 | 6.633E-09 | 3.370E-10 | 2.707E-07 | 0.000E+00 | 2.601E-06 | 9.885E-07 | 3.382E-07 | 8.194E-06 | 0.000E+00 | 4.682E-07 | 1.171E-09 | 9.364E-09 | 3.808E-09 | 2.244E-06 | 2.440E-09 |
| OVEN4_A | Emission Rate | lb/day | | 0.001 | 0.000 | 2.378 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN4_A | REER | (g/s)/(µg/m³) | 5.410E-05 | 6.346E-09 | 2.714E-07 | 1.040E-05 | 6.937E-07 | 1.914E-07 | 4.162E-07 | 2.543E-05 | 3.237E-06 | 0.000E+00 | 5.896E-09 | 2.995E-10 | 2.407E-07 | 0.000E+00 | 2.312E-06 | 8.786E-07 | 3.006E-07 | 7.283E-06 | 0.000E+00 | 4.162E-07 | 1.040E-09 | 8.324E-09 | 3.385E-09 | 1.994E-06 | 2.169E-09 |
| OVEN4_B | Emission Rate | lb/day | | 0.001 | 0.000 | 2.378 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN4_B | REER | (g/s)/(µg/m³) | 5.410E-05 | 6.346E-09 | 2.714E-07 | 1.040E-05 | 6.937E-07 | 1.914E-07 | 4.162E-07 | 2.543E-05 | 3.237E-06 | 0.000E+00 | 5.896E-09 | 2.995E-10 | 2.407E-07 | 0.000E+00 | 2.312E-06 | 8.786E-07 | 3.006E-07 | 7.283E-06 | 0.000E+00 | 4.162E-07 | 1.040E-09 | 8.324E-09 | 3.385E-09 | 1.994E-06 | 2.169E-09 |
| OVEN5_A | Emission Rate | lb/day | | 0.001 | 0.000 | 2.378 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN5_A | REER | (g/s)/(µg/m³) | 5.410E-05 | 6.346E-09 | 2.714E-07 | 1.040E-05 | 6.937E-07 | 1.914E-07 | 4.162E-07 | 2.543E-05 | 3.237E-06 | 0.000E+00 | 5.896E-09 | 2.995E-10 | 2.407E-07 | 0.000E+00 | 2.312E-06 | 8.786E-07 | 3.006E-07 | 7.283E-06 | 0.000E+00 | 4.162E-07 | 1.040E-09 | 8.324E-09 | 3.385E-09 | 1.994E-06 | 2.169E-09 |
| OVEN5_B | Emission Rate | lb/day | | 0.001 | 0.000 | 2.378 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN5_B | REER | (g/s)/(µg/m³) | 5.410E-05 | 6.346E-09 | 2.714E-07 | 1.040E-05 | 6.937E-07 | 1.914E-07 | 4.162E-07 | 2.543E-05 | 3.237E-06 | 0.000E+00 | 5.896E-09 | 2.995E-10 | 2.407E-07 | 0.000E+00 | 2.312E-06 | 8.786E-07 | 3.006E-07 | 7.283E-06 | 0.000E+00 | 4.162E-07 | 1.040E-09 | 8.324E-09 | 3.385E-09 | 1.994E-06 | 2.169E-09 |
| OVEN6_A | Emission Rate | lb/day | | 0.001 | 0.000 | 2.378 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN6_A | REER | (g/s)/(µg/m³) | 5.410E-05 | 6.346E-09 | 2.714E-07 | 1.040E-05 | 6.937E-07 | 1.914E-07 | 4.162E-07 | 2.543E-05 | 3.237E-06 | 0.000E+00 | 5.896E-09 | 2.995E-10 | 2.407E-07 | 0.000E+00 | 2.312E-06 | 8.786E-07 | 3.006E-07 | 7.283E-06 | 0.000E+00 | 4.162E-07 | 1.040E-09 | 8.324E-09 | 3.385E-09 | 1.994E-06 | 2.169E-09 |
| OVEN6_B | Emission Rate | lb/day | | 0.001 | 0.000 | 2.378 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.000 | 0.004 |
| OVEN6_B | REER | (g/s)/(µg/m³) | 5.410E-05 | 6.346E-09 | 2.714E-07 | 1.040E-05 | 6.937E-07 | 1.914E-07 | 4.162E-07 | 2.543E-05 | 3.237E-06 | 0.000E+00 | 5.896E-09 | 2.995E-10 | 2.407E-07 | 0.000E+00 | 2.312E-06 | 8.786E-07 | 3.006E-07 | 7.283E-06 | 0.000E+00 | 4.162E-07 | 1.040E-09 | 8.324E-09 | 3.385E-09 | 1.994E-06 | 2.169E-09 |
| OVEN10_A | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN10_A | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN10_B | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN10_B | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN12_A | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN12_A | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN12_B | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN12_B | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN13_A | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN13_A | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN13_B | Emission Rate | lb/day | | 0.000 | 0.000 | 1.784 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.003 |
| OVEN13_B | REER | (g/s)/(µg/m³) | 4.058E-05 | 4.760E-09 | 2.036E-07 | 7.804E-06 | 5.202E-07 | 1.435E-07 | 3.121E-07 | 1.908E-05 | 2.428E-06 | 0.000E+00 | 4.422E-09 | 2.246E-10 | 1.805E-07 | 0.000E+00 | 1.734E-06 | 6.590E-07 | 2.254E-07 | 5.463E-06 | 0.000E+00 | 3.121E-07 | 7.804E-10 | 6.243E-09 | 2.539E-09 | 1.496E-06 | 1.626E-09 |
| OVEN14 | Emission Rate | lb/day | | 0.000 | 0.000 | 0.208 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| OVEN14 | REER | (g/s)/(µg/m³) | 4.734E-06 | 5.553E-10 | 2.375E-08 | 9.104E-07 | 6.069E-08 | 1.674E-08 | 3.642E-08 | 2.225E-06 | 2.832E-07 | 0.000E+00 | 5.159E-10 | 2.621E-11 | 2.106E-08 | 0.000E+00 | 2.023E-07 | 7.688E-08 | 2.630E-08 | 6.373E-07 | 0.000E+00 | 3.642E-08 | 9.104E-11 | 7.283E-10 | 2.962E-10 | 1.745E-07 | 1.898E-10 |
| OVEN18_A | Emission Rate | lb/day | | 0.000 | 0.000 | 0.357 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 |
| OVEN18_A | REER | (g/s)/(µg/m³) | 8.115E-06 | 9.519E-10 | 4.071E-08 | 1.561E-06 | 1.040E-07 | 2.870E-08 | 6.243E-08 | 3.815E-06 | 4.856E-07 | 0.000E+00 | 8.844E-10 | 4.493E-11 | 3.610E-08 | 0.000E+00 | 3.468E-07 | 1.318E-07 | 4.509E-08 | 1.093E-06 | 0.000E+00 | 6.243E-08 | 1.561E-10 | 1.249E-09 | 5.078E-10 | 2.991E-07 | 3.253E-10 |
| OVEN18_B | Emission Rate | lb/day | | 0.000 | 0.000 | 0.357 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 |
| OVEN18_B | REER | (g/s)/(µg/m³) | 8.115E-06 | 9.519E-10 | 4.071E-08 | 1.561E-06 | 1.040E-07 | 2.870E-08 | 6.243E-08 | 3.815E-06 | 4.856E-07 | 0.000E+00 | 8.844E-10 | 4.493E-11 | 3.610E-08 | 0.000E+00 | 3.468E-07 | 1.318E-07 | 4.509E-08 | 1.093E-06 | 0.000E+00 | 6.243E-08 | 1.561E-10 | 1.249E-09 | 5.078E-10 | 2.991E-07 | 3.253E-10 |
| OVEN20_A | Emission Rate | lb/day | | 0.001 | 0.001 | 3.567 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.005 |
| OVEN20_A | REER | (g/s)/(µg/m³) | 8.115E-05 | 9.519E-09 | 4.071E-07 | 1.561E-05 | 1.040E-06 | 2.870E-07 | 6.243E-07 | 3.815E-05 | 4.856E-06 | 0.000E+00 | 8.844E-09 | 4.493E-10 | 3.610E-07 | 0.000E+00 | 3.468E-06 | 1.318E-06 | 4.509E-07 | 1.093E-05 | 0.000E+00 | 6.243E-07 | 1.561E-09 | 1.249E-08 | 5.078E-09 | 2.991E-06 | 3.253E-09 |
| OVEN20_B | Emission Rate | lb/day | | 0.001 | 0.001 | 3.567 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.005 |
| OVEN20_B | REER | (g/s)/(µg/m³) | 8.115E-05 | 9.519E-09 | 4.071E-07 | 1.561E-05 | 1.040E-06 | 2.870E-07 | 6.243E-07 | 3.815E-05 | 4.856E-06 | 0.000E+00 | 8.844E-09 | 4.493E-10 | 3.610E-07 | 0.000E+00 | 3.468E-06 | 1.318E-06 | 4.509E-07 | 1.093E-05 | 0.000E+00 | 6.243E-07 | 1.561E-09 | 1.249E-08 | 5.078E-09 | 2.991E-06 | 3.253E-09 |
| OVEN21 | Emission Rate | lb/day | | 0.001 | 0.001 | 3.567 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.000 | 0.005 |
| OVEN21 | REER | (g/s)/(µg/m³) | 8.115E-05 | 9.519E-09 | 4.071E-07 | 1.561E-05 | 1.040E-06 | 2.870E-07 | 6.243E-07 | 3.815E-05 | 4.856E-06 | 0.000E+00 | 8.844E-09 | 4.493E-10 | 3.610E-07 | 0.000E+00 | 3.468E-06 | 1.318E-06 | 4.509E-07 | 1.093E-05 | 0.000E+00 | 6.243E-07 | 1.561E-09 | 1.249E-08 | 5.078E-09 | 2.991E-06 | 3.253E-09 |
| CORE1 | Emission Rate | lb/day | | 0.000 | 0.000 | 0.297 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 |
| CORE1 | REER | (g/s)/(µg/m³) | 6.763E-06 | 7.933E-10 | 3.393E-08 | 1.301E-06 | 8.671E-08 | 2.392E-08 | 5.202E-08 | 3.179E-06 | 4.046E-07 | 0.000E+00 | 7.370E-10 | 3.744E-11 | 3.008E-08 | 0.000E+00 | 2.890E-07 | 1.098E-07 | 3.757E-08 | 9.104E-07 | 0.000E+00 | 5.202E-08 | 1.301E-10 | 1.040E-09 | 4.231E-10 | 2.491E-07 | 2.711E-10 |
| CORE2 | Emission Rate | lb/day | | 0.000 | 0.000 | 0.297 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 |
| CORE2 | REER | (g/s)/(µg/m³) | 6.763E-06 | 7.933E-10 | 3.393E-08 | 1.301E-06 | 8.671E-08 | 2.392E-08 | 5.202E-08 | 3.179E-06 | 4.046E-07 | 0.000E+00 | 7.370E-10 | 3.744E-11 | 3.008E-08 | 0.000E+00 | 2.890E-07 | 1.098E-07 | 3.757E-08 | 9.104E-07 | 0.000E+00 | 5.202E-08 | 1.301E-10 | 1.040E-09 | 4.231E-10 | 2.491E-07 | 2.711E-10 |
| CORE3 | Emission Rate | lb/day | | 0.000 | 0.000 | 0.446 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 |
| CORE3 | REER | (g/s)/(µg/m³) | 1.014E-05 | 1.190E-09 | 5.089E-08 | 1.951E-06 | 1.301E-07 | 3.588E-08 | 7.804E-08 | 4.769E-06 | 6.069E-07 | 0.000E+00 | 1.106E-09 | 5.616E-11 | 4.512E-08 | 0.000E+00 | 4.335E-07 | 1.647E-07 | 5.636E-08 | 1.366E-06 | 0.000E+00 | 7.804E-08 | 1.951E-10 | 1.561E-09 | 6.347E-10 | 3.739E-07 | 4.066E-10 |
| LADLE1-3 | Emission Rate | lb/day | | 0.000 | 0.000 | 1.070 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.002 |
| LADLE1-3 | REER | (g/s)/(µg/m³) | 2.435E-05 | 2.856E-09 | 1.221E-07 | 4.682E-06 | 3.121E-07 | 8.611E-08 | 1.873E-07 | 1.145E-05 | 1.457E-06 | 0.000E+00 | 2.653E-09 | 1.348E-10 | 1.083E-07 | 0.000E+00 | 1.040E-06 | 3.954E-07 | 1.353E-07 | 3.278E-06 | 0.000E+00 | 1.873E-07 | 4.682E-10 | 3.746E-09 | 1.523E-09 | 8.974E-07 | 9.759E-10 |

