



# 2015 Ozone NAAQS – El Paso- Las Cruces TX/NM Ozone Nonattainment Area SIP Revision

Periodic Emissions Inventory for Sunland Park, New Mexico

The New Mexico Environment Department’s Air Quality Bureau prepared this document. It is available for review at the website located at [www.env.nm.gov/air-quality/](http://www.env.nm.gov/air-quality/) or in person at the address listed below. The Air Quality Bureau is accepting public comment and requests to hold a public hearing on this document from August 3, 2023 to September 3, 2023. For further information or to request a copy of this document, please contact the bureau by phone or in writing at:

NMED AQB  
Planning Section  
525 Camino de los Marquez, Suite 1 Santa Fe, NM 87505  
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# Table of Contents

INTRODUCTION.....	1
OVERVIEW.....	1
EMISSIONS SUMMARY.....	1
EMISSIONS INVENTORY.....	1
APPENDICES.....	2
APPENDIX A    PUBLIC COMMENT AND HEARING REQUEST NOTICE.....	3
APPENDIX B    ERG EMISSIONS INVENTORY DOCUMENTATION REPORT.....	8
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
<b>2.0 INVENTORY SCOPE.....</b>	<b>1</b>
<b>2.1 Pollutants.....</b>	<b>1</b>
<b>2.2 Source Sector Types.....</b>	<b>1</b>
<b>2.3 Geographical Domain.....</b>	<b>1</b>
<b>2.4 Temporal Resolution.....</b>	<b>2</b>
<b>3.0 EMISSIONS INVENTORY DEVELOPMENT.....</b>	<b>2</b>
<b>3.1 Point Source Emissions.....</b>	<b>3</b>
<b>3.2 County-Level Emissions Allocation Procedure.....</b>	<b>3</b>
<b>3.2.1 Nonpoint Area Sources.....</b>	<b>5</b>
<b>3.2.2 Onroad Sources.....</b>	<b>9</b>
<b>3.2.3 Nonroad Sources.....</b>	<b>12</b>
<b>4.0 EMISSION INVENTORY ADJUSTMENTS.....</b>	<b>16</b>
<b>5.0 FINAL EMISSIONS.....</b>	<b>18</b>
<b>5.1 Final Nonpoint Area and Nonroad Source Emissions.....</b>	<b>18</b>
<b>5.2 Final Emissions By SCC.....</b>	<b>20</b>
<b>5.3 Calculating Ozone Season Daily Emissions.....</b>	<b>28</b>
<b>5.4 Final Emissions By Sector.....</b>	<b>43</b>
<b>6.0 SUPPORTING CALCULATIONS.....</b>	<b>43</b>



# INTRODUCTION

## OVERVIEW

The New Mexico Environment Department (NMED) Air Quality Bureau contracted the Eastern Research Group, Inc. (ERG) that prepared this periodic 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)(3)(A), 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](#)). NMED's baseline emissions inventory and emissions statement submittal was approved by EPA on April 6, 2022 ([87 FR 12592](#)). NMED's nonattainment new source review submittal was approved by EPA on August 19, 2022 ([87 FR 51041](#)). The neighboring El Paso County, TX's marginal ozone nonattainment area remand designation for the 2015 ozone NAAQS prompted the renaming of the Sunland Park nonattainment area to the El Paso-Las Cruces TX/NM nonattainment area ([86 FR 67864](#)). The periodic emissions inventory must be submitted every three-years after the baseline inventory until the El Paso-Las Cruces TX/NM ozone nonattainment area is designated as attainment of the NAAQS. This SIP revision includes the periodic emissions inventory to meet the CAA for New Mexico's portion of the El Paso-Las Cruces TX/NM ozone nonattainment area including public comment and hearing request requirements as provided in Appendix A.

## EMISSIONS SUMMARY

Sources	Nonattainment Area Annual Estimates (TPY)	Ozone Season Day Emissions Estimates (lbs./day)
Point	VOC: 42 NO <sub>x</sub> : 741	VOC: 282 NO <sub>x</sub> : 4,047
Area	VOC: 134 NO <sub>x</sub> : 42	VOC: 553 NO <sub>x</sub> : 215
Mobile	VOC: 33 NO <sub>x</sub> : 121	VOC: 253 NO <sub>x</sub> : 662
<b>Total</b>	<b>VOC: 209</b> <b>NO<sub>x</sub>: 904</b>	<b>VOC: 1,088 (0.54 TPD)</b> <b>NO<sub>x</sub>: 4,924 (2.46 TPD)</b>

TPY = Tons per Year, TPD = Tons per Day

## EMISSIONS INVENTORY

The periodic emissions inventory documentation report that was developed by ERG is provided in Appendix B.



