

Base Year Ozone SIP Point Source Inventory

The Ozone SIP requires a base year point source inventory as a building block for the SIP. The base year inventory selected for this evaluation was the 2017 inventory.

As with all inventories collected for this analysis, the pollutants included PM₁₀, PM_{2.5}, NO_x, SO₂, VOC, CO, and NH₃ and the unit of measurement was tons per year (tpy). Once the inventory was completed, a pre-processor called SMOKE converted it to a 24-hour period.

Source Selection:

At the beginning of this ozone SIP, the 2017 triennial inventory was the latest and most current inventory available for point sources, which included all major sources, Title V sources, and any sources included in the PM₁₀ or ozone maintenance plans. Staff used the definition of a Type B Source under Title V of the Clean Air Act (as specified in 40 CFR Appendix A to Subpart A of Part 51) to define point source thresholds in the nonattainment areas. The provided inventory includes all Type B sources of NO_x, VOC, and CO in the non-attainment area that have the potential to emit 100 tpy NO_x or VOC. Emissions from sources under the Type B thresholds are included in the area source base year inventory, as they do not have large enough potential emissions to qualify for the point source base year inventory.

According to the above definition, Utah had 53 Type B Sources as of 2017 based on the facilities' potential to emit in their Approval Orders. Table 1 lists the 53 Type B Sources along with their 2017 actual emissions for PM₁₀, PM_{2.5}, SO₂, NO_x, VOC, CO and NH₃.

Table 1. Major Point Sources with 2017 Base Year Emissions in tons per year (tpy)

| Northern Wasatch Front Ozone NAA | | | | | |
|----------------------------------|--|-----------|----------|----------|----------|
| Site ID | Site Name | County | NOx | VOC | CO |
| 10122 | Big West Oil, LLC- Big West Oil Refinery | Davis | 115.15 | 676.59 | 235.13 |
| 10119 | Chevron Products Co - Salt Lake Refinery | Davis | 253.64 | 363.88 | 245.94 |
| 11386 | Hexcel Corporation: Salt Lake Operations | Salt Lake | 189.68 | 151.11 | 105.03 |
| 10121 | Hill Air Force Base- Main Base | Davis | 101.43 | 140.24 | 104.80 |
| 10123 | Holly Corp- HRMC and HEP Woods Cross Operations | Davis | 170.51 | 217.45 | 404.25 |
| 10572 | Kennecott Utah Copper LLC- Power Plant Lab Tailings Impoundment | Salt Lake | 460.80 | 6.59 | 36.12 |
| 10346 | Kennecott Utah Copper LLC- Smelter & Refinery | Salt Lake | 134.16 | 10.82 | 92.03 |
| 10571 | Kennecott Utah Copper LLC: Mine & Copperton Concentrator | Salt Lake | 4,209.19 | 210.03 | 1,357.04 |
| 10707 | Lhoist North America - Grantsville Plant | Tooele | 0.11 | 0.07 | 0.06 |
| 10355 | Pacificorp Energy- Gadsby Power Plant | Salt Lake | 38.81 | 2.26 | 27.08 |
| 10335 | Tesoro Refining & Marketing Company LLC - Salt Lake City Refinery | Salt Lake | 313.27 | 230.77 | 255.07 |
| 10354 | University of Utah- University of Utah facilities | Salt Lake | 41.65 | 8.13 | 38.02 |
| 12495 | Utah Municipal Power Agency: West Valley Power Plant | Salt Lake | 10.09 | 1.47 | 14.37 |
| 10129 | Wasatch Integrated Waste Mgt District- DCERF | Davis | 91.82 | 23.72 | 34.98 |
| | | | 6,130.31 | 2,043.13 | 2,949.91 |
| Southern Wasatch Front Ozone NAA | | | | | |
| Site ID | Site Name | County | Nox | VOC | CO |
| 10790 | Brigham Young University - Main Campus | Utah | 66.92 | 5.54 | 25.88 |
| 10794 | McWane Ductile | Utah | 34.42 | 26.80 | 12.44 |
| 13031 | PacifiCorp Energy: Lake Side Power Plant | Utah | 207.06 | 26.26 | 917.07 |
| | | | 308.40 | 58.60 | 955.39 |
| Uinta Basin Ozone NAA | | | | | |
| Site ID | Site Name | County | Nox | VOC | CO |
| 10209 | Kinder Morgan Altamont LLC- East Compressor Station | Duchesne | 451.58 | 55.90 | 84.66 |
| 10210 | Kinder Morgan Altamont LLC- West Compressor Station | Duchesne | 312.56 | 34.66 | 20.65 |
| 10211 | Kinder Morgan Altamont LLC - South Compressor Station | Duchesne | 397.14 | 41.60 | 64.38 |
| 15438 | LaPoint Recycle and Storage - Produced Water Facility | Uintah | 1.37 | 21.61 | 0.32 |
| 15439 | Western Water Solutions, Inc. - Sand Pass Ranch Evaporation Facility | Duchesne | 0.34 | 205.10 | 0.19 |
| | | | 1,162.98 | 358.86 | 170.19 |

