

## INTRODUCTION

### OVERVIEW

The New Mexico Environment Department (NMED) Air Quality Bureau has prepared this baseline emissions inventory for the tropospheric ozone precursors nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) to meet requirements promulgated in Title I of the federal Clean Air Act (CAA) sections 172(c)(3) and 182(a)(1), for the City of Sunland Park that had failed to meet the 2015 Ozone National Ambient Air Quality Standard (NAAQS). Effective August 3, 2018, the area of Sunland Park in southern Doña Ana County was classified as marginal nonattainment for the 2015 ozone NAAQS; initiating the two-year deadline to submit a baseline emissions inventory (83 FR 25776).

### TEMPORAL SCOPE

This baseline emissions inventory will provide emissions estimates for year 2017 that coincides with the EPA triennial National Emissions Inventory (NEI) year in tons per year (TPY): the months of June through August will be the focus of the peak ozone season daily emissions in pounds per day (lbs./day). The peak ozone season was determined by reviewing 2013 - 2016 eight-hour average ozone exceedance reports obtained from the EPA Air Quality System (AQS) for the Desert View monitoring site between February - October. The analysis indicated 82% of the NAAQS exceedances occurred during the months of June-August. These months contained the highest daily ozone average concentrations recorded along with the highest Air Quality Index's. Excluding the months of May and September from the ozone season day calculations will provide a more accurate estimate of the average ozone season day emissions by not including the months with relatively lower averages than June - August.

### SPATIAL SCOPE

The City of Sunland Park nonattainment area located in southern Doña Ana County will be the area of interest, bounded by the northern latitude of N31°49'30"; western longitude W106°36'36"; the southern international border between New Mexico and Mexico; and the eastern New Mexico and western Texas state line. (See Figure 1)



Figure 1 – The City of Sunland Park 2015 Ozone Nonattainment Area

## EMISSIONS SUMMARY

Sources	Nonattainment Area Annual Estimates (TPY)	Ozone Season Day Emissions Estimates (lbs./day)
Point	VOC: 30 NO <sub>x</sub> : 801	VOC: 165 NO <sub>x</sub> : 5,367
Area	VOC: 221 NO <sub>x</sub> : 77	VOC: 1,132 NO <sub>x</sub> : 429
Mobile	VOC: 29* NO <sub>x</sub> : 121*	VOC: 271 NO <sub>x</sub> : 871
<b>Total</b>	<b>VOC: 280</b> <b>NO<sub>x</sub>: 999</b>	<b>VOC: 1,568 (0.78 TPD)</b> <b>NO<sub>x</sub>: 6,667 (3.33 TPD)</b>

TPY = Tons per Year, TPD = Tons per Day; \*On-Road Mobile emissions not included

## POINT SOURCE EMISSIONS

For the purposes of this emissions inventory, point sources are major stationary sources located in the marginal nonattainment area that have the potential to emit 100 tons per year (TPY) or more of NO<sub>x</sub> or VOC. The only point source within the nonattainment area along the New Mexico and Texas state line is the Rio Grande Generating Station, owned by the El Paso Electric Company, located at 3501 Doniphan Drive; El Paso, TX. The Rio Grande Generating Station is

partially located in Texas and New Mexico and does currently hold a Title V permit through NMED.

## POINT SOURCE INVENTORY CALCULATION METHOD

### ANNUAL EMISSIONS

The Air Emissions Reporting Requirements (AERR) of 20.2.73 New Mexico Administrative Code (NMAC) require to submit emission reports to the State of New Mexico for entry into the National Emissions Inventory (NEI) for NO<sub>x</sub> and VOC. This inventory will be composed of ozone precursors NO<sub>x</sub> and VOC for the 2017 baseline emissions inventory for the City of Sunland Park, NM. The annual emissions reported to NMED from the point source are from continuous emissions monitoring systems (CEMS), stack tests, and/or estimations with EPA approved emissions factors through the Clearinghouse for Inventories and Emissions Factors (CHIEF).

### OZONE SEASON DAY EMISSIONS

The 2017 ozone season day emissions estimates were provided by NMED upon request from the Rio Grande Generating Station's Environmental Engineer, Celena Arreola.