APPENDICES

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**NEW MEXICO ENVIRONMENT DEPARTMENT**  
**Notice of Opportunity for Public Hearing and Comment**  
**New Mexico's Proposed State Implementation Plan Revision for**  
**the 2015 Ozone National Ambient Air Quality Standard**

The New Mexico Environment Department (“NMED”) announces an opportunity to comment on or request a public hearing on a proposed revision to New Mexico’s federally-approved State Implementation Plan (“SIP”) that addresses elements of Clean Air Act (“CAA”) Section 182(a). The proposed revision is for the Sunland Park, New Mexico portion of the El Paso-Las Cruces TX/NM marginal ozone nonattainment area (EP-LC TX/NM O<sub>3</sub> NAA), as applicable to the 2015 ozone National Ambient Air Quality Standard (“NAAQS”). Specifically, NMED addresses Section 182(a)(3)(A) in respect to periodic emissions inventory requirements in this submittal. The purpose of the proposed action is to fulfill New Mexico’s planning requirements and obligations under the CAA for the EP-LC TX/NM O<sub>3</sub> NAA.

Legislative authority for New Mexico’s air quality program is codified in Chapter 74, Environmental Improvement, of the New Mexico Statutes, which gives the New Mexico Environmental Improvement Board and NMED the authority to implement the CAA in New Mexico, excluding Albuquerque/Bernalillo County, which is under the jurisdiction of a local board and agency, and Tribal Lands. The proposed SIP revision was developed by NMED to comply with the requirements contained in Section 182 of the CAA and 40 CFR Part 51, *Requirements for Preparation, Adoption, and Submittal of Implementation Plans*. The proposed revision does not adopt or amend any regulations; therefore, it is not subject to the mandatory public hearing requirement of NMSA 1978 Section 74-2-6, *Adoption of Regulations; Notice and Hearings*. However, a hearing may be requested as described below.

New Mexico’s proposed *El Paso-Las Cruces TX/NM Ozone Nonattainment Area State Implementation Plan Revision for the 2015 Ozone NAAQS* is available for a 30-day public comment period. Submission of comments on the proposed revision may be written or oral. All comments must be received by September 3, 2023. All public comments received during the comment period will be evaluated and responded to as appropriate by NMED prior to submission of the final revision to EPA. If a request for a public hearing is received during the 30-day public comment period, a hearing date, time and location will be announced at a later date, in accordance with 20.1.1 NMAC – *Rulemaking Procedures – Environmental Improvement Board*, including an additional public comment period. Upon completion of the 30-day public comment period and the hearing, if requested, all documents included in New Mexico’s El Paso-Las Cruces TX/NM Ozone Nonattainment Area SIP Revision will be submitted to EPA to be included in the New Mexico SIP.

The proposed revision may be reviewed at the NMED Air Quality Bureau’s web site at <https://www.env.nm.gov/air-quality/proposed-regs/>.

Written comments, requests for copies and/or public hearing requests regarding the proposed revision should be submitted via email, mail, or fax to:

New Mexico Environment Department  
ATTN: Armando Paz, Air Quality Bureau  
2301 Entrada del Sol  
Las Cruces, NM 88001



[armando.paz@env.nm.gov](mailto:armando.paz@env.nm.gov)

(Office): (505) 629-3242

(Fax): (575) 526-6161

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*Kate Cardenas,  
NMED Non-Discrimination Coordinator  
1190 St. Francis Dr., Suite N4050  
P.O. Box 5469  
Santa Fe, NM 87502  
(505) 827-2855  
[nd.coordinator@state.nm.us](mailto:nd.coordinator@state.nm.us)*

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**DEPARTAMENTO DE MEDIO AMBIENTE DE NUEVO MÉXICO**  
**Aviso de oportunidad para audiencia y comentarios públicos**  
**Revisión del Plan de Implementación del Estado propuesto por Nuevo México para**  
**el Estándar Nacional de Calidad del Aire Ambiente de Ozono de 2015**