# Table A-9. Emission Rates and REER Calculations - Resident Chronic Cancer Exposure Scenario - Sources Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 75-07-0 | 107-02-8 | 7664-41-7 | 7440-38-2 | 71-43-2 | 7440-41-7 | 7440-43-9 | 18540-29-9 | 7440-48-4 | 7440-50-8 | 100-41-4 | 50-00-0 | 110-54-3 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 365 | 401 | 50-32-8 | 91-20-3 | 7782-49-2 | 108-88-3 | 7440-62-2 | 1330-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Acetaldehyde | Acrolein | Ammonia | Arsenic and compounds | Benzene | Beryllium and compounds | Cadmium and compounds | Chromium VI, chromate and dichromate particulate | Cobalt and compounds | Copper and compounds | Ethyl benzene | Formaldehyde | Hexane | Lead and compounds | Manganese and compounds | Mercury and compounds | Nickel compounds, insoluble | Polycyclic aromatic hydrocarbons (PAHs) | Benzo[a]pyrene | Naphthalene | Selenium and compounds | Toluene | Vanadium (fume or dust) | Xylene (mixture), including m-xylene, o-xylene, p-xylene |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 0.450 | 0.000 | 0.000 | 0.000 | 0.130 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.400 | 0.170 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.029 | 0.000 | 0.000 | 0.000 | 0.000 |
| OVEN102 | Emission Rate | lb/yr | | 0.479 | 0.437 | 2782.588 | 0.031 | 0.897 | 0.002 | 0.170 | 0.216 | 0.013 | 0.133 | 1.067 | 1.901 | 0.711 | 0.077 | 0.059 | 0.040 | 0.325 | 0.015 | 0.000 | 0.046 | 0.004 | 4.097 | 0.356 | 3.065 |
| OVEN102 | REER | (g/m)/(µg/m³) | 1.302E-01 | 1.532E-05 | 0.000E+00 | 0.000E+00 | 1.853E-02 | 9.920E-05 | 6.353E-05 | 4.368E-03 | 1.004E-01 | 0.000E+00 | 0.000E+00 | 3.836E-05 | 1.609E-04 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.229E-03 | 5.171E-03 | 6.205E-05 | 2.300E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN1_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_A | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN1_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_B | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN2_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_A | REER | (g/m)/(µg/m³) | 4.343E-02 | 7.082E-06 | 0.000E+00 | 0.000E+00 | 6.176E-03 | 4.561E-05 | 2.118E-05 | 1.456E-03 | 3.347E-02 | 0.000E+00 | 0.000E+00 | 1.760E-05 | 7.412E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.096E-04 | 1.724E-03 | 2.068E-05 | 7.667E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN2_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_B | REER | (g/m)/(µg/m³) | 4.343E-02 | 7.082E-06 | 0.000E+00 | 0.000E+00 | 6.176E-03 | 4.561E-05 | 2.118E-05 | 1.456E-03 | 3.347E-02 | 0.000E+00 | 0.000E+00 | 1.760E-05 | 7.412E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.096E-04 | 1.724E-03 | 2.068E-05 | 7.667E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN3_A | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_A | REER | (g/m)/(µg/m³) | 3.257E-02 | 5.312E-06 | 0.000E+00 | 0.000E+00 | 4.632E-03 | 3.421E-05 | 1.588E-05 | 1.092E-03 | 2.510E-02 | 0.000E+00 | 0.000E+00 | 1.320E-05 | 5.559E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.072E-04 | 1.293E-03 | 1.551E-05 | 5.750E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN3_B | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_B | REER | (g/m)/(µg/m³) | 3.257E-02 | 5.312E-06 | 0.000E+00 | 0.000E+00 | 4.632E-03 | 3.421E-05 | 1.588E-05 | 1.092E-03 | 2.510E-02 | 0.000E+00 | 0.000E+00 | 1.320E-05 | 5.559E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.072E-04 | 1.293E-03 | 1.551E-05 | 5.750E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN4_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_A | REER | (g/m)/(µg/m³) | 2.895E-02 | 4.721E-06 | 0.000E+00 | 0.000E+00 | 4.118E-03 | 3.041E-05 | 1.412E-05 | 9.706E-04 | 2.231E-02 | 0.000E+00 | 0.000E+00 | 1.174E-05 | 4.941E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.731E-04 | 1.149E-03 | 1.379E-05 | 5.111E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN4_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_B | REER | (g/m)/(µg/m³) | 2.895E-02 | 4.721E-06 | 0.000E+00 | 0.000E+00 | 4.118E-03 | 3.041E-05 | 1.412E-05 | 9.706E-04 | 2.231E-02 | 0.000E+00 | 0.000E+00 | 1.174E-05 | 4.941E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.731E-04 | 1.149E-03 | 1.379E-05 | 5.111E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN5_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_A | REER | (g/m)/(µg/m³) | 2.895E-02 | 4.721E-06 | 0.000E+00 | 0.000E+00 | 4.118E-03 | 3.041E-05 | 1.412E-05 | 9.706E-04 | 2.231E-02 | 0.000E+00 | 0.000E+00 | 1.174E-05 | 4.941E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.731E-04 | 1.149E-03 | 1.379E-05 | 5.111E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN5_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_B | REER | (g/m)/(µg/m³) | 2.895E-02 | 4.721E-06 | 0.000E+00 | 0.000E+00 | 4.118E-03 | 3.041E-05 | 1.412E-05 | 9.706E-04 | 2.231E-02 | 0.000E+00 | 0.000E+00 | 1.174E-05 | 4.941E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.731E-04 | 1.149E-03 | 1.379E-05 | 5.111E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN6_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_A | REER | (g/m)/(µg/m³) | 2.895E-02 | 4.721E-06 | 0.000E+00 | 0.000E+00 | 4.118E-03 | 3.041E-05 | 1.412E-05 | 9.706E-04 | 2.231E-02 | 0.000E+00 | 0.000E+00 | 1.174E-05 | 4.941E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.731E-04 | 1.149E-03 | 1.379E-05 | 5.111E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN6_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_B | REER | (g/m)/(µg/m³) | 2.895E-02 | 4.721E-06 | 0.000E+00 | 0.000E+00 | 4.118E-03 | 3.041E-05 | 1.412E-05 | 9.706E-04 | 2.231E-02 | 0.000E+00 | 0.000E+00 | 1.174E-05 | 4.941E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.731E-04 | 1.149E-03 | 1.379E-05 | 5.111E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN10_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_A | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN10_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_B | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN12_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_A | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN12_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_B | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN13_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_A | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN13_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_B | REER | (g/m)/(µg/m³) | 2.172E-02 | 3.541E-06 | 0.000E+00 | 0.000E+00 | 3.088E-03 | 2.281E-05 | 1.059E-05 | 7.279E-04 | 1.674E-02 | 0.000E+00 | 0.000E+00 | 8.801E-06 | 3.706E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.048E-04 | 8.618E-04 | 1.034E-05 | 3.834E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN14 | Emission Rate | lb/yr | | 0.013 | 0.008 | 54.106 | 0.001 | 0.024 | 0.000 | 0.003 | 0.004 | 0.000 | 0.003 | 0.029 | 0.051 | 0.019 | 0.002 | 0.001 | 0.001 | 0.006 | 0.000 | 0.000 | 0.001 | 0.000 | 0.110 | 0.007 | 0.082 |
| OVEN14 | REER | (g/m)/(µg/m³) | 2.533E-03 | 4.131E-07 | 0.000E+00 | 0.000E+00 | 3.603E-04 | 2.661E-06 | 1.235E-06 | 8.493E-05 | 1.953E-03 | 0.000E+00 | 0.000E+00 | 1.027E-06 | 4.323E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.389E-05 | 1.005E-04 | 1.207E-06 | 4.473E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN18_A | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_A | REER | (g/m)/(µg/m³) | 4.343E-03 | 7.082E-07 | 0.000E+00 | 0.000E+00 | 6.176E-04 | 4.561E-06 | 2.118E-06 | 1.456E-04 | 3.347E-03 | 0.000E+00 | 0.000E+00 | 1.760E-06 | 7.412E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.096E-05 | 1.724E-04 | 2.068E-06 | 7.667E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN18_B | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_B | REER | (g/m)/(µg/m³) | 4.343E-03 | 7.082E-07 | 0.000E+00 | 0.000E+00 | 6.176E-04 | 4.561E-06 | 2.118E-06 | 1.456E-04 | 3.347E-03 | 0.000E+00 | 0.000E+00 | 1.760E-06 | 7.412E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.096E-05 | 1.724E-04 | 2.068E-06 | 7.667E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN20_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_A | REER | (g/m)/(µg/m³) | 4.343E-02 | 7.082E-06 | 0.000E+00 | 0.000E+00 | 6.176E-03 | 4.561E-05 | 2.118E-05 | 1.456E-03 | 3.347E-02 | 0.000E+00 | 0.000E+00 | 1.760E-05 | 7.412E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.096E-04 | 1.724E-03 | 2.068E-05 | 7.667E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN20_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_B | REER | (g/m)/(µg/m³) | 4.343E-02 | 7.082E-06 | 0.000E+00 | 0.000E+00 | 6.176E-03 | 4.561E-05 | 2.118E-05 | 1.456E-03 | 3.347E-02 | 0.000E+00 | 0.000E+00 | 1.760E-05 | 7.412E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.096E-04 | 1.724E-03 | 2.068E-05 | 7.667E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN21 | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN21 | REER | (g/m)/(µg/m³) | 4.343E-02 | 7.082E-06 | 0.000E+00 | 0.000E+00 | 6.176E-03 | 4.561E-05 | 2.118E-05 | 1.456E-03 | 3.347E-02 | 0.000E+00 | 0.000E+00 | 1.760E-05 | 7.412E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.096E-04 | 1.724E-03 | 2.068E-05 | 7.667E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE1 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE1 | REER | (g/m)/(µg/m³) | 3.619E-03 | 5.902E-07 | 0.000E+00 | 0.000E+00 | 5.147E-04 | 3.801E-06 | 1.765E-06 | 1.213E-04 | 2.789E-03 | 0.000E+00 | 0.000E+00 | 1.467E-06 | 6.176E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.413E-05 | 1.436E-04 | 1.724E-06 | 6.389E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE2 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE2 | REER | (g/m)/(µg/m³) | 3.619E-03 | 5.902E-07 | 0.000E+00 | 0.000E+00 | 5.147E-04 | 3.801E-06 | 1.765E-06 | 1.213E-04 | 2.789E-03 | 0.000E+00 | 0.000E+00 | 1.467E-06 | 6.176E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.413E-05 | 1.436E-04 | 1.724E-06 | 6.389E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE3 | Emission Rate | lb/yr | | 0.028 | 0.017 | 115.941 | 0.001 | 0.052 | 0.000 | 0.007 | 0.008 | 0.001 | 0.005 | 0.061 | 0.110 | 0.041 | 0.003 | 0.002 | 0.002 | 0.014 | 0.001 | 0.000 | 0.002 | 0.000 | 0.236 | 0.015 | 0.175 |
| CORE3 | REER | (g/m)/(µg/m³) | 5.429E-03 | 8.853E-07 | 0.000E+00 | 0.000E+00 | 7.720E-04 | 5.701E-06 | 2.647E-06 | 1.820E-04 | 4.184E-03 | 0.000E+00 | 0.000E+00 | 2.200E-06 | 9.265E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 5.120E-05 | 2.155E-04 | 2.585E-06 | 9.584E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| LADLE1-3 | Emission Rate | lb/yr | | 0.066 | 0.042 | 278.259 | 0.003 | 0.124 | 0.000 | 0.017 | 0.022 | 0.001 | 0.013 | 0.147 | 0.263 | 0.097 | 0.008 | 0.006 | 0.004 | 0.032 | 0.002 | 0.000 | 0.005 | 0.000 | 0.566 | 0.036 | 0.420 |
| LADLE1-3 | REER | (g/m)/(µg/m³) | 1.303E-02 | 2.125E-06 | 0.000E+00 | 0.000E+00 | 1.853E-03 | 1.368E-05 | 6.353E-06 | 4.368E-04 | 1.004E-02 | 0.000E+00 | 0.000E+00 | 5.281E-06 | 2.223E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.229E-04 | 5.171E-04 | 6.205E-06 | 2.300E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