El Paso Electric Rio Grande Generating Station (3501 Doniphan Drive; El Paso, TX)

Facility	Annual Estimate (TPY)	Ozone Season Day (lbs./day)
Rio Grande Generating Station	VOC: 29.624 NO <sub>x</sub> : 800.516	VOC: 164.698 NO <sub>x</sub> : 5,367.498

## NONPOINT (AREA) SOURCE EMISSIONS

Nonpoint or area sources are the many different types of sources that do not meet the definition of "point source" contained in 40 CFR Part 70; these sources emit less than 100 TPY of NO<sub>x</sub> or VOC for the purposes of this emissions inventory. Area sources have the potential to have a larger impact on air quality than point sources, due to the numerous different sources with little to no controls in place. Combined, they create an additive effect to the airshed.

### AREA SOURCE INVENTORY CALCULATION METHOD

Sector	Nonattainment Area Apportionment Method	Ozone Season Day Calculation Method
<b>Commercial Combustion Sources</b>		
Commercial /Institutional - Natural Gas	Employment	Operating Schedule
Commercial /Institutional - LPG	Employment	Operating Schedule
Commercial /Institutional – Distillate Oil	Employment	Operating Schedule
Commercial /Institutional - Biomass	Employment	Operating Schedule
<b>Residential Combustion Sources</b>		

Residential - Natural Gas	Population	Seasonal Factor
Residential - LPG	Population	Heating Degree Days
Residential– Distillate Oil	Population	Heating Degree Days
Residential - Biomass	Population	Heating Degree Days
<b>Miscellaneous Sources</b>		
Commercial Cooking	Employment	Uniform Usage
Cremations	Population	Uniform Usage
Open Burning	Population	Uniform Usage
Portable Gas Cans	Population	Uniform Usage
Residential Grilling	Population	Uniform Usage
Structural Fires	Survey	Seasonal Factor
Waste Treatment & Disposal	Emissions Report	Emissions Report
<b>Evaporative Sources</b>		
Auto Refinishing	Population	Uniform Usage
Traffic Markings	Population	Uniform Usage
Industrial Maintenance Coatings	Population	Uniform Usage
Other Special Purpose Coatings	Population	Uniform Usage
Livestock Waste	Equine Population Ratio	Seasonal Factor
Personal Care Products	Population	Uniform Usage
Household Products	Population	Uniform Usage
Automotive Aftermarket Products	Population	Uniform Usage
Coatings & Related Products	Population	Uniform Usage
Adhesives & Sealants	Population	Uniform Usage
FIFRA Related Products	Population	Uniform Usage
Miscellaneous Products	Population	Uniform Usage
Asphalt Application	Population	Uniform Usage
Agricultural Pesticide Application	Population	Uniform Usage
Storage & Transfer	Population	Uniform Usage
Degreasing	Population	Uniform Usage
Wastewater Treatment & Disposal	Population	Uniform Usage
<b>Non-Road Mobile Sources</b>		
Locomotives	Rail Track Miles	Uniform Usage
Gasoline Non-Road Mobile	Population	Uniform Usage

Diesel Operated Non-Road Mobile	Population	Uniform Usage
Other Non-Road Mobile	Population	Uniform Usage

**ANNUAL EMISSIONS**

The 2017 NEI was queried for the ozone precursors of NO<sub>x</sub> and VOC for area source sectors; the emissions estimates will be in tons per year (TPY) for Doña Ana County.

Apportionment factors will be applied to the Doña Ana County NEI estimates to scale the emissions down to the partial-county nonattainment area (NAA) for the City of Sunland Park, NM.

Industrial boiler combustion sources were not included in this inventory due to TEMPO database query results finding no sources within the Sunland Park nonattainment area.