El Departamento de Medio Ambiente de Nuevo México ("NMED" por sus siglas en inglés) anuncia una oportunidad para comentarios o para solicitar una audiencia pública sobre una propuesta de revisión del Plan de Implementación del Estado ("SIP" por sus siglas en inglés) de Nuevo México, aprobado por el gobierno federal, que aborda elementos de la Ley del Aire Limpio ("CAA" por sus siglas en inglés), Sección 182(a). La revisión propuesta corresponde al área marginal de incumplimiento de ozono de porción de Sunland Park de Nuevo México de El Paso-Las Cruces TX/NM ("EP-LC TX/NM O<sub>3</sub> NAA"), según se aplica al Estándar Nacional de Calidad del Aire Ambiental ("NAAQS" por sus siglas en inglés) de ozono de 2015. Específicamente, NMED aborda un seccion 182(a)(3)(A) con respecto al inventario de emisiones de periódico. El propósito de la acción propuesta es cumplir con los requisitos y obligaciones de planificación de Nuevo México bajo CAA para el EP-LC TX/NM O<sub>3</sub> NAA.

La autoridad legislativa para el programa de calidad del aire de Nuevo México está codificada en el Capítulo 74, Mejoramiento Ambiental, de los Estatutos de Nuevo México, que le da la Junta de Mejoramiento Ambiental de Nuevo México y al NMED la autoridad para implementar la CAA en Nuevo México, excluyendo el condado de Bernalillo/ Albuquerque, que está bajo la jurisdicción de una junta y organismo local, y Tierras Tribales. La propuesta de revisión del SIP fue desarrollada por el NMED para cumplir con los requisitos contenidos en la Sección 182 de la CAA y 40 CFR Parte 51, *Requisitos para la Preparación, Adopción y Presentación de Planes de Implementación*. La revisión propuesta no adopta ni enmienda ningún reglamento; por lo tanto, no está sujeta al requisito de audiencia pública obligatoria de NMSA 1978 Sección 74-2-6, *Adopción de Reglamentos; Avisos y Audiencias*. Sin embargo, se puede solicitar una audiencia como se describe a continuación.

La propuesta de revisión del plan de implementación del estado del área de no cumplimiento de ozono de Sunland Park de Nuevo México para el NAAQS de ozono 2015 está disponible para un período de comentarios públicos de 30 días. La presentación de comentarios sobre la revisión propuesta puede ser oral o por escrito. Todos los comentarios deben recibirse hasta el 3 de septiembre de 2023. Todos los comentarios públicos recibidos durante el período de comentarios serán evaluados y respondidos por el NMED, según corresponda, antes de la presentación de la revisión final a EPA. Si se recibe una solicitud de audiencia pública durante el período de comentarios públicos de 30 días, se anunciará una fecha, hora y lugar de la audiencia en una fecha posterior, de acuerdo con el 20.1.1 NMAC - Procedimientos de Reglamentación - Junta de Mejoramiento Ambiental, incluido un período adicional de comentarios públicos. Una vez completado el periodo de 30 días de comentarios públicos y la audiencia, si se solicita, todos los documentos incluidos en la Revisión del SIP del Área de No cumplimiento de Ozono de Sunland Park de Nuevo México se presentarán a la EPA para ser incluidos en el SIP de Nuevo México.

La revisión propuesta puede ser revisada en el sitio web de la Oficina de Calidad del Aire del NMED en <https://www.env.nm.gov/air-quality/proposed-regs/>.

Los comentarios por escrito, las solicitudes de copias y/o las solicitudes de audiencias públicas con respecto a la revisión propuesta deberán presentarse por correo electrónico, correo postal o fax a:

New Mexico Environment Department



ATTN: Armando Paz, Air Quality Bureau  
2301 Entrada del Sol  
Las Cruces, NM 88001  
[armando.paz@env.nm.gov](mailto:armando.paz@env.nm.gov)  
(Office): (505) 629-3242  
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*Kate Cardenas, coordinadora de no discriminación  
Departamento de Medio Ambiente de Nuevo México  
1190 St. Francis Dr., Suite N4050  
P.O. Box 5469  
Santa Fe, NM 87502  
(505) 827-2855  
[nd.coordinator@state.nm.us](mailto:nd.coordinator@state.nm.us)*

*También puede visitar nuestro sitio web en <https://www.env.nm.gov/non-employee-discrimination-complaint-page/> para saber cómo y dónde presentar una queja de discriminación.*



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**DEVELOPMENT OF AIR EMISSIONS INVENTORY  
FOR THE SUNLAND PARK, NM AREA THAT LIES WITHIN  
THE EL PASO-LAS CRUCES, TX-NM OZONE NONATTAINMENT AREA**