# Table A-10. Emission Rates and REER Calculations - Resident Chronic Non-Cancer Exposure Scenario - Sources Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 75-07-0 | 107-02-8 | 7664-41-7 | 7440-38-2 | 71-43-2 | 7440-41-7 | 7440-43-9 | 18540-29-9 | 7440-48-4 | 7440-50-8 | 100-41-4 | 50-00-0 | 110-54-3 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 365 | 401 | 50-32-8 | 91-20-3 | 7782-49-2 | 108-88-3 | 7440-62-2 | 1330-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Acetaldehyde | Acrolein | Ammonia | Arsenic and compounds | Benzene | Beryllium and compounds | Cadmium and compounds | Chromium VI, chromate and dichromate particulate | Cobalt and compounds | Copper and compounds | Ethyl benzene | Formaldehyde | Hexane | Lead and compounds | Manganese and compounds | Mercury and compounds | Nickel compounds, insoluble | Polycyclic aromatic hydrocarbons (PAHs) | Benzo[a]pyrene | Naphthalene | Selenium and compounds | Toluene | Vanadium (fume or dust) | Xylene (mixture), including m-xylene, o-xylene, p-xylene |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 140.000 | 0.350 | 500.000 | 0.000 | 3.000 | 0.007 | 0.005 | 0.083 | 0.100 | 0.000 | 260.000 | 9.000 | 700.000 | 0.150 | 0.090 | 0.077 | 0.014 | 0.000 | 0.002 | 3.700 | 0.000 | 5000.000 | 0.100 | 220.000 |
| OVEN102 | Emission Rate | lb/yr | | 0.479 | 0.437 | 2782.588 | 0.031 | 0.497 | 0.002 | 0.170 | 0.216 | 0.013 | 0.131 | 1.067 | 1.901 | 0.711 | 0.077 | 0.059 | 0.040 | 0.325 | 0.015 | 0.000 | 0.046 | 0.004 | 4.097 | 0.356 | 3.065 |
| OVEN102 | REER | (g/m)/(µg/m³) | 3.664E-03 | 4.923E-08 | 1.715E-05 | 8.005E-05 | 2.616E-03 | 4.299E-06 | 3.812E-06 | 4.892E-04 | 3.750E-05 | 1.868E-06 | 0.000E+00 | 5.901E-08 | 3.039E-06 | 1.461E-08 | 7.412E-06 | 9.388E-06 | 7.508E-06 | 3.335E-04 | 0.000E+00 | 1.334E-06 | 1.803E-07 | 0.000E+00 | 1.178E-08 | 5.114E-05 | 1.991E-07 |
| OVEN1_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_A | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN1_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_B | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN2_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_A | REER | (g/m)/(µg/m³) | 1.222E-03 | 2.276E-08 | 5.718E-06 | 2.668E-05 | 8.720E-04 | 1.976E-06 | 1.271E-06 | 1.631E-04 | 1.250E-05 | 6.226E-07 | 0.000E+00 | 2.708E-08 | 1.400E-06 | 6.670E-09 | 2.471E-06 | 3.129E-06 | 2.503E-06 | 1.112E-04 | 0.000E+00 | 4.447E-07 | 6.009E-08 | 0.000E+00 | 5.425E-09 | 1.705E-05 | 9.163E-08 |
| OVEN2_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_B | REER | (g/m)/(µg/m³) | 1.222E-03 | 2.276E-08 | 5.718E-06 | 2.668E-05 | 8.720E-04 | 1.976E-06 | 1.271E-06 | 1.631E-04 | 1.250E-05 | 6.226E-07 | 0.000E+00 | 2.708E-08 | 1.400E-06 | 6.670E-09 | 2.471E-06 | 3.129E-06 | 2.503E-06 | 1.112E-04 | 0.000E+00 | 4.447E-07 | 6.009E-08 | 0.000E+00 | 5.425E-09 | 1.705E-05 | 9.163E-08 |
| OVEN3_A | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_A | REER | (g/m)/(µg/m³) | 9.166E-04 | 1.707E-08 | 4.288E-06 | 2.001E-05 | 6.540E-04 | 1.482E-06 | 9.529E-07 | 1.223E-04 | 9.376E-06 | 4.669E-07 | 0.000E+00 | 2.031E-08 | 1.050E-06 | 5.003E-09 | 1.853E-06 | 2.347E-06 | 1.877E-06 | 8.338E-05 | 0.000E+00 | 3.335E-07 | 4.507E-08 | 0.000E+00 | 4.069E-09 | 1.279E-05 | 6.873E-08 |
| OVEN3_B | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_B | REER | (g/m)/(µg/m³) | 9.166E-04 | 1.707E-08 | 4.288E-06 | 2.001E-05 | 6.540E-04 | 1.482E-06 | 9.529E-07 | 1.223E-04 | 9.376E-06 | 4.669E-07 | 0.000E+00 | 2.031E-08 | 1.050E-06 | 5.003E-09 | 1.853E-06 | 2.347E-06 | 1.877E-06 | 8.338E-05 | 0.000E+00 | 3.335E-07 | 4.507E-08 | 0.000E+00 | 4.069E-09 | 1.279E-05 | 6.873E-08 |
| OVEN4_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_A | REER | (g/m)/(µg/m³) | 8.148E-04 | 1.518E-08 | 3.812E-06 | 1.779E-05 | 5.813E-04 | 1.318E-06 | 8.470E-07 | 1.087E-04 | 8.334E-06 | 4.151E-07 | 0.000E+00 | 1.805E-08 | 9.333E-07 | 4.447E-09 | 1.647E-06 | 2.086E-06 | 1.668E-06 | 7.412E-05 | 0.000E+00 | 2.965E-07 | 4.006E-08 | 0.000E+00 | 3.617E-09 | 1.136E-05 | 6.109E-08 |
| OVEN4_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_B | REER | (g/m)/(µg/m³) | 8.148E-04 | 1.518E-08 | 3.812E-06 | 1.779E-05 | 5.813E-04 | 1.318E-06 | 8.470E-07 | 1.087E-04 | 8.334E-06 | 4.151E-07 | 0.000E+00 | 1.805E-08 | 9.333E-07 | 4.447E-09 | 1.647E-06 | 2.086E-06 | 1.668E-06 | 7.412E-05 | 0.000E+00 | 2.965E-07 | 4.006E-08 | 0.000E+00 | 3.617E-09 | 1.136E-05 | 6.109E-08 |
| OVEN5_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_A | REER | (g/m)/(µg/m³) | 8.148E-04 | 1.518E-08 | 3.812E-06 | 1.779E-05 | 5.813E-04 | 1.318E-06 | 8.470E-07 | 1.087E-04 | 8.334E-06 | 4.151E-07 | 0.000E+00 | 1.805E-08 | 9.333E-07 | 4.447E-09 | 1.647E-06 | 2.086E-06 | 1.668E-06 | 7.412E-05 | 0.000E+00 | 2.965E-07 | 4.006E-08 | 0.000E+00 | 3.617E-09 | 1.136E-05 | 6.109E-08 |
| OVEN5_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_B | REER | (g/m)/(µg/m³) | 8.148E-04 | 1.518E-08 | 3.812E-06 | 1.779E-05 | 5.813E-04 | 1.318E-06 | 8.470E-07 | 1.087E-04 | 8.334E-06 | 4.151E-07 | 0.000E+00 | 1.805E-08 | 9.333E-07 | 4.447E-09 | 1.647E-06 | 2.086E-06 | 1.668E-06 | 7.412E-05 | 0.000E+00 | 2.965E-07 | 4.006E-08 | 0.000E+00 | 3.617E-09 | 1.136E-05 | 6.109E-08 |
| OVEN6_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_A | REER | (g/m)/(µg/m³) | 8.148E-04 | 1.518E-08 | 3.812E-06 | 1.779E-05 | 5.813E-04 | 1.318E-06 | 8.470E-07 | 1.087E-04 | 8.334E-06 | 4.151E-07 | 0.000E+00 | 1.805E-08 | 9.333E-07 | 4.447E-09 | 1.647E-06 | 2.086E-06 | 1.668E-06 | 7.412E-05 | 0.000E+00 | 2.965E-07 | 4.006E-08 | 0.000E+00 | 3.617E-09 | 1.136E-05 | 6.109E-08 |
| OVEN6_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_B | REER | (g/m)/(µg/m³) | 8.148E-04 | 1.518E-08 | 3.812E-06 | 1.779E-05 | 5.813E-04 | 1.318E-06 | 8.470E-07 | 1.087E-04 | 8.334E-06 | 4.151E-07 | 0.000E+00 | 1.805E-08 | 9.333E-07 | 4.447E-09 | 1.647E-06 | 2.086E-06 | 1.668E-06 | 7.412E-05 | 0.000E+00 | 2.965E-07 | 4.006E-08 | 0.000E+00 | 3.617E-09 | 1.136E-05 | 6.109E-08 |
| OVEN10_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_A | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN10_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_B | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN12_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_A | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN12_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_B | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN13_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_A | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN13_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_B | REER | (g/m)/(µg/m³) | 6.111E-04 | 1.138E-08 | 2.859E-06 | 1.334E-05 | 4.360E-04 | 9.882E-07 | 6.353E-07 | 8.153E-05 | 6.251E-06 | 3.113E-07 | 0.000E+00 | 1.354E-08 | 7.000E-07 | 3.335E-09 | 1.235E-06 | 1.565E-06 | 1.251E-06 | 5.559E-05 | 0.000E+00 | 2.223E-07 | 3.005E-08 | 0.000E+00 | 2.713E-09 | 8.523E-06 | 4.582E-08 |
| OVEN14 | Emission Rate | lb/yr | | 0.013 | 0.008 | 54.106 | 0.001 | 0.024 | 0.000 | 0.003 | 0.004 | 0.000 | 0.003 | 0.029 | 0.051 | 0.019 | 0.002 | 0.001 | 0.001 | 0.006 | 0.000 | 0.000 | 0.001 | 0.000 | 0.110 | 0.007 | 0.082 |
| OVEN14 | REER | (g/m)/(µg/m³) | 7.129E-05 | 1.328E-09 | 3.335E-07 | 1.556E-06 | 5.086E-05 | 1.153E-07 | 7.412E-08 | 9.512E-06 | 7.293E-07 | 3.632E-08 | 0.000E+00 | 1.580E-09 | 8.167E-08 | 3.891E-10 | 1.441E-07 | 1.825E-07 | 1.460E-07 | 6.485E-06 | 0.000E+00 | 2.594E-08 | 3.506E-09 | 0.000E+00 | 3.165E-10 | 9.944E-07 | 5.345E-09 |
| OVEN18_A | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.003 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_A | REER | (g/m)/(µg/m³) | 1.222E-04 | 2.276E-09 | 5.718E-07 | 2.668E-06 | 8.720E-05 | 1.976E-07 | 1.271E-07 | 1.631E-05 | 1.250E-06 | 6.226E-08 | 0.000E+00 | 2.708E-09 | 1.400E-07 | 6.670E-10 | 2.471E-07 | 3.129E-07 | 2.503E-07 | 1.112E-05 | 0.000E+00 | 4.447E-08 | 6.009E-09 | 0.000E+00 | 5.425E-10 | 1.705E-06 | 9.163E-09 |
| OVEN18_B | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.003 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_B | REER | (g/m)/(µg/m³) | 1.222E-04 | 2.276E-09 | 5.718E-07 | 2.668E-06 | 8.720E-05 | 1.976E-07 | 1.271E-07 | 1.631E-05 | 1.250E-06 | 6.226E-08 | 0.000E+00 | 2.708E-09 | 1.400E-07 | 6.670E-10 | 2.471E-07 | 3.129E-07 | 2.503E-07 | 1.112E-05 | 0.000E+00 | 4.447E-08 | 6.009E-09 | 0.000E+00 | 5.425E-10 | 1.705E-06 | 9.163E-09 |
| OVEN20_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_A | REER | (g/m)/(µg/m³) | 1.222E-03 | 2.276E-08 | 5.718E-06 | 2.668E-05 | 8.720E-04 | 1.976E-06 | 1.271E-06 | 1.631E-04 | 1.250E-05 | 6.226E-07 | 0.000E+00 | 2.708E-08 | 1.400E-06 | 6.670E-09 | 2.471E-06 | 3.129E-06 | 2.503E-06 | 1.112E-04 | 0.000E+00 | 4.447E-07 | 6.009E-08 | 0.000E+00 | 5.425E-09 | 1.705E-05 | 9.163E-08 |
| OVEN20_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_B | REER | (g/m)/(µg/m³) | 1.222E-03 | 2.276E-08 | 5.718E-06 | 2.668E-05 | 8.720E-04 | 1.976E-06 | 1.271E-06 | 1.631E-04 | 1.250E-05 | 6.226E-07 | 0.000E+00 | 2.708E-08 | 1.400E-06 | 6.670E-09 | 2.471E-06 | 3.129E-06 | 2.503E-06 | 1.112E-04 | 0.000E+00 | 4.447E-07 | 6.009E-08 | 0.000E+00 | 5.425E-09 | 1.705E-05 | 9.163E-08 |
| OVEN21 | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN21 | REER | (g/m)/(µg/m³) | 1.222E-03 | 2.276E-08 | 5.718E-06 | 2.668E-05 | 8.720E-04 | 1.976E-06 | 1.271E-06 | 1.631E-04 | 1.250E-05 | 6.226E-07 | 0.000E+00 | 2.708E-08 | 1.400E-06 | 6.670E-09 | 2.471E-06 | 3.129E-06 | 2.503E-06 | 1.112E-04 | 0.000E+00 | 4.447E-07 | 6.009E-08 | 0.000E+00 | 5.425E-09 | 1.705E-05 | 9.163E-08 |
| CORE1 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE1 | REER | (g/m)/(µg/m³) | 1.018E-04 | 1.897E-09 | 4.765E-07 | 2.223E-06 | 7.266E-05 | 1.647E-07 | 1.059E-07 | 1.359E-05 | 1.042E-06 | 5.188E-08 | 0.000E+00 | 2.257E-09 | 1.167E-07 | 5.559E-10 | 2.059E-07 | 2.608E-07 | 2.086E-07 | 9.265E-06 | 0.000E+00 | 3.706E-08 | 5.008E-09 | 0.000E+00 | 4.521E-10 | 1.421E-06 | 7.636E-09 |
| CORE2 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE2 | REER | (g/m)/(µg/m³) | 1.018E-04 | 1.897E-09 | 4.765E-07 | 2.223E-06 | 7.266E-05 | 1.647E-07 | 1.059E-07 | 1.359E-05 | 1.042E-06 | 5.188E-08 | 0.000E+00 | 2.257E-09 | 1.167E-07 | 5.559E-10 | 2.059E-07 | 2.608E-07 | 2.086E-07 | 9.265E-06 | 0.000E+00 | 3.706E-08 | 5.008E-09 | 0.000E+00 | 4.521E-10 | 1.421E-06 | 7.636E-09 |
| CORE3 | Emission Rate | lb/yr | | 0.028 | 0.017 | 115.941 | 0.001 | 0.052 | 0.000 | 0.007 | 0.008 | 0.001 | 0.005 | 0.061 | 0.110 | 0.041 | 0.003 | 0.002 | 0.002 | 0.014 | 0.001 | 0.000 | 0.002 | 0.000 | 0.236 | 0.015 | 0.175 |
| CORE3 | REER | (g/m)/(µg/m³) | 1.528E-04 | 2.846E-09 | 7.147E-07 | 3.335E-06 | 1.090E-04 | 2.471E-07 | 1.588E-07 | 2.038E-05 | 1.563E-06 | 7.782E-08 | 0.000E+00 | 3.385E-09 | 1.750E-07 | 8.338E-10 | 3.088E-07 | 3.912E-07 | 3.128E-07 | 1.390E-05 | 0.000E+00 | 5.559E-08 | 7.512E-09 | 0.000E+00 | 6.782E-10 | 2.131E-06 | 1.145E-08 |
| LADLE1-3 | Emission Rate | lb/yr | | 0.066 | 0.042 | 278.259 | 0.003 | 0.124 | 0.000 | 0.017 | 0.022 | 0.001 | 0.013 | 0.147 | 0.263 | 0.097 | 0.008 | 0.006 | 0.004 | 0.032 | 0.002 | 0.000 | 0.005 | 0.000 | 0.566 | 0.036 | 0.420 |
| LADLE1-3 | REER | (g/m)/(µg/m³) | 3.666E-04 | 6.829E-09 | 1.715E-06 | 8.005E-06 | 2.616E-04 | 5.929E-07 | 3.812E-07 | 4.892E-05 | 3.750E-06 | 1.868E-07 | 0.000E+00 | 8.124E-09 | 4.200E-07 | 2.001E-09 | 7.412E-07 | 9.388E-07 | 7.508E-07 | 3.335E-05 | 0.000E+00 | 1.334E-07 | 1.803E-08 | 0.000E+00 | 1.628E-09 | 5.114E-06 | 2.749E-08 |