**Population Apportionment Factor**

2017 US Census population data for Doña Ana County is 216,186 and for the City of Sunland Park is 17,123. The City of Sunland Park’s population ratio to Doña Ana County:

**2017 Sunland Park Population / 2017 Doña Ana County Population = Population Apportionment Factor**

**17,123/216,186 = 0.079**

**Employment Apportionment Factor**

Statewide average employment for 2017 has been estimated at 880,509 (US Labor & Stat.). Doña Ana County employment for 2017 has been estimated at 89,317 (NM Workforce Connection). Using a ratio to estimate employment due to the City of Sunland Park employment data being unavailable:

**2017 Doña Ana County Employment/2017 Doña Ana County Population = x/2017 City of Sunland Park Estimated Population      X = NAA Employment Estimate**

**89,317/216,186 = x/17,123    x = 7,074 people employed in NAA**

**Sunland Park Employment Estimate/Doña Ana County Employment = Employment Apportionment Factor**

**7,074/17,123 = 0.41**

**Equine Population Apportionment Factor**

Livestock waste emissions estimates were determined by apportioning down to the City of Sunland Park using 2017 Doña Ana County equine population statistics from the USDA estimate of 2,152 horses and ponies. The Sunland Park Racetrack and Casino indicates that there are approximately 1500 horses during peak racing season.

**The City of Sunland Park Equine Population/Doña Ana County Equine Population = Equine Population Factor**

$$1,500/2,152 = 0.70$$

**Locomotive Rail Track Miles Apportionment Factor**

According to the New Mexico Department of Transportation Rail Division, Doña Ana County has a total of 125 track miles and the City of Sunland Park has a total of 10 track miles of a Class I line-haul railroad that BNSF and Union Pacific utilize. No switch yards are located within the nonattainment area.

**The City of Sunland Park Rail Track miles/Doña Ana County Rail Track miles = Locomotive Rail Track Miles Factor:**

$$10/125 = 0.08$$

**OZONE SEASON DAY EMISSIONS**

The ozone season of June through August, a total of 92 days, will be the timeframe for calculating pounds per day (lbs./day) emission estimates, based on the EIS database ozone exceedance analysis that indicated the peak ozone season.

**Heating Degree Days**

The average ozone season daily emissions were calculated using the number of Heating Degree Days. There were no Heating Degree Days where the daily average temperature was below 65° Fahrenheit, as determined by the National Oceanic and Atmospheric Administration records.

**Operating Schedule**

Ozone season daily calculations are approached by assuming activity occurs a number of days a week which is relatively uniform throughout the year. The annual emission estimates were divided by the number of days per week multiplied by 52 weeks per year. The 7.489 days per week factor was used to calculate ozone season day emissions estimates for the Commercial and Institutional fuel combustion sources to reflect the fluctuations in different operating schedules.

**Uniform Usage**

Assuming activity is consistent throughout the year, calculating annual emissions estimates by 365 days per year will produce the ozone season daily emissions estimates.

**Seasonal Factors**

Seasonal factors are applied to annual estimates to reflect the activity for the source within the peak ozone season compared to the remainder of the year; this value is represented as a percentage as to how much activity occurs during the season. Factors are calculated by

dividing the total annual activity data by peak ozone season activity data through the months of June-August for a total of 92 days.

To reflect the average ozone season daily emissions estimates for residential natural gas appliances other than space heaters (i.e water heaters, stoves, etc...), an 8.69% seasonal factor was applied to the annual estimates of natural gas since the predominant months of peak natural gas usage are during the colder months when the Heating Degree Days start to increase within the nonattainment area ( $2608 \text{ MMcf}/29,994 \text{ MMcf} = 0.08695$ ) (US DOE, 2017). After applying the seasonal factor, the resulting estimate is then divided by 92 days

For livestock waste ozone season daily emission estimates, NMED records indicate the Sunland Park Racetrack & Casino has a 20% reduction in activity during the summer months. The annual estimate will have the 80% activity rate applied; the seasonal adjusted activity rate is then divided by 92 days.

Since no local data was available, structural fires ozone season daily emissions estimates were calculated by applying a 23.5% seasonal factor to the annual emissions estimates. The Federal Emergency Management Administration's monthly analysis of the percentage of structural fires indicates that through the months of June through August, 21.5% residential and 25.2% non-residential structural fires occurred in these months ( $21.5 + 25.2/2 = 23.5$ ) (EPA, 2001). The resulting estimates are then divided by 92 days.