| Surrounding Area | | | | | |
|------------------|--|-----------|-----------|----------|-----------|
| Site ID | Site Name | County | NOx | VOC | CO |
| 10303 | Ash Grove Cement Company- Leamington Cement Plant | Millard | 1,192.02 | 53.01 | 6,278.88 |
| 10009 | ATK Launch Systems - Promontory | Box Elder | 35.83 | 29.93 | 36.59 |
| 10725 | Clean Harbors Aragonite LLC: Hazardous Waste Storage Incineration | Tooele | 126.60 | 5.87 | 43.53 |
| 10706 | Dugway Proving Ground- U.S. Army-Dugway Proving Ground | Tooele | 16.78 | 12.38 | 131.92 |
| 10107 | ECDC Environmental LC: East Carbon Landfill | Carbon | 14.31 | 15.82 | 33.50 |
| 14010 | Energy Fuels Resources (USA) Inc. Tony M. Mine | Garfield | - | - | - |
| 12929 | EnerVest Operating - Sage Brush Flat Compressor Station | Carbon | 15.28 | 20.74 | 3.05 |
| 12948 | EnerVest Operating L.L.C.: Dry Canyon Compressor Station | Carbon | 7.40 | 14.34 | 9.79 |
| 13284 | EnerVest Operating L.L.C.: Interplanetary Compressor Station | Carbon | 5.13 | 13.30 | 7.13 |
| 11767 | Genpak Corporation: Polystyrene Foam Production Facility | Iron | 1.08 | 71.08 | 0.46 |
| 10313 | Graymont Western US Incorporated- Cricket Mountain Plant | Millard | 568.99 | 12.34 | 278.82 |
| 11284 | Hill Air Force Base- Utah Test and Training Range | Tooele | 14.17 | 3.52 | 5.04 |
| 10007 | Holcim (US) Inc. - Devil's Slide Plant | Morgan | 1,426.83 | 45.11 | 1,059.51 |
| 10327 | Intermountain Power Service Corporation- Generation Station | Millard | 9,333.37 | 9.65 | 964.59 |
| 12512 | Kern River Gas Transmission Company- Veyo Compressor Station | Washingtc | 70.83 | 5.51 | 11.47 |
| 10311 | Materion Natural Resources- Delta Mill | Millard | 13.70 | 6.21 | 8.86 |
| 10259 | Northwest Pipeline GP: Cisco Compressor Station | Grand | 2.56 | 0.04 | 1.09 |
| 10627 | Northwest Pipeline GP: Moab Compressor Station | San Juan | 34.48 | 1.31 | 4.94 |
| 10008 | Nucor Steel- Nucor Steel | Box Elder | 182.41 | 31.49 | 688.01 |
| 14185 | OWL Danish Flats SWD -Produced Water Evaporation Ponds, Cisco | Grand | 0.63 | 147.39 | 1.26 |
| 12524 | PacifiCorp Energy: Currant Creek Power Plant | Juab | 157.68 | 10.02 | 297.96 |
| 10237 | PacifiCorp- Hunter Power Plant | Emery | 9,776.71 | 119.75 | 3,158.09 |
| 10238 | PacifiCorp- Huntington Power Plant | Emery | 5,934.58 | 74.78 | 5,107.68 |
| 10034 | Paradox Midstream, LLC - Lisbon Natural Gas Processing Plant | San Juan | - | - | - |
| 14107 | Procter and Gamble-Paper Manufacturing Plant | Box Elder | 28.31 | 17.30 | 28.18 |
| 11532 | Questar Pipeline LLC: Kastler Marushack Compressor Station | Daggett | 639.15 | 44.79 | 28.03 |
| 10892 | St. George City Power: Red Rock Power Generation Station | Washingtc | 15.99 | 2.85 | 6.01 |
| 10096 | Sunnyside Cogeneration Associates- Sunnyside Cogeneration Facility | Carbon | 430.77 | 25.39 | 42.76 |
| 10716 | US Magnesium LLC- Rowley Plant | Tooele | 1,061.59 | 660.26 | 323.05 |
| 10676 | Utelite Corporation: Shale Processing | Summit | 211.45 | 2.32 | 9.27 |
| 10028 | Vulcraft - Division of Nucor Corporation- Steel Products | Box Elder | 6.15 | 42.92 | 6.38 |
| | | | 31,324.75 | 1,499.43 | 18,575.84 |

Data Collection and QA/QC

UDAQ manages point source emissions inventory data with the online platform State and Local Emissions Inventory System (SLEIS). SLEIS utilizes extensive built-in computing capabilities which standardize calculations. SLEIS also contains extensive QA/QC which guides point sources as they submit their data, greatly reducing oversight required by UDAQ staff. The submitted emissions inventories were thoroughly reviewed using additional QA/QC by UDAQ staff before being finalized. Each facility's submission is reviewed and compared against previous inventories and the corresponding permit to ensure all equipment is captured in the inventory and that calculation methods remain sound and consistent. This QA/QC process greatly surpasses EPA guidance requiring 10% QA/QC as the minimum criteria necessary for a SIP inventory.