# Table A-11. Emission Rates and REER Calculations - Non-Resident Child Chronic Cancer Exposure Scenario - Sources Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 75-07-0 | 107-02-8 | 7664-41-7 | 7440-38-2 | 71-43-2 | 7440-41-7 | 7440-43-9 | 18540-29-9 | 7440-48-4 | 7440-50-8 | 100-41-4 | 50-00-0 | 110-54-3 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 365 | 401 | 50-32-8 | 91-20-3 | 7782-49-2 | 108-88-3 | 7440-62-2 | 1330-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Acetaldehyde | Acrolein | Ammonia | Arsenic and compounds | Benzene | Beryllium and compounds | Cadmium and compounds | Chromium VI, chromate and dichromate particulate | Cobalt and compounds | Copper and compounds | Ethyl benzene | Formaldehyde | Hexane | Lead and compounds | Manganese and compounds | Mercury and compounds | Nickel compounds, insoluble | Polycyclic aromatic hydrocarbons (PAHs) | Benzo[a]pyrene | Naphthalene | Selenium and compounds | Toluene | Vanadium (fume or dust) | Xylene (mixture), including m-xylene, o-xylene, p-xylene |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 12.000 | 0.000 | 0.000 | 0.001 | 3.300 | 0.011 | 0.014 | 0.001 | 0.000 | 0.000 | 10.000 | 4.300 | 0.000 | 0.000 | 0.000 | 0.000 | 0.100 | 0.002 | 0.002 | 0.760 | 0.000 | 0.000 | 0.000 | 0.000 |
| OVEN102 | Emission Rate | lb/yr | | 0.479 | 0.417 | 2782.588 | 0.031 | 0.897 | 0.002 | 0.170 | 0.216 | 0.013 | 0.133 | 1.067 | 1.901 | 0.711 | 0.077 | 0.059 | 0.040 | 0.325 | 0.015 | 0.000 | 0.046 | 0.004 | 4.097 | 0.356 | 3.065 |
| OVEN102 | REER | (g/s)/(µg/m³) | 6.706E-03 | 5.744E-07 | 0.000E+00 | 0.000E+00 | 3.421E-04 | 3.908E-06 | 2.426E-06 | 1.747E-04 | 5.986E-03 | 0.000E+00 | 0.000E+00 | 1.534E-06 | 6.360E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.669E-05 | 1.390E-04 | 1.668E-06 | 8.777E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN1_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_A | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN1_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_B | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN2_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_A | REER | (g/s)/(µg/m³) | 2.237E-03 | 2.656E-07 | 0.000E+00 | 0.000E+00 | 1.140E-04 | 1.797E-06 | 8.085E-07 | 5.823E-05 | 1.995E-03 | 0.000E+00 | 0.000E+00 | 7.041E-07 | 2.930E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.556E-05 | 4.632E-05 | 5.559E-07 | 2.926E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN2_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_B | REER | (g/s)/(µg/m³) | 2.237E-03 | 2.656E-07 | 0.000E+00 | 0.000E+00 | 1.140E-04 | 1.797E-06 | 8.085E-07 | 5.823E-05 | 1.995E-03 | 0.000E+00 | 0.000E+00 | 7.041E-07 | 2.930E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.556E-05 | 4.632E-05 | 5.559E-07 | 2.926E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN3_A | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_A | REER | (g/s)/(µg/m³) | 1.678E-03 | 1.992E-07 | 0.000E+00 | 0.000E+00 | 8.552E-05 | 1.348E-06 | 6.064E-07 | 4.368E-05 | 1.497E-03 | 0.000E+00 | 0.000E+00 | 5.281E-07 | 2.198E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.167E-05 | 3.474E-05 | 4.169E-07 | 2.194E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN3_B | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_B | REER | (g/s)/(µg/m³) | 1.678E-03 | 1.992E-07 | 0.000E+00 | 0.000E+00 | 8.552E-05 | 1.348E-06 | 6.064E-07 | 4.368E-05 | 1.497E-03 | 0.000E+00 | 0.000E+00 | 5.281E-07 | 2.198E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.167E-05 | 3.474E-05 | 4.169E-07 | 2.194E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN4_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_A | REER | (g/s)/(µg/m³) | 1.491E-03 | 1.771E-07 | 0.000E+00 | 0.000E+00 | 7.602E-05 | 1.198E-06 | 5.390E-07 | 3.882E-05 | 1.330E-03 | 0.000E+00 | 0.000E+00 | 4.694E-07 | 1.953E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.038E-05 | 3.088E-05 | 3.706E-07 | 1.950E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN4_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_B | REER | (g/s)/(µg/m³) | 1.491E-03 | 1.771E-07 | 0.000E+00 | 0.000E+00 | 7.602E-05 | 1.198E-06 | 5.390E-07 | 3.882E-05 | 1.330E-03 | 0.000E+00 | 0.000E+00 | 4.694E-07 | 1.953E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.038E-05 | 3.088E-05 | 3.706E-07 | 1.950E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN5_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_A | REER | (g/s)/(µg/m³) | 1.491E-03 | 1.771E-07 | 0.000E+00 | 0.000E+00 | 7.602E-05 | 1.198E-06 | 5.390E-07 | 3.882E-05 | 1.330E-03 | 0.000E+00 | 0.000E+00 | 4.694E-07 | 1.953E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.038E-05 | 3.088E-05 | 3.706E-07 | 1.950E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN5_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_B | REER | (g/s)/(µg/m³) | 1.491E-03 | 1.771E-07 | 0.000E+00 | 0.000E+00 | 7.602E-05 | 1.198E-06 | 5.390E-07 | 3.882E-05 | 1.330E-03 | 0.000E+00 | 0.000E+00 | 4.694E-07 | 1.953E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.038E-05 | 3.088E-05 | 3.706E-07 | 1.950E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN6_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_A | REER | (g/s)/(µg/m³) | 1.491E-03 | 1.771E-07 | 0.000E+00 | 0.000E+00 | 7.602E-05 | 1.198E-06 | 5.390E-07 | 3.882E-05 | 1.330E-03 | 0.000E+00 | 0.000E+00 | 4.694E-07 | 1.953E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.038E-05 | 3.088E-05 | 3.706E-07 | 1.950E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN6_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_B | REER | (g/s)/(µg/m³) | 1.491E-03 | 1.771E-07 | 0.000E+00 | 0.000E+00 | 7.602E-05 | 1.198E-06 | 5.390E-07 | 3.882E-05 | 1.330E-03 | 0.000E+00 | 0.000E+00 | 4.694E-07 | 1.953E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.038E-05 | 3.088E-05 | 3.706E-07 | 1.950E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN10_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_A | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN10_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_B | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN12_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_A | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN12_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_B | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN13_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_A | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN13_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_B | REER | (g/s)/(µg/m³) | 1.118E-03 | 1.328E-07 | 0.000E+00 | 0.000E+00 | 5.701E-05 | 8.984E-07 | 4.043E-07 | 2.912E-05 | 9.977E-04 | 0.000E+00 | 0.000E+00 | 3.521E-07 | 1.465E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 7.782E-06 | 2.316E-05 | 2.779E-07 | 1.463E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN14 | Emission Rate | lb/yr | | 0.013 | 0.008 | 54.106 | 0.001 | 0.024 | 0.000 | 0.003 | 0.004 | 0.000 | 0.003 | 0.029 | 0.051 | 0.019 | 0.002 | 0.001 | 0.001 | 0.006 | 0.000 | 0.000 | 0.001 | 0.000 | 0.110 | 0.007 | 0.082 |
| OVEN14 | REER | (g/s)/(µg/m³) | 1.305E-04 | 1.549E-08 | 0.000E+00 | 0.000E+00 | 6.651E-06 | 1.048E-07 | 4.716E-08 | 3.397E-06 | 1.164E-04 | 0.000E+00 | 0.000E+00 | 4.107E-08 | 1.709E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 9.079E-07 | 2.702E-06 | 3.243E-08 | 1.707E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN18_A | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_A | REER | (g/s)/(µg/m³) | 2.237E-04 | 2.656E-08 | 0.000E+00 | 0.000E+00 | 1.140E-05 | 1.797E-07 | 8.085E-08 | 5.823E-06 | 1.995E-04 | 0.000E+00 | 0.000E+00 | 7.041E-08 | 2.930E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.556E-06 | 4.632E-06 | 5.559E-08 | 2.926E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN18_B | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_B | REER | (g/s)/(µg/m³) | 2.237E-04 | 2.656E-08 | 0.000E+00 | 0.000E+00 | 1.140E-05 | 1.797E-07 | 8.085E-08 | 5.823E-06 | 1.995E-04 | 0.000E+00 | 0.000E+00 | 7.041E-08 | 2.930E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.556E-06 | 4.632E-06 | 5.559E-08 | 2.926E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN20_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_A | REER | (g/s)/(µg/m³) | 2.237E-03 | 2.656E-07 | 0.000E+00 | 0.000E+00 | 1.140E-04 | 1.797E-06 | 8.085E-07 | 5.823E-05 | 1.995E-03 | 0.000E+00 | 0.000E+00 | 7.041E-07 | 2.930E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.556E-05 | 4.632E-05 | 5.559E-07 | 2.926E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN20_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_B | REER | (g/s)/(µg/m³) | 2.237E-03 | 2.656E-07 | 0.000E+00 | 0.000E+00 | 1.140E-04 | 1.797E-06 | 8.085E-07 | 5.823E-05 | 1.995E-03 | 0.000E+00 | 0.000E+00 | 7.041E-07 | 2.930E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.556E-05 | 4.632E-05 | 5.559E-07 | 2.926E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN21 | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN21 | REER | (g/s)/(µg/m³) | 2.237E-03 | 2.656E-07 | 0.000E+00 | 0.000E+00 | 1.140E-04 | 1.797E-06 | 8.085E-07 | 5.823E-05 | 1.995E-03 | 0.000E+00 | 0.000E+00 | 7.041E-07 | 2.930E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.556E-05 | 4.632E-05 | 5.559E-07 | 2.926E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE1 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE1 | REER | (g/s)/(µg/m³) | 1.864E-04 | 2.213E-08 | 0.000E+00 | 0.000E+00 | 9.502E-06 | 1.497E-07 | 6.738E-08 | 4.853E-06 | 1.663E-04 | 0.000E+00 | 0.000E+00 | 5.868E-08 | 2.442E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.297E-06 | 3.860E-06 | 4.632E-08 | 2.438E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE2 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE2 | REER | (g/s)/(µg/m³) | 1.864E-04 | 2.213E-08 | 0.000E+00 | 0.000E+00 | 9.502E-06 | 1.497E-07 | 6.738E-08 | 4.853E-06 | 1.663E-04 | 0.000E+00 | 0.000E+00 | 5.868E-08 | 2.442E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.297E-06 | 3.860E-06 | 4.632E-08 | 2.438E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE3 | Emission Rate | lb/yr | | 0.028 | 0.017 | 115.941 | 0.001 | 0.052 | 0.000 | 0.007 | 0.008 | 0.001 | 0.005 | 0.061 | 0.110 | 0.041 | 0.003 | 0.002 | 0.002 | 0.014 | 0.001 | 0.000 | 0.002 | 0.000 | 0.236 | 0.015 | 0.175 |
| CORE3 | REER | (g/s)/(µg/m³) | 2.796E-04 | 3.320E-08 | 0.000E+00 | 0.000E+00 | 1.425E-05 | 2.246E-07 | 1.011E-07 | 7.279E-06 | 2.494E-04 | 0.000E+00 | 0.000E+00 | 8.801E-08 | 3.663E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.946E-06 | 5.790E-06 | 6.948E-08 | 3.657E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| LADLE1-3 | Emission Rate | lb/yr | | 0.066 | 0.042 | 278.259 | 0.003 | 0.124 | 0.000 | 0.017 | 0.022 | 0.001 | 0.013 | 0.147 | 0.263 | 0.097 | 0.008 | 0.006 | 0.004 | 0.032 | 0.002 | 0.000 | 0.005 | 0.000 | 0.566 | 0.036 | 0.420 |
| LADLE1-3 | REER | (g/s)/(µg/m³) | 6.711E-04 | 7.968E-08 | 0.000E+00 | 0.000E+00 | 3.421E-05 | 5.390E-07 | 2.426E-07 | 1.747E-05 | 5.986E-04 | 0.000E+00 | 0.000E+00 | 2.112E-07 | 8.791E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.669E-06 | 1.390E-05 | 1.668E-07 | 8.777E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