### **QA/QC PROCEDURES**

Procedures established in each step of the process to create a representative, comparable, accurate, and comprehensive area source emissions inventory for the Sunland Park nonattainment area included:

- Establishment of an Inventory Development Team to increase the reliability and reproducibility of the emissions estimate approaches and methodology;
- An objective QA/QC team that is not involved with the initial preparation and calculation of the emissions estimates;
- Conducting regular meetings with the Inventory Development Team to update any new developments and problems arising;
- Ensuring that Inventory Development Team members are adequately trained to ensure accuracy and precision of emissions estimates;
- Cross-Referencing different NEI/EIS reports down to the Tier IV descriptors to eliminate any portions from the total estimates for each sector to avoid overestimating. For example, only accounting for horses and ponies from the total livestock waste emissions estimates as the Doña Ana County dairy cattle waste emissions are primarily from the dairies in the Vado/Anthony area, which is outside of the nonattainment area;
- Cross-referencing point/nonpoint emissions to avoid double counting and overestimating, such as subtracting locomotive point switch yard idling emissions from the non-point locomotive total emission estimates. Ensure that the new Option Groups/Sets for the 2017 NEI are being utilized;

- Utilizing EPA tools such as Wagon Wheel to run emission reports and verify inputs are accurate and representative;
- Working collaboratively with the EPA Region 6 Office of Air and Radiation & the Office of Air Quality and Planning in support of guidance documents;
- Maintaining current knowledge of NEI developments and methodologies through publicly available data and listserv updates; and
- Cross-referencing other jurisdictions emissions inventories for preparation guidance (e.g., Maricopa, Houston-Galveston-Brazoria, Dallas-Fort Worth, and Bexar Counties emissions inventories).

## FUEL COMBUSTION SOURCES

### Commercial Fuel Combustion Sources

These sources include combustion of fuel-oil (distillate and/or residual), natural gas, and liquified petroleum gas (LPG). Examples of sources in this category are restaurants, small business operations, retail stores, services, grocery stores, schools, and government buildings.

<b>Sector</b>	<b>Doña Ana County Estimates (TPY)</b>	<b>Nonattainment Area Annual Estimates (TPY)</b>	<b>Ozone Season Day Emissions Estimates (lbs./day)</b>
Commercial /Institutional - Natural Gas	VOC: 5.447243 NO <sub>x</sub> : 99.04078	VOC: 2.233 NO <sub>x</sub> : 40.607	VOC: 15.507 NO <sub>x</sub> : 281.95
Commercial /Institutional - LPG	VOC: 0.2473891 NO <sub>x</sub> : 6.769898	VOC: 0.10143 NO <sub>x</sub> : 2.7757	VOC: 0.70428 NO <sub>x</sub> : 19.273
Commercial /Institutional – Distillate Oil	VOC: 1.503 NO <sub>x</sub> : 17.731	VOC: 0.61623 NO <sub>x</sub> : 7.27	VOC: 4.279 NO <sub>x</sub> : 50.477
Commercial /Institutional - Biomass	VOC: 0.7690082 NO <sub>x</sub> : 9.951871	VOC: 0.31529 NO <sub>x</sub> : 4.0803	VOC: 2.189 NO <sub>x</sub> : 28.33
<b>Total</b>	<b>VOC: 7.97</b> <b>NO<sub>x</sub>: 133.5</b>	<b>VOC: 3.266</b> <b>NO<sub>x</sub>: 54.733</b>	<b>VOC: 22.679</b> <b>NO<sub>x</sub>: 380.03</b>

### Residential Fuel Combustion Sources

These sources include combustion of fuel-oil, natural gas, LPG, and wood.