**EMISSION INVENTORY DOCUMENTATION**

**DRAFT**

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June 23, 2023

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## Table of Contents

<u>1.0</u>	<u>INTRODUCTION</u> .....	1
<u>2.0</u>	<u>INVENTORY SCOPE</u> .....	1
<u>2.1</u>	<u>Pollutants</u> .....	1
<u>2.2</u>	<u>Source Sector Types</u> .....	1
<u>2.3</u>	<u>Geographical Domain</u> .....	1
<u>2.4</u>	<u>Temporal Resolution</u> .....	2
<u>3.0</u>	<u>EMISSIONS INVENTORY DEVELOPMENT</u> .....	2
<u>3.1</u>	<u>Point Source Emissions</u> .....	3
<u>3.2</u>	<u>County-Level Emissions Allocation Procedure</u> .....	3
<u>3.2.1</u>	<u>Nonpoint Area Sources</u> .....	5
<u>3.2.2</u>	<u>Onroad Sources</u> .....	9
<u>3.2.3</u>	<u>Nonroad Sources</u> .....	12
<u>4.0</u>	<u>EMISSION INVENTORY ADJUSTMENTS</u> .....	16
<u>5.0</u>	<u>FINAL EMISSIONS</u> .....	18
<u>5.1</u>	<u>Final Nonpoint Area and Nonroad Source Emissions</u> .....	18
<u>5.2</u>	<u>Final Emissions By SCC</u> .....	20
<u>5.3</u>	<u>Calculating Ozone Season Daily Emissions</u> .....	28
<u>5.4</u>	<u>Final Emissions By Sector</u> .....	43
<u>6.0</u>	<u>SUPPORTING CALCULATIONS</u> .....	43

## List of Tables

<a href="#">Table 3-1. Sunland Park, NM Point Source Emissions</a>	3
<a href="#">Table 3-2. Grid Apportionments for the Sunland Park, NM Study Area 4-km Grid Squares</a>	5
<a href="#">Table 3-3. Top 10 Doña Ana County, NM Nonpoint Area NO<sub>x</sub> Sources</a>	5
<a href="#">Table 3-4. Top 10 Doña Ana County, NM Nonpoint Area VOC Sources</a>	6
<a href="#">Table 3-5. Top 10 Sunland Park, NM Study Nonpoint Area NO<sub>x</sub> Sources</a>	8
<a href="#">Table 3-6. Top 10 Sunland Park, NM Study Nonpoint Area VOC Sources</a>	8
<a href="#">Table 3-7. Top 10 Doña Ana County, NM Onroad NO<sub>x</sub> Sources</a>	9
<a href="#">Table 3-8. Top 10 Doña Ana County, NM Onroad VOC Sources</a>	10
<a href="#">Table 3-9. Top 10 Sunland Park, NM Study Area Onroad NO<sub>x</sub> Sources</a>	11
<a href="#">Table 3-10. Top 10 Sunland Park, NM Study Area Onroad VOC Sources</a>	11
<a href="#">Table 3-11. Top 10 Doña Ana County, NM Nonroad NO<sub>x</sub> Sources</a>	12
<a href="#">Table 3-12. Top 10 Doña Ana County, NM Nonroad VOC Sources</a>	13
<a href="#">Table 3-13. Top 10 Sunland Park, NM Study Area Nonroad NO<sub>x</sub> Sources</a>	15
<a href="#">Table 3-14. Top 10 Sunland Park, NM Study Area Nonroad VOC Sources</a>	15
<a href="#">Table 4-1. Emissions Inventory Considerations</a>	16
<a href="#">Table 5-1. Top 10 Sunland Park, NM Study Nonpoint Area NO<sub>x</sub> Sources, Final</a>	18
<a href="#">Table 5-2. Top 10 Sunland Park, NM Study Nonpoint Area VOC Sources, Final</a>	18
<a href="#">Table 5-3. Top 10 Sunland Park, NM Study Nonroad NO<sub>x</sub> Sources, Final</a>	19
<a href="#">Table 5-4. Top 10 Sunland Park, NM Study Nonroad VOC Sources, Final</a>	20
<a href="#">Table 5-5. Final Emissions by SCC</a>	21
<a href="#">Table 5-6. Ozone Season Daily Emissions by SCC</a>	30
<a href="#">Table 5-7. Final NO<sub>x</sub> Emissions By Sector</a>	43
<a href="#">Table 5-8. Final VOC Emissions By Sector</a>	43