# Table A-12. Emission Rates and REER Calculations - Non-Resident Child Chronic Non-Cancer Exposure Scenario - Sources Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 75-07-0 | 107-02-8 | 7664-41-7 | 7440-38-2 | 71-43-2 | 7440-41-7 | 7440-43-9 | 18540-29-9 | 7440-48-4 | 7440-50-8 | 100-41-4 | 50-00-0 | 110-54-3 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 365 | 401 | 50-32-8 | 91-20-3 | 7782-49-2 | 108-88-3 | 7440-62-2 | 1330-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Acetaldehyde | Acrolein | Ammonia | Arsenic and compounds | Benzene | Beryllium and compounds | Cadmium and compounds | Chromium VI, chromate and dichromate particulate | Cobalt and compounds | Copper and compounds | Ethyl benzene | Formaldehyde | Hexane | Lead and compounds | Manganese and compounds | Mercury and compounds | Nickel compounds, insoluble | Polycyclic aromatic hydrocarbons (PAHs) | Benzo[a]pyrene | Naphthalene | Selenium and compounds | Toluene | Vanadium (fume or dust) | Xylene (mixture), including m-xylene, o-xylene, p-xylene |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 620.000 | 1.500 | 2200.000 | 0.002 | 13.000 | 0.031 | 0.037 | 0.880 | 0.440 | 0.000 | 1100.000 | 40.000 | 3100.000 | 0.660 | 0.400 | 0.630 | 0.062 | 0.000 | 0.009 | 16.000 | 0.000 | 22000.000 | 0.440 | 970.000 |
| OVEN102 | Emission Rate | lb/yr | | 0.479 | 0.437 | 2782.588 | 0.031 | 0.897 | 0.002 | 0.170 | 0.216 | 0.013 | 0.133 | 1.067 | 1.901 | 0.711 | 0.077 | 0.059 | 0.040 | 0.325 | 0.015 | 0.000 | 0.046 | 0.004 | 4.097 | 0.356 | 3.065 |
| OVEN102 | REER | (g/s)/(µg/m³) | 3.722E-04 | 1.112E-08 | 4.002E-06 | 1.819E-05 | 1.853E-04 | 9.920E-07 | 8.607E-07 | 6.610E-05 | 3.537E-06 | 4.245E-07 | 0.000E+00 | 1.395E-08 | 6.837E-07 | 3.299E-09 | 1.684E-06 | 2.112E-06 | 9.176E-07 | 7.531E-05 | 0.000E+00 | 3.032E-07 | 4.169E-08 | 0.000E+00 | 2.678E-09 | 1.162E-05 | 4.516E-08 |
| OVEN1_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN1_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN2_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_A | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN2_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_B | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN3_A | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_A | REER | (g/s)/(µg/m³) | 9.321E-05 | 3.855E-09 | 1.001E-06 | 4.548E-06 | 4.632E-05 | 3.421E-07 | 2.152E-07 | 1.653E-05 | 8.843E-07 | 1.061E-07 | 0.000E+00 | 4.801E-09 | 2.362E-07 | 1.130E-09 | 4.211E-07 | 5.281E-07 | 2.294E-07 | 1.883E-05 | 0.000E+00 | 7.580E-08 | 1.042E-08 | 0.000E+00 | 9.248E-10 | 2.906E-06 | 1.559E-08 |
| OVEN3_B | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_B | REER | (g/s)/(µg/m³) | 9.321E-05 | 3.855E-09 | 1.001E-06 | 4.548E-06 | 4.632E-05 | 3.421E-07 | 2.152E-07 | 1.653E-05 | 8.843E-07 | 1.061E-07 | 0.000E+00 | 4.801E-09 | 2.362E-07 | 1.130E-09 | 4.211E-07 | 5.281E-07 | 2.294E-07 | 1.883E-05 | 0.000E+00 | 7.580E-08 | 1.042E-08 | 0.000E+00 | 9.248E-10 | 2.906E-06 | 1.559E-08 |
| OVEN4_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_A | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN4_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_B | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN5_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_A | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN5_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_B | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN6_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_A | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN6_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_B | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN10_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN10_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN12_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN12_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN13_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN13_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN14 | Emission Rate | lb/yr | | 0.013 | 0.008 | 54.106 | 0.001 | 0.024 | 0.000 | 0.003 | 0.004 | 0.000 | 0.003 | 0.029 | 0.051 | 0.019 | 0.002 | 0.001 | 0.001 | 0.006 | 0.000 | 0.000 | 0.001 | 0.000 | 0.110 | 0.007 | 0.082 |
| OVEN14 | REER | (g/s)/(µg/m³) | 7.249E-06 | 2.999E-10 | 7.782E-08 | 3.537E-07 | 3.603E-06 | 2.661E-08 | 1.674E-08 | 1.285E-06 | 6.878E-08 | 8.254E-09 | 0.000E+00 | 3.734E-10 | 1.837E-08 | 8.786E-11 | 3.275E-08 | 4.107E-08 | 1.784E-08 | 1.464E-06 | 0.000E+00 | 5.896E-09 | 8.106E-10 | 0.000E+00 | 7.193E-11 | 2.260E-07 | 1.212E-09 |
| OVEN18_A | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_A | REER | (g/s)/(µg/m³) | 1.243E-05 | 5.140E-10 | 1.334E-07 | 6.064E-07 | 6.176E-06 | 4.561E-08 | 2.869E-08 | 2.203E-06 | 1.179E-07 | 1.415E-08 | 0.000E+00 | 6.401E-10 | 3.150E-08 | 1.506E-10 | 5.615E-08 | 7.041E-08 | 3.059E-08 | 2.510E-06 | 0.000E+00 | 1.011E-08 | 1.390E-09 | 0.000E+00 | 1.233E-10 | 3.874E-07 | 2.078E-09 |
| OVEN18_B | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_B | REER | (g/s)/(µg/m³) | 1.243E-05 | 5.140E-10 | 1.334E-07 | 6.064E-07 | 6.176E-06 | 4.561E-08 | 2.869E-08 | 2.203E-06 | 1.179E-07 | 1.415E-08 | 0.000E+00 | 6.401E-10 | 3.150E-08 | 1.506E-10 | 5.615E-08 | 7.041E-08 | 3.059E-08 | 2.510E-06 | 0.000E+00 | 1.011E-08 | 1.390E-09 | 0.000E+00 | 1.233E-10 | 3.874E-07 | 2.078E-09 |
| OVEN20_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_A | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN20_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_B | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN21 | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN21 | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| CORE1 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE1 | REER | (g/s)/(µg/m³) | 1.036E-05 | 4.284E-10 | 1.112E-07 | 5.053E-07 | 5.147E-06 | 3.801E-08 | 2.391E-08 | 1.836E-06 | 9.826E-08 | 1.179E-08 | 0.000E+00 | 5.334E-10 | 2.625E-08 | 1.255E-10 | 4.679E-08 | 5.868E-08 | 2.549E-08 | 2.092E-06 | 0.000E+00 | 8.422E-09 | 1.158E-09 | 0.000E+00 | 1.028E-10 | 3.229E-07 | 1.732E-09 |
| CORE2 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE2 | REER | (g/s)/(µg/m³) | 1.036E-05 | 4.284E-10 | 1.112E-07 | 5.053E-07 | 5.147E-06 | 3.801E-08 | 2.391E-08 | 1.836E-06 | 9.826E-08 | 1.179E-08 | 0.000E+00 | 5.334E-10 | 2.625E-08 | 1.255E-10 | 4.679E-08 | 5.868E-08 | 2.549E-08 | 2.092E-06 | 0.000E+00 | 8.422E-09 | 1.158E-09 | 0.000E+00 | 1.028E-10 | 3.229E-07 | 1.732E-09 |
| CORE3 | Emission Rate | lb/yr | | 0.028 | 0.017 | 115.941 | 0.001 | 0.052 | 0.000 | 0.007 | 0.008 | 0.001 | 0.005 | 0.061 | 0.110 | 0.041 | 0.003 | 0.002 | 0.002 | 0.014 | 0.001 | 0.000 | 0.002 | 0.000 | 0.236 | 0.015 | 0.175 |
| CORE3 | REER | (g/s)/(µg/m³) | 1.553E-05 | 6.425E-10 | 1.668E-07 | 7.580E-07 | 7.720E-06 | 5.701E-08 | 3.586E-08 | 2.754E-06 | 1.474E-07 | 1.769E-08 | 0.000E+00 | 8.001E-10 | 3.937E-08 | 1.883E-10 | 7.019E-08 | 8.801E-08 | 3.823E-08 | 3.138E-06 | 0.000E+00 | 1.263E-08 | 1.737E-09 | 0.000E+00 | 1.541E-10 | 4.843E-07 | 2.598E-09 |
| LADLE1-3 | Emission Rate | lb/yr | | 0.066 | 0.042 | 278.259 | 0.003 | 0.124 | 0.000 | 0.017 | 0.022 | 0.001 | 0.013 | 0.147 | 0.263 | 0.097 | 0.008 | 0.006 | 0.004 | 0.032 | 0.002 | 0.000 | 0.005 | 0.000 | 0.566 | 0.036 | 0.420 |
| LADLE1-3 | REER | (g/s)/(µg/m³) | 3.728E-05 | 1.542E-09 | 4.002E-07 | 1.819E-06 | 1.853E-05 | 1.368E-07 | 8.607E-08 | 6.610E-06 | 3.537E-07 | 4.245E-08 | 0.000E+00 | 1.920E-09 | 9.450E-08 | 4.519E-10 | 1.684E-07 | 2.112E-07 | 9.176E-08 | 7.531E-06 | 0.000E+00 | 3.032E-08 | 4.169E-09 | 0.000E+00 | 3.699E-10 | 1.162E-06 | 6.235E-09 |