<b>Sector</b>	<b>Doña Ana County Estimates (TPY)</b>	<b>Nonattainment Area Annual Estimates (TPY)</b>	<b>Ozone Season Day Emissions Estimates (lbs./day)</b>
Residential - Natural Gas	VOC: 8.492731 NO <sub>x</sub> : 145.1485	VOC: 0.670926 NO <sub>x</sub> : 11.4667	VOC: 1.267 NO <sub>x</sub> : 21.662

Residential - LPG	VOC: 1.748208 NO <sub>x</sub> : 44.90604	VOC: 0.138108 NO <sub>x</sub> : 3.547577	N/A
Residential– Distillate Oil	VOC: 0.00108 NO <sub>x</sub> : 0.027	VOC: 0.000085 NO <sub>x</sub> : 0.002133	N/A
Residential - Biomass	VOC: 269.87 NO <sub>x</sub> : 29.74	VOC: 21.3197 NO <sub>x</sub> : 2.34946	N/A
<b>Total</b>	<b>VOC: 280.112</b> <b>NO<sub>x</sub>: 219.822</b>	<b>VOC: 22.129</b> <b>NO<sub>x</sub>: 17.366</b>	<b>VOC: 1.267</b> <b>NO<sub>x</sub>: 21.662</b>

## MISCELLANEOUS SOURCES

Many of these sources are not easily classifiable and fall into this source sector category under the NEI.

For the portable gas containers source sector, the refilling at the pump portions of the inventory estimates have been removed since there are no gas stations located in the nonattainment area to refill gas containers. The residential and commercial sources included are for permeation, evaporation, and spillage during transport.

For the structural & vehicle fires sectors, there were 6 structural fires in the City of Sunland Park and no vehicle fires in 2017 as per the City of Sunland Park Fire Chief Daniel Medrano (April 21, 2020). The US EPA EIIP guidance provides a default emissions factor of 1.15 tons of material burned per fire (EPA, 2001).

The Camino Real Landfill and Four Peaks Generating Station at 1000 Camino Real, Sunland Park, NM 88063 account for the waste treatment & disposal landfill source sector. The Camino Real Landfill does currently hold a Title V permit through NMED. Discussions with facility operators and managers, Nathan Barnes and Juan Carlos Tomas, verified the emissions for the year 2017. It is important to note that the Four Peaks Generating Station did not provide emissions estimates for 2017; the facility was undergoing a transfer of ownership, and both record keeping and production were negligible upon the previous owner's departure.

<b>Sector</b>	<b>Doña Ana County Estimates (TPY)</b>	<b>Nonattainment Area Annual Estimates (TPY)</b>	<b>Ozone Season Day Emissions Estimates (lbs./day)</b>
Commercial Cooking	VOC: 11.0235	VOC: 4.52	VOC: 24.77
Cremations (Human & Animal)	VOC: 0.012759 NO <sub>x</sub> : 0.15192	VOC: 0.001 NO <sub>x</sub> : 0.012	VOC: 0.006 NO <sub>x</sub> : 0.066
Open Burning	VOC: 42.29 NO <sub>x</sub> : 22.66	VOC: 3.34 NO <sub>x</sub> : 1.79	VOC: 18.31 NO <sub>x</sub> : 9.81
Portable Gas Containers	VOC: 23.525	VOC: 1.859	VOC: 10.183

(Commercial & Residential)			
Residential Grilling	VOC: 2.69 NO <sub>x</sub> : 1.01	VOC: 0.213 NO <sub>x</sub> : 0.0798	VOC: 1.164 NO <sub>x</sub> : 0.437
Structural Fires	N/A	VOC: 0.03795 NO <sub>x</sub> : 0.00483	VOC: 0.193875 NO <sub>x</sub> : 0.024675
Waste Treatment & Disposal	N/A	VOC: 8.95 NO <sub>x</sub> : 3.08	VOC: 49.04 NO <sub>x</sub> : 16.88
<b>Total</b>	<b>VOC: 79.541</b> <b>NO<sub>x</sub>: 23.822</b>	<b>VOC: 18.921</b> <b>NO<sub>x</sub>: 4.967</b>	<b>VOC: 103.667</b> <b>NO<sub>x</sub>: 27.218</b>

### EVAPORATIVE SOURCES

These sources include many non-combustible sources within the nonattainment area. Many operations are not located in the nonattainment area, as the City of Sunland Park is considered a suburb of the greater El Paso, TX Metropolitan area which does include the operations that are indicated as non-applicable.

There are no airports located in the nonattainment area. The nearest airports are in Santa Teresa, NM and El Paso, TX.

Bioprocesses emissions from bakeries, breweries, wineries and distilleries are negligible due to the limited number of operations that occur within the nonattainment area. There is one bakery and one winery located in the nonattainment area.