# Table A-13. Emission Rates and REER Calculations - Non-Resident Worker Chronic Cancer Exposure Scenario - Sources Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 75-07-0 | 107-02-8 | 7664-41-7 | 7440-38-2 | 71-43-2 | 7440-41-7 | 7440-43-9 | 18540-29-9 | 7440-48-4 | 7440-50-8 | 100-41-4 | 50-00-0 | 110-54-3 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 365 | 401 | 50-32-8 | 91-20-3 | 7782-49-2 | 108-88-3 | 7440-62-2 | 1330-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Acetaldehyde | Acrolein | Ammonia | Arsenic and compounds | Benzene | Beryllium and compounds | Cadmium and compounds | Chromium VI, chromate and dichromate particulate | Cobalt and compounds | Copper and compounds | Ethyl benzene | Formaldehyde | Hexane | Lead and compounds | Manganese and compounds | Mercury and compounds | Nickel compounds, insoluble | Polycyclic aromatic hydrocarbons (PAHs) | Benzo[a]pyrene | Naphthalene | Selenium and compounds | Toluene | Vanadium (fume or dust) | Xylene (mixture), including m-xylene, o-xylene, p-xylene |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 5.500 | 0.000 | 0.000 | 0.001 | 1.500 | 0.005 | 0.007 | 0.001 | 0.000 | 0.000 | 4.800 | 2.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.046 | 0.003 | 0.003 | 0.350 | 0.000 | 0.000 | 0.000 | 0.000 |
| OVEN102 | Emission Rate | lb/yr | | 0.479 | 0.417 | 2782.588 | 0.031 | 0.897 | 0.002 | 0.170 | 0.216 | 0.013 | 0.131 | 1.067 | 1.901 | 0.711 | 0.077 | 0.059 | 0.040 | 0.325 | 0.015 | 0.000 | 0.046 | 0.004 | 4.097 | 0.356 | 3.065 |
| OVEN102 | REER | (g/s)/(µg/m³) | 4.406E-03 | 1.253E-06 | 0.000E+00 | 0.000E+00 | 7.173E-04 | 8.598E-06 | 5.336E-06 | 3.651E-04 | 3.113E-03 | 0.000E+00 | 0.000E+00 | 3.195E-06 | 1.367E-05 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.015E-04 | 7.412E-05 | 8.894E-07 | 1.906E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN1_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_A | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN1_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_B | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN2_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_A | REER | (g/s)/(µg/m³) | 1.472E-03 | 5.795E-07 | 0.000E+00 | 0.000E+00 | 2.391E-04 | 3.953E-06 | 1.779E-06 | 1.217E-04 | 1.038E-03 | 0.000E+00 | 0.000E+00 | 1.467E-06 | 6.300E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.384E-05 | 2.471E-05 | 2.965E-07 | 6.353E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN2_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_B | REER | (g/s)/(µg/m³) | 1.472E-03 | 5.795E-07 | 0.000E+00 | 0.000E+00 | 2.391E-04 | 3.953E-06 | 1.779E-06 | 1.217E-04 | 1.038E-03 | 0.000E+00 | 0.000E+00 | 1.467E-06 | 6.300E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.384E-05 | 2.471E-05 | 2.965E-07 | 6.353E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN3_A | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_A | REER | (g/s)/(µg/m³) | 1.104E-03 | 4.346E-07 | 0.000E+00 | 0.000E+00 | 1.793E-04 | 2.965E-06 | 1.334E-06 | 9.126E-05 | 7.782E-04 | 0.000E+00 | 0.000E+00 | 1.100E-06 | 4.725E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.538E-05 | 1.853E-05 | 2.223E-07 | 4.765E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN3_B | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_B | REER | (g/s)/(µg/m³) | 1.104E-03 | 4.346E-07 | 0.000E+00 | 0.000E+00 | 1.793E-04 | 2.965E-06 | 1.334E-06 | 9.126E-05 | 7.782E-04 | 0.000E+00 | 0.000E+00 | 1.100E-06 | 4.725E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.538E-05 | 1.853E-05 | 2.223E-07 | 4.765E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN4_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_A | REER | (g/s)/(µg/m³) | 9.813E-04 | 3.863E-07 | 0.000E+00 | 0.000E+00 | 1.594E-04 | 2.635E-06 | 1.186E-06 | 8.112E-05 | 6.918E-04 | 0.000E+00 | 0.000E+00 | 9.779E-07 | 4.200E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.256E-05 | 1.647E-05 | 1.976E-07 | 4.235E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN4_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_B | REER | (g/s)/(µg/m³) | 9.813E-04 | 3.863E-07 | 0.000E+00 | 0.000E+00 | 1.594E-04 | 2.635E-06 | 1.186E-06 | 8.112E-05 | 6.918E-04 | 0.000E+00 | 0.000E+00 | 9.779E-07 | 4.200E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.256E-05 | 1.647E-05 | 1.976E-07 | 4.235E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN5_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_A | REER | (g/s)/(µg/m³) | 9.813E-04 | 3.863E-07 | 0.000E+00 | 0.000E+00 | 1.594E-04 | 2.635E-06 | 1.186E-06 | 8.112E-05 | 6.918E-04 | 0.000E+00 | 0.000E+00 | 9.779E-07 | 4.200E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.256E-05 | 1.647E-05 | 1.976E-07 | 4.235E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN5_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_B | REER | (g/s)/(µg/m³) | 9.813E-04 | 3.863E-07 | 0.000E+00 | 0.000E+00 | 1.594E-04 | 2.635E-06 | 1.186E-06 | 8.112E-05 | 6.918E-04 | 0.000E+00 | 0.000E+00 | 9.779E-07 | 4.200E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.256E-05 | 1.647E-05 | 1.976E-07 | 4.235E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN6_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_A | REER | (g/s)/(µg/m³) | 9.813E-04 | 3.863E-07 | 0.000E+00 | 0.000E+00 | 1.594E-04 | 2.635E-06 | 1.186E-06 | 8.112E-05 | 6.918E-04 | 0.000E+00 | 0.000E+00 | 9.779E-07 | 4.200E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.256E-05 | 1.647E-05 | 1.976E-07 | 4.235E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN6_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_B | REER | (g/s)/(µg/m³) | 9.813E-04 | 3.863E-07 | 0.000E+00 | 0.000E+00 | 1.594E-04 | 2.635E-06 | 1.186E-06 | 8.112E-05 | 6.918E-04 | 0.000E+00 | 0.000E+00 | 9.779E-07 | 4.200E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.256E-05 | 1.647E-05 | 1.976E-07 | 4.235E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN10_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_A | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN10_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_B | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN12_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_A | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN12_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_B | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN13_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_A | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN13_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_B | REER | (g/s)/(µg/m³) | 7.360E-04 | 2.897E-07 | 0.000E+00 | 0.000E+00 | 1.195E-04 | 1.976E-06 | 8.894E-07 | 6.084E-05 | 5.188E-04 | 0.000E+00 | 0.000E+00 | 7.334E-07 | 3.150E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.692E-05 | 1.235E-05 | 1.482E-07 | 3.176E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN14 | Emission Rate | lb/yr | | 0.013 | 0.008 | 54.106 | 0.001 | 0.024 | 0.000 | 0.003 | 0.004 | 0.000 | 0.003 | 0.029 | 0.051 | 0.019 | 0.002 | 0.001 | 0.001 | 0.006 | 0.000 | 0.000 | 0.001 | 0.000 | 0.110 | 0.007 | 0.082 |
| OVEN14 | REER | (g/s)/(µg/m³) | 8.586E-05 | 3.380E-08 | 0.000E+00 | 0.000E+00 | 1.395E-05 | 2.306E-07 | 1.038E-07 | 7.098E-06 | 6.053E-05 | 0.000E+00 | 0.000E+00 | 8.557E-08 | 3.675E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.974E-06 | 1.441E-06 | 1.729E-08 | 3.706E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN18_A | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_A | REER | (g/s)/(µg/m³) | 1.472E-04 | 5.795E-08 | 0.000E+00 | 0.000E+00 | 2.391E-05 | 3.953E-07 | 1.779E-07 | 1.217E-05 | 1.038E-04 | 0.000E+00 | 0.000E+00 | 1.467E-07 | 6.300E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.384E-06 | 2.471E-06 | 2.965E-08 | 6.353E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN18_B | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_B | REER | (g/s)/(µg/m³) | 1.472E-04 | 5.795E-08 | 0.000E+00 | 0.000E+00 | 2.391E-05 | 3.953E-07 | 1.779E-07 | 1.217E-05 | 1.038E-04 | 0.000E+00 | 0.000E+00 | 1.467E-07 | 6.300E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.384E-06 | 2.471E-06 | 2.965E-08 | 6.353E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN20_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_A | REER | (g/s)/(µg/m³) | 1.472E-03 | 5.795E-07 | 0.000E+00 | 0.000E+00 | 2.391E-04 | 3.953E-06 | 1.779E-06 | 1.217E-04 | 1.038E-03 | 0.000E+00 | 0.000E+00 | 1.467E-06 | 6.300E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.384E-05 | 2.471E-05 | 2.965E-07 | 6.353E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN20_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_B | REER | (g/s)/(µg/m³) | 1.472E-03 | 5.795E-07 | 0.000E+00 | 0.000E+00 | 2.391E-04 | 3.953E-06 | 1.779E-06 | 1.217E-04 | 1.038E-03 | 0.000E+00 | 0.000E+00 | 1.467E-06 | 6.300E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.384E-05 | 2.471E-05 | 2.965E-07 | 6.353E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| OVEN21 | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN21 | REER | (g/s)/(µg/m³) | 1.472E-03 | 5.795E-07 | 0.000E+00 | 0.000E+00 | 2.391E-04 | 3.953E-06 | 1.779E-06 | 1.217E-04 | 1.038E-03 | 0.000E+00 | 0.000E+00 | 1.467E-06 | 6.300E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 3.384E-05 | 2.471E-05 | 2.965E-07 | 6.353E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE1 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE1 | REER | (g/s)/(µg/m³) | 1.227E-04 | 4.829E-08 | 0.000E+00 | 0.000E+00 | 1.992E-05 | 3.294E-07 | 1.482E-07 | 1.014E-05 | 8.647E-05 | 0.000E+00 | 0.000E+00 | 1.222E-07 | 5.250E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.820E-06 | 2.059E-06 | 2.471E-08 | 5.294E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE2 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE2 | REER | (g/s)/(µg/m³) | 1.227E-04 | 4.829E-08 | 0.000E+00 | 0.000E+00 | 1.992E-05 | 3.294E-07 | 1.482E-07 | 1.014E-05 | 8.647E-05 | 0.000E+00 | 0.000E+00 | 1.222E-07 | 5.250E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.820E-06 | 2.059E-06 | 2.471E-08 | 5.294E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| CORE3 | Emission Rate | lb/yr | | 0.028 | 0.017 | 115.941 | 0.001 | 0.052 | 0.000 | 0.007 | 0.008 | 0.001 | 0.005 | 0.061 | 0.110 | 0.041 | 0.003 | 0.002 | 0.002 | 0.014 | 0.001 | 0.000 | 0.002 | 0.000 | 0.236 | 0.015 | 0.175 |
| CORE3 | REER | (g/s)/(µg/m³) | 1.840E-04 | 7.243E-08 | 0.000E+00 | 0.000E+00 | 2.989E-05 | 4.941E-07 | 2.223E-07 | 1.521E-05 | 1.297E-04 | 0.000E+00 | 0.000E+00 | 1.834E-07 | 7.875E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 4.229E-06 | 3.088E-06 | 3.706E-08 | 7.941E-08 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| LADLE1-3 | Emission Rate | lb/yr | | 0.066 | 0.042 | 278.259 | 0.003 | 0.124 | 0.000 | 0.017 | 0.022 | 0.001 | 0.013 | 0.147 | 0.263 | 0.097 | 0.008 | 0.006 | 0.004 | 0.032 | 0.002 | 0.000 | 0.005 | 0.000 | 0.566 | 0.036 | 0.420 |
| LADLE1-3 | REER | (g/s)/(µg/m³) | 4.416E-04 | 1.738E-07 | 0.000E+00 | 0.000E+00 | 7.173E-05 | 1.186E-06 | 5.336E-07 | 3.651E-05 | 3.113E-04 | 0.000E+00 | 0.000E+00 | 4.401E-07 | 1.890E-06 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.015E-05 | 7.412E-06 | 8.894E-08 | 1.906E-07 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |

# Table A-14. Emission Rates and REER Calculations - Non-Resident Worker Chronic Non-Cancer Exposure Scenario - Sources Combusting Natural Gas

| TEU | Parameter | Units | All Compounds | 75-07-0 | 107-02-8 | 7664-41-7 | 7440-38-2 | 71-43-2 | 7440-41-7 | 7440-43-9 | 18540-29-9 | 7440-48-4 | 7440-50-8 | 100-41-4 | 50-00-0 | 110-54-3 | 7439-92-1 | 7439-96-5 | 7439-97-6 | 365 | 401 | 50-32-8 | 91-20-3 | 7782-49-2 | 108-88-3 | 7440-62-2 | 1330-20-7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Acetaldehyde | Acrolein | Ammonia | Arsenic and compounds | Benzene | Beryllium and compounds | Cadmium and compounds | Chromium VI, chromate and dichromate particulate | Cobalt and compounds | Copper and compounds | Ethyl benzene | Formaldehyde | Hexane | Lead and compounds | Manganese and compounds | Mercury and compounds | Nickel compounds, insoluble | Polycyclic aromatic hydrocarbons (PAHs) | Benzo[a]pyrene | Naphthalene | Selenium and compounds | Toluene | Vanadium (fume or dust) | Xylene (mixture), including m-xylene, o-xylene, p-xylene |
| | Exposure Scenario-specific RBC | (µg/m³) | n/a | 620.000 | 1.500 | 2200.000 | 0.002 | 13.000 | 0.031 | 0.037 | 0.880 | 0.440 | 0.000 | 1100.000 | 40.000 | 3100.000 | 0.660 | 0.400 | 0.630 | 0.062 | 0.000 | 0.009 | 16.000 | 0.000 | 22000.000 | 0.440 | 970.000 |
| OVEN102 | Emission Rate | lb/yr | | 0.479 | 0.437 | 2782.588 | 0.031 | 0.897 | 0.002 | 0.170 | 0.216 | 0.013 | 0.133 | 1.067 | 1.901 | 0.711 | 0.077 | 0.059 | 0.040 | 0.325 | 0.015 | 0.000 | 0.046 | 0.004 | 4.097 | 0.356 | 3.065 |
| OVEN102 | REER | (g/s)/(µg/m³) | 3.722E-04 | 1.112E-08 | 4.002E-06 | 1.819E-05 | 1.853E-04 | 9.920E-07 | 8.607E-07 | 6.610E-05 | 3.537E-06 | 4.245E-07 | 0.000E+00 | 1.395E-08 | 6.837E-07 | 3.299E-09 | 1.684E-06 | 2.112E-06 | 9.176E-07 | 7.531E-05 | 0.000E+00 | 3.032E-07 | 4.169E-08 | 0.000E+00 | 2.678E-09 | 1.162E-05 | 4.516E-08 |
| OVEN1_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN1_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN1_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN2_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_A | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN2_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN2_B | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN3_A | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_A | REER | (g/s)/(µg/m³) | 9.321E-05 | 3.855E-09 | 1.001E-06 | 4.548E-06 | 4.632E-05 | 3.421E-07 | 2.152E-07 | 1.653E-05 | 8.843E-07 | 1.061E-07 | 0.000E+00 | 4.801E-09 | 2.362E-07 | 1.130E-09 | 4.211E-07 | 5.281E-07 | 2.294E-07 | 1.883E-05 | 0.000E+00 | 7.580E-08 | 1.042E-08 | 0.000E+00 | 9.248E-10 | 2.906E-06 | 1.559E-08 |
| OVEN3_B | Emission Rate | lb/yr | | 0.166 | 0.104 | 695.647 | 0.008 | 0.309 | 0.000 | 0.043 | 0.054 | 0.003 | 0.033 | 0.367 | 0.657 | 0.243 | 0.019 | 0.015 | 0.010 | 0.081 | 0.004 | 0.000 | 0.012 | 0.001 | 1.414 | 0.089 | 1.051 |
| OVEN3_B | REER | (g/s)/(µg/m³) | 9.321E-05 | 3.855E-09 | 1.001E-06 | 4.548E-06 | 4.632E-05 | 3.421E-07 | 2.152E-07 | 1.653E-05 | 8.843E-07 | 1.061E-07 | 0.000E+00 | 4.801E-09 | 2.362E-07 | 1.130E-09 | 4.211E-07 | 5.281E-07 | 2.294E-07 | 1.883E-05 | 0.000E+00 | 7.580E-08 | 1.042E-08 | 0.000E+00 | 9.248E-10 | 2.906E-06 | 1.559E-08 |
| OVEN4_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_A | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN4_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN4_B | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN5_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_A | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN5_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN5_B | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN6_A | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_A | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN6_B | Emission Rate | lb/yr | | 0.148 | 0.093 | 618.353 | 0.007 | 0.275 | 0.000 | 0.038 | 0.048 | 0.003 | 0.029 | 0.326 | 0.584 | 0.216 | 0.017 | 0.013 | 0.009 | 0.072 | 0.003 | 0.000 | 0.010 | 0.001 | 1.257 | 0.079 | 0.934 |
| OVEN6_B | REER | (g/s)/(µg/m³) | 8.285E-05 | 3.427E-09 | 8.894E-07 | 4.043E-06 | 4.118E-05 | 3.041E-07 | 1.913E-07 | 1.469E-05 | 7.861E-07 | 9.433E-08 | 0.000E+00 | 4.267E-09 | 2.100E-07 | 1.004E-09 | 3.743E-07 | 4.694E-07 | 2.039E-07 | 1.674E-05 | 0.000E+00 | 6.738E-08 | 9.265E-09 | 0.000E+00 | 8.220E-10 | 2.583E-06 | 1.386E-08 |
| OVEN10_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN10_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN10_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN12_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN12_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN12_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN13_A | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_A | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN13_B | Emission Rate | lb/yr | | 0.111 | 0.070 | 463.765 | 0.005 | 0.206 | 0.000 | 0.028 | 0.036 | 0.002 | 0.022 | 0.245 | 0.438 | 0.162 | 0.013 | 0.010 | 0.007 | 0.054 | 0.003 | 0.000 | 0.008 | 0.001 | 0.943 | 0.059 | 0.701 |
| OVEN13_B | REER | (g/s)/(µg/m³) | 6.214E-05 | 2.570E-09 | 6.670E-07 | 3.032E-06 | 3.088E-05 | 2.281E-07 | 1.435E-07 | 1.102E-05 | 5.896E-07 | 7.075E-08 | 0.000E+00 | 3.200E-09 | 1.575E-07 | 7.531E-10 | 2.807E-07 | 3.521E-07 | 1.529E-07 | 1.255E-05 | 0.000E+00 | 5.053E-08 | 6.948E-09 | 0.000E+00 | 6.165E-10 | 1.937E-06 | 1.039E-08 |
| OVEN14 | Emission Rate | lb/yr | | 0.013 | 0.008 | 54.106 | 0.001 | 0.024 | 0.000 | 0.003 | 0.004 | 0.000 | 0.003 | 0.029 | 0.051 | 0.019 | 0.002 | 0.001 | 0.001 | 0.006 | 0.000 | 0.000 | 0.001 | 0.000 | 0.110 | 0.007 | 0.082 |
| OVEN14 | REER | (g/s)/(µg/m³) | 7.249E-06 | 2.999E-10 | 7.782E-08 | 3.537E-07 | 3.603E-06 | 2.661E-08 | 1.674E-08 | 1.285E-06 | 6.878E-08 | 8.254E-09 | 0.000E+00 | 3.734E-10 | 1.837E-08 | 8.786E-11 | 3.275E-08 | 4.107E-08 | 1.784E-08 | 1.464E-06 | 0.000E+00 | 5.896E-09 | 8.106E-10 | 0.000E+00 | 7.193E-11 | 2.260E-07 | 1.212E-09 |
| OVEN18_A | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_A | REER | (g/s)/(µg/m³) | 1.243E-05 | 5.140E-10 | 1.334E-07 | 6.064E-07 | 6.176E-06 | 4.561E-08 | 2.869E-08 | 2.203E-06 | 1.179E-07 | 1.415E-08 | 0.000E+00 | 6.401E-10 | 3.150E-08 | 1.506E-10 | 5.615E-08 | 7.041E-08 | 3.059E-08 | 2.510E-06 | 0.000E+00 | 1.011E-08 | 1.390E-09 | 0.000E+00 | 1.233E-10 | 3.874E-07 | 2.078E-09 |
| OVEN18_B | Emission Rate | lb/yr | | 0.022 | 0.014 | 92.753 | 0.001 | 0.041 | 0.000 | 0.006 | 0.007 | 0.000 | 0.004 | 0.049 | 0.088 | 0.032 | 0.003 | 0.002 | 0.001 | 0.011 | 0.001 | 0.000 | 0.002 | 0.000 | 0.189 | 0.012 | 0.140 |
| OVEN18_B | REER | (g/s)/(µg/m³) | 1.243E-05 | 5.140E-10 | 1.334E-07 | 6.064E-07 | 6.176E-06 | 4.561E-08 | 2.869E-08 | 2.203E-06 | 1.179E-07 | 1.415E-08 | 0.000E+00 | 6.401E-10 | 3.150E-08 | 1.506E-10 | 5.615E-08 | 7.041E-08 | 3.059E-08 | 2.510E-06 | 0.000E+00 | 1.011E-08 | 1.390E-09 | 0.000E+00 | 1.233E-10 | 3.874E-07 | 2.078E-09 |
| OVEN20_A | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_A | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN20_B | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN20_B | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| OVEN21 | Emission Rate | lb/yr | | 0.222 | 0.139 | 927.529 | 0.010 | 0.412 | 0.001 | 0.057 | 0.072 | 0.004 | 0.044 | 0.490 | 0.876 | 0.325 | 0.026 | 0.020 | 0.013 | 0.108 | 0.005 | 0.000 | 0.015 | 0.001 | 1.886 | 0.119 | 1.402 |
| OVEN21 | REER | (g/s)/(µg/m³) | 1.243E-04 | 5.140E-09 | 1.334E-06 | 6.064E-06 | 6.176E-05 | 4.561E-07 | 2.869E-07 | 2.203E-05 | 1.179E-06 | 1.415E-07 | 0.000E+00 | 6.401E-09 | 3.150E-07 | 1.506E-09 | 5.615E-07 | 7.041E-07 | 3.059E-07 | 2.510E-05 | 0.000E+00 | 1.011E-07 | 1.390E-08 | 0.000E+00 | 1.233E-09 | 3.874E-06 | 2.078E-08 |
| CORE1 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE1 | REER | (g/s)/(µg/m³) | 1.036E-05 | 4.284E-10 | 1.112E-07 | 5.053E-07 | 5.147E-06 | 3.801E-08 | 2.391E-08 | 1.836E-06 | 9.826E-08 | 1.179E-08 | 0.000E+00 | 5.334E-10 | 2.625E-08 | 1.255E-10 | 4.679E-08 | 5.868E-08 | 2.549E-08 | 2.092E-06 | 0.000E+00 | 8.422E-09 | 1.158E-09 | 0.000E+00 | 1.028E-10 | 3.229E-07 | 1.732E-09 |
| CORE2 | Emission Rate | lb/yr | | 0.018 | 0.012 | 77.294 | 0.001 | 0.034 | 0.000 | 0.005 | 0.006 | 0.000 | 0.004 | 0.041 | 0.073 | 0.027 | 0.002 | 0.002 | 0.001 | 0.009 | 0.000 | 0.000 | 0.001 | 0.000 | 0.157 | 0.010 | 0.117 |
| CORE2 | REER | (g/s)/(µg/m³) | 1.036E-05 | 4.284E-10 | 1.112E-07 | 5.053E-07 | 5.147E-06 | 3.801E-08 | 2.391E-08 | 1.836E-06 | 9.826E-08 | 1.179E-08 | 0.000E+00 | 5.334E-10 | 2.625E-08 | 1.255E-10 | 4.679E-08 | 5.868E-08 | 2.549E-08 | 2.092E-06 | 0.000E+00 | 8.422E-09 | 1.158E-09 | 0.000E+00 | 1.028E-10 | 3.229E-07 | 1.732E-09 |
| CORE3 | Emission Rate | lb/yr | | 0.028 | 0.017 | 115.941 | 0.001 | 0.052 | 0.000 | 0.007 | 0.008 | 0.001 | 0.005 | 0.061 | 0.110 | 0.041 | 0.003 | 0.002 | 0.002 | 0.014 | 0.001 | 0.000 | 0.002 | 0.000 | 0.236 | 0.015 | 0.175 |
| CORE3 | REER | (g/s)/(µg/m³) | 1.553E-05 | 6.425E-10 | 1.668E-07 | 7.580E-07 | 7.720E-06 | 5.701E-08 | 3.586E-08 | 2.754E-06 | 1.474E-07 | 1.769E-08 | 0.000E+00 | 8.001E-10 | 3.937E-08 | 1.883E-10 | 7.019E-08 | 8.801E-08 | 3.823E-08 | 3.138E-06 | 0.000E+00 | 1.263E-08 | 1.737E-09 | 0.000E+00 | 1.541E-10 | 4.843E-07 | 2.598E-09 |
| LADLE1-3 | Emission Rate | lb/yr | | 0.066 | 0.042 | 278.259 | 0.003 | 0.124 | 0.000 | 0.017 | 0.022 | 0.001 | 0.013 | 0.147 | 0.263 | 0.097 | 0.008 | 0.006 | 0.004 | 0.032 | 0.002 | 0.000 | 0.005 | 0.000 | 0.566 | 0.036 | 0.420 |
| LADLE1-3 | REER | (g/s)/(µg/m³) | 3.728E-05 | 1.542E-09 | 4.002E-07 | 1.819E-06 | 1.853E-05 | 1.368E-07 | 8.607E-08 | 6.610E-06 | 3.537E-07 | 4.245E-08 | 0.000E+00 | 1.920E-09 | 9.450E-08 | 4.519E-10 | 1.684E-07 | 2.112E-07 | 9.176E-08 | 7.531E-06 | 0.000E+00 | 3.032E-08 | 4.169E-09 | 0.000E+00 | 3.699E-10 | 1.162E-06 | 6.235E-09 |

# APPENDIX B

# SUPPLEMENTARY METEOROLOGICAL INFORMATION

## Modeling Protocol and Risk Assessment Work Plan

Columbia Steel Casting Co., Inc.
10425 N Bloss Ave.
Portland, OR 97203

November 2021

## Table B-1. Meteorological Data Completeness by Quarter

| Time Period | Data Completeness (%) by Time Period and Meteorological Variable | | | |
|---|---|---|---|---|
| | Wind Speed | Wind Direction | Temperature | Cloud Cover |
| **2015 Q1** | 100 | 100 | 100 | 100 |
| **2015 Q2** | 100 | 100 | 100 | 100 |
| **2015 Q3** | 100 | 100 | 100 | 100 |
| **2015 Q4** | 100 | 100 | 100 | 100 |
| **2016 Q1** | 100 | 100 | 100 | 100 |
| **2016 Q2** | 100 | 99 | 100 | 100 |
| **2016 Q3** | 100 | 100 | 100 | 100 |
| **2016 Q4** | 100 | 100 | 100 | 100 |
| **2017 Q1** | 100 | 100 | 100 | 100 |
| **2017 Q2** | 100 | 100 | 100 | 100 |
| **2017 Q3** | 100 | 100 | 100 | 100 |
| **2017 Q4** | 100 | 100 | 100 | 100 |
| **2018 Q1** | 100 | 99 | 100 | 100 |
| **2018 Q2** | 100 | 95 | 100 | 100 |
| **2018 Q3** | 100 | 95 | 100 | 100 |
| **2018 Q4** | 100 | 100 | 100 | 100 |
| **2019 Q1** | 100 | 99 | 100 | 100 |
| **2019 Q2** | 100 | 100 | 100 | 100 |
| **2019 Q3** | 100 | 100 | 100 | 100 |
| **2019 Q4** | 100 | 100 | 100 | 100 |

Data completeness is assessed by comaring the number of hours in each quarter
in the AERMET-processed surface file with valid data to the total number of hours in the quarter.

**Table B-2. Surface Moisture Determinations by Month**

| Year | Precipitation (inches) Amount for 30 Years at Portland, OR | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| **1981** | 1.47 | 3.86 | 2.33 | 1.79 | 2.25 | 3.23 | 0.24 | 0.15 | 1.86 | 4.12 | 4.62 | 8.37 |
| **1982** | 6.31 | 5.98 | 2.38 | 3.56 | 0.46 | 1.66 | 0.94 | 1.66 | 3.98 | 4.44 | 3.51 | 8.16 |
| **1983** | 6.23 | 7.78 | 6.80 | 1.87 | 1.30 | 1.95 | 2.68 | 2.29 | 0.39 | 1.95 | 8.65 | 5.30 |
| **1984** | 2.01 | 3.93 | 3.19 | 3.20 | 3.41 | 4.06 | 0.00 | 0.09 | 1.46 | 3.85 | 9.74 | 2.56 |
| **1985** | 0.06 | 1.79 | 3.08 | 1.07 | 1.52 | 2.34 | 0.55 | 0.48 | 2.76 | 2.75 | 3.89 | 2.19 |
| **1986** | 4.65 | 5.31 | 2.60 | 1.91 | 2.19 | 0.23 | 1.20 | 0.10 | 4.30 | 1.99 | 6.26 | 4.30 |
| **1987** | 6.93 | 2.45 | 4.91 | 1.94 | 1.63 | 0.14 | 1.03 | 0.35 | 0.30 | 0.27 | 1.96 | 8.00 |
| **1988** | 4.95 | 1.17 | 3.13 | 4.57 | 2.53 | 2.34 | 0.69 | 0.10 | 1.76 | 0.19 | 7.92 | 2.37 |
| **1989** | 3.30 | 2.84 | 6.73 | 2.08 | 2.87 | 0.78 | 0.91 | 1.07 | 1.48 | 1.73 | 3.18 | 3.08 |
| **1990** | 7.95 | 3.43 | 2.52 | 2.31 | 2.37 | 1.94 | 0.32 | 0.95 | 0.34 | 4.65 | 3.68 | 2.40 |
| **1991** | 2.56 | 3.65 | 4.64 | 4.05 | 3.34 | 2.31 | 0.07 | 0.70 | 0.02 | 1.51 | 6.36 | 4.34 |
| **1992** | 4.31 | 4.12 | 1.87 | 3.82 | 0.10 | 0.60 | 0.67 | 0.49 | 1.12 | 2.87 | 4.55 | 4.98 |
| **1993** | 3.06 | 0.72 | 4.39 | 5.26 | 4.36 | 1.69 | 2.41 | 0.37 | 0.00 | 1.59 | 1.50 | 5.01 |
| **1994** | 3.56 | 4.92 | 1.84 | 1.91 | 0.56 | 1.67 | 0.07 | 0.13 | 1.13 | 8.41 | 5.91 | 4.85 |
| **1995** | 5.56 | 3.19 | 3.82 | 3.49 | 1.65 | 2.62 | 1.23 | 0.81 | 1.31 | 3.15 | 10.74 | 5.91 |
| **1996** | 7.15 | 10.03 | 3.24 | 5.12 | 4.88 | 0.44 | 0.73 | 0.25 | 3.05 | 5.38 | 9.58 | 13.35 |
| **1997** | 7.32 | 1.63 | 7.14 | 3.73 | 3.63 | 2.83 | 0.52 | 1.58 | 1.98 | 6.40 | 4.02 | 3.03 |
| **1998** | 6.77 | 5.27 | 4.06 | 1.04 | 5.55 | 1.73 | 0.59 | 0.00 | 1.09 | 2.16 | 11.02 | 6.74 |
| **1999** | 6.63 | 8.73 | 4.03 | 1.56 | 1.97 | 1.73 | 0.51 | 0.75 | 0.10 | 2.44 | 6.81 | 3.62 |
| **2000** | 5.66 | 4.50 | 3.21 | 1.82 | 2.70 | 1.19 | 0.15 | 0.12 | 1.67 | 3.25 | 2.46 | 3.47 |
| **2001** | 1.47 | 1.29 | 3.11 | 2.85 | 0.91 | 1.79 | 0.95 | 0.74 | 0.70 | 3.12 | 6.89 | 6.62 |
| **2002** | 6.22 | 3.55 | 3.40 | 2.34 | 1.86 | 1.57 | 0.19 | 0.04 | 1.54 | 0.63 | 1.91 | 8.00 |
| **2003** | 7.64 | 2.37 | 5.75 | 4.37 | 1.49 | 0.31 | 0.00 | 0.19 | 0.85 | 3.01 | 4.09 | 7.45 |
| **2004** | 4.86 | 3.95 | 1.53 | 1.01 | 1.78 | 1.12 | 0.04 | 2.68 | 1.03 | 3.36 | 2.38 | 3.91 |
| **2005** | 1.94 | 1.30 | 3.77 | 3.49 | 4.34 | 2.21 | 0.41 | 1.05 | 1.70 | 3.39 | 4.98 | 7.52 |
| **2006** | 10.92 | 2.15 | 2.96 | 2.46 | 3.00 | 0.92 | 0.47 | 0.10 | 0.86 | 1.39 | 11.92 | 5.85 |
| **2007** | 2.72 | 3.47 | 3.20 | 2.01 | 1.45 | 1.08 | 0.55 | 0.46 | 2.04 | 3.26 | 4.25 | 7.57 |
| **2008** | 4.71 | 2.19 | 3.71 | 2.08 | 2.02 | 1.00 | 0.29 | 1.23 | 0.48 | 1.74 | 4.15 | 3.52 |
| **2009** | 4.50 | 1.36 | 3.36 | 2.31 | 3.26 | 1.30 | 0.34 | 0.76 | 1.40 | 3.02 | 5.13 | 3.76 |
| **2010** | 4.94 | 2.76 | 3.58 | 2.92 | 4.68 | 4.27 | 0.59 | 0.23 | 3.36 | 3.87 | 6.63 | 8.35 |
| **30-Year Avg** | **4.88** | **3.66** | **3.68** | **2.73** | **2.47** | **1.70** | **0.64** | **0.66** | **1.47** | **3.00** | **5.62** | **5.49** |
| **30th percentile** | **3.48** | **2.32** | **3.10** | **1.93** | **1.64** | **1.11** | **0.31** | **0.18** | **0.86** | **1.98** | **3.98** | **3.72** |
| **70th percentile** | **6.25** | **4.00** | **3.88** | **3.49** | **3.08** | **2.03** | **0.70** | **0.78** | **1.72** | **3.37** | **6.68** | **6.95** |

| Year | Precipitation (inches) Monthly Totals at Portland, OR | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| **2015** | 3.33 | 3.71 | 4.71 | 1.75 | 0.59 | 0.40 | 0.57 | 0.66 | 1.26 | 3.69 | 4.49 | 15.24 |
| **2016** | 7.23 | 4.10 | 4.73 | 1.96 | 1.72 | 1.42 | 0.66 | 0.09 | 1.69 | 8.31 | 6.83 | 4.61 |
| **2017** | 4.13 | 10.36 | 7.26 | 4.51 | 1.92 | 1.08 | 0.00 | 0.06 | 2.38 | 4.57 | 6.44 | 3.09 |
| **2018** | 5.36 | 1.86 | 2.50 | 3.34 | 0.17 | 1.03 | 0.02 | 0.06 | 1.59 | 3.43 | 2.86 | 5.08 |
| **2019** | 2.79 | 4.10 | 1.54 | 2.98 | 1.51 | 0.45 | 0.80 | 1.23 | 3.85 | 1.51 | 1.52 | 4.39 |

| Year | Determination of Surface Moisture Status by Month (1) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| **2015** | Dry | Average | Wet | Dry | Dry | Dry | Average | Average | Average | Wet | Average | Wet |
| **2016** | Wet | Wet | Wet | Average | Average | Average | Average | Dry | Average | Wet | Wet | Average |
| **2017** | Average | Wet | Wet | Wet | Average | Dry | Dry | Dry | Wet | Wet | Average | Dry |
| **2018** | Average | Dry | Dry | Average | Dry | Dry | Dry | Dry | Average | Wet | Dry | Average |
| **2019** | Dry | Wet | Dry | Average | Dry | Dry | Wet | Wet | Wet | Dry | Dry | Average |

(1) Classification of Monthly Surface Moisture:

Months with less than the 30th percentile of the climatological (1981-2010) monthly average precipitation are classified as dry.

Months with greater than the 70th percentile of the climatological (1981-2010) monthly average precipitation are classified as wet.

Months with between the 30th-70th percentile of the climatological (1981-2010) monthly average precipitation are classified as average.