No dry-cleaning operations are situated in the nonattainment area. The nearest dry cleaners are in El Paso, TX.

There is no oil and gas production within the nonattainment area.

There are no gas stations located in the nonattainment area.

There are no leaking underground petroleum storage tanks that have been remediated in 2017. According to the NMED Petroleum Storage Tank Bureaus' records, there are a total of 6 underground petroleum storage tanks with 4 currently in use: two tanks each at the Sunland Racetrack and Casino and the Rio Grande Generating Station are in use, and the two tanks at the former American Eagle Brick Plant are no longer usable.

Apportioning the livestock waste emissions from the Doña Ana County total required removal of all the other sources of emissions within this source sector in the NEI as the only sources of Livestock Waste emissions are from the Sunland Park Racetrack and Casino's horses and ponies that are housed on-site during racing season.

<b>Sector</b>	<b>Doña Ana County Estimates (TPY)</b>	<b>Nonattainment Area Annual Estimates (TPY)</b>	<b>Ozone Season Day Emissions Estimates (lbs./day)</b>
Auto Refinishing	VOC: 33.86	VOC: 2.675	VOC: 14.66
Traffic Markings	VOC: 81.47	VOC: 6.44	VOC: 35.266
Industrial Maintenance Coatings	VOC: 39.29	VOC: 3.104	VOC: 17.01
Other Special Coatings	VOC: 0.63	VOC: 0.05	VOC: 0.27
Architectural Coatings	VOC: 254.44	VOC: 20.1	VOC: 110.141
Livestock Waste	VOC: 4.13	VOC: 2.891	VOC: 50.278
Personal Care Products	VOC: 211.15	VOC: 16.68085	VOC: 91.4
Household Products	VOC: 215.01	VOC: 16.98579	VOC: 93.073
Automotive Aftermarket Products	VOC: 20.37	VOC: 1.60923	VOC: 8.8177
Coatings & Related Products	VOC: 102.4	VOC: 8.0896	VOC: 44.33
Adhesives & Sealants	VOC: 196.61	VOC: 15.532	VOC: 85.1079
FIFRA Related Products	VOC: 191.87	VOC: 15.15773	VOC: 83.056
Miscellaneous Products	VOC: 7.55	VOC: 0.59645	VOC: 3.268
Asphalt Application	VOC: 694.1	VOC: 54.8339	VOC: 300.4597
Agricultural Pesticide Application	VOC: 87	VOC: 6.873	VOC: 37.66
Storage & Transfer	VOC: 4.24	VOC: 0.33496	VOC: 1.835
Degreasing	VOC: 61.44	VOC: 4.85376	VOC: 26.6
Wastewater Treatment	VOC: 1.58	VOC: 0.12482	VOC: 0.6839
<b>Total</b>	<b>VOC: 2,207.14</b>	<b>VOC: 176.932</b>	<b>VOC: 1,003.916</b>

## ON-ROAD MOBILE EMISSIONS

On-road mobile emission estimates were obtained from the El Paso Metropolitan Planning Organization's 2019 Transportation Conformity Report for the nonattainment areas ozone season daily estimates from June through August. The MOVES2014a model run results for the City of Sunland Park were used to calculate the on-road emission estimates by the Texas A&M Transportation Institute (TTI) for year 2017. The results of the MOVES2014a model run to calculate emissions estimates were directly obtained from TTI to provide a lbs. per day estimate.

VOC: 112.3 lbs./day  
NO<sub>x</sub>: 209.24 lbs./day

## NON-ROAD MOBILE EMISSIONS

Non-road vehicles that do not normally operate on roads or highways are commonly referred to as off-road vehicles. Non-road emission sources include agricultural equipment, commercial and industrial equipment, construction, lawn and garden equipment, aircraft, and locomotives.

No airports are located within the City of Sunland Park for emissions estimates.

For locomotives, the point switch-yard emissions estimates were subtracted from the Non-point estimates as there are no switchyards located within the City of Sunland Park. The nearest switch yards are in Santa Teresa, NM and El Paso, TX.

<b>Sector</b>	<b>Doña Ana County Estimates (TPY)</b>	<b>Nonattainment Area Annual Estimates (TPY)</b>	<b>Ozone Season Day Emissions Estimates (lbs./day)</b>
Locomotives	VOC: 44.68 NO <sub>x</sub> : 973.42	VOC: 3.574 NO <sub>x</sub> : 77.874	VOC: 19.59 NO <sub>x</sub> : 426.7
Gasoline Operated Non-Road Equipment	VOC: 280.4 NO <sub>x</sub> : 44.86	VOC: 22.2 NO <sub>x</sub> : 3.544	VOC: 121.38 NO <sub>x</sub> : 19.42
Diesel Operated Non-Road Equipment	VOC: 40.25 NO <sub>x</sub> : 490.2	VOC: 3.18 NO <sub>x</sub> : 38.726	VOC: 17.42 NO <sub>x</sub> : 212.2
Non-Road Equipment - Other	VOC: 1.613 NO <sub>x</sub> : 7.65	VOC: 0.127 NO <sub>x</sub> : 0.604	VOC: 0.70 NO <sub>x</sub> : 3.31
<b>Total</b>	<b>VOC: 366.94</b> <b>NO<sub>x</sub>: 1,516.13</b>	<b>VOC: 29.081</b> <b>NO<sub>x</sub>: 120.748</b>	<b>VOC: 159.09</b> <b>NO<sub>x</sub>: 661.63</b>

## REFERENCES

EPMPPO, 2019. El Paso Metropolitan Planning Organization. 2015 Transportation Conformity Report. Internet Address:

<http://www.elpasompo.org/civicax/filebank/blobdload.aspx?t=48893.91&BlobID=24363>

US DOE, 2017. United States Department of Energy, Energy Information Administration. 2017 New Mexico Monthly Residential Natural Gas Consumption. Internet Address:

<https://www.eia.gov/dnav/ng/hist/n3010nm2m.htm>

US EPA, 2017. Emissions Inventory guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations.

Internet address: [https://www.epa.gov/sites/production/files/2017-07/documents/ei\\_guidance\\_may\\_2017\\_final\\_rev.pdf](https://www.epa.gov/sites/production/files/2017-07/documents/ei_guidance_may_2017_final_rev.pdf)

US EPA, 2001. Air Emissions Inventory Improvement Program (EIIP), Volumes II-III. Point & Non-Point Emissions Inventory Estimation Methods. Internet address:

<https://www.epa.gov/air-emissions-inventories/air-emissions-inventory-improvement-program-eiip>

US EPA, 2020. 2017 National Emissions Inventory. Office of Air Quality Planning and Standards, Research Triangle park, NC. May 2020. Internet address: <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data>

USDA 2017. 2017 Census of Agriculture. *Doña Ana County Profile*. Dona Ana County, NM. Pg. 2 Livestock Inventory. Internet Address:

[https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/New\\_Mexico/cp35013.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/New_Mexico/cp35013.pdf)[https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/County\\_Profiles/New\\_Mexico/cp35013.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/New_Mexico/cp35013.pdf)

US EPA, 2008. Air Emissions Reporting Requirements. 73 FR 76539 (Dec. 17, 2008). Internet address: <https://federalregister.gov/a/E8-29737>

US DOL, 2017. US Department of Labor & Statistics. 2017 New Mexico Employment Data. Internet Address:

[https://data.bls.gov/timeseries/LASST35000000000005?amp%253bdata\\_tool=XGtable&output\\_view=data&include\\_graphs=true](https://data.bls.gov/timeseries/LASST35000000000005?amp%253bdata_tool=XGtable&output_view=data&include_graphs=true)

US NOAA, 2018. National Oceanic and Atmospheric Administration Climate Prediction Center. 2017 Heating Degree Days by Climate Division. Internet Address:

[ftp://ftp.cpc.ncep.noaa.gov/htdocs/degree\\_days/weighted/daily\\_data/2017/ClimateDivisions.Heating.txt](ftp://ftp.cpc.ncep.noaa.gov/htdocs/degree_days/weighted/daily_data/2017/ClimateDivisions.Heating.txt)