## List of Figures

<a href="#">Figure 2-1. Geographic Area of Interest</a>	2
<a href="#">Figure 3-1. Sunland Park, NM</a>	3
<a href="#">Figure 3-2. 4-km Grid Squares Overlaid on the Sunland Park, NM Ozone Nonattainment Area</a>	4

## Abbreviations, Acronyms, and Symbols

lb/day	pounds per day
NAAQS	National ambient air quality standards
NEC	Not Elsewhere Classified
NEI	National Emissions Inventory
NLCD	National Land Cover Data
NMED	New Mexico Environment Department
NO <sub>x</sub>	nitrogen oxides
SCC	State Corporation Commission
TCEQ	Texas Commission on Environmental Quality
tpy	tons per year
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compounds

## 1.0 INTRODUCTION

The New Mexico Environment Department (NMED) is responsible for ozone control strategies for the Sunland Park, NM area within the El Paso-Las Cruces, TX-NM ozone nonattainment area, which was designated as Marginal after implementation of the 2015 ozone national ambient air quality standards (NAAQS). Ozone is a key component to smog, which is harmful to breathe (e.g., chest pain, coughing, wheezing, and shortness of breath) and causes damage to trees and plants. Ozone is not directly emitted from sources but formed through photochemical reactions of volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), and ultraviolet sunlight.

The purpose of this report is to document the development of the Sunland Park, NM emissions inventory. The results of this project will be merged with the El Paso, TX ozone nonattainment emissions inventory developed by the Texas Commission on Environmental Quality (TCEQ).

## 2.0 INVENTORY SCOPE

The scope of the emissions inventory is detailed below for the pollutants, source types, geographical domain, and temporal resolution of the estimates.

### 2.1 Pollutants

The following ozone precursor pollutants are included:

- Nitrogen oxides (NO<sub>x</sub>)
- Volatile organic compounds (VOCs)

### 2.2 Source Sector Types

The source sector types include industrial and small point sources, area nonpoint sources (e.g., residential heating, commercial cooking, surface coating, gasoline dispensing facilities, etc.), onroad mobile sources (i.e., tailpipe exhaust), nonroad mobile sources (e.g., lawn and garden equipment, construction, agricultural equipment, etc.), and fires (e.g., wildfires, prescribed burnings).

### 2.3 Geographical Domain

The study area focuses on a small portion of Doña Ana County, NM, primary encompassing Sunland Park, NM. The specific geographic description of the nonattainment area is defined as:

*The area bounded on the New Mexico-Texas state line on the east, the New Mexico-Mexico international line on the south, latitude N31°49'0" on the north, and longitude W106°36'36" on the west.<sup>1</sup>*

Figure 2-1 presents the study area.

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<sup>1</sup> U.S. Greenbook. Website link: [https://www3.epa.gov/airquality/greenbook/jnp.html#Ozone\\_8-hr.2015.El\\_Paso](https://www3.epa.gov/airquality/greenbook/jnp.html#Ozone_8-hr.2015.El_Paso)



Figure 2-1. Geographic Area of Interest

## 2.4 Temporal Resolution

The temporal resolution of the emissions inventory is annual and ozone season daily<sup>2,3</sup> for the 2020 base year. This matches the base year that TCEQ has developed for the El Paso, TX nonattainment portion.

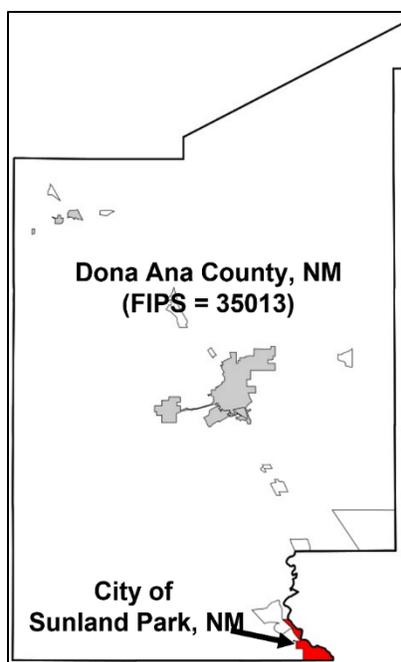
## 3.0 EMISSIONS INVENTORY DEVELOPMENT

This section provides the procedure to develop the 2020 Sunland Park, NM emissions inventory for the ozone nonattainment area. The starting point is the recently released 2020 National Emissions Inventory (NEI), which was submitted by NMED and quality-assured by U.S. EPA.<sup>4</sup> Sunland Park is a small portion of Doña Ana County, as presented in Figure 3-1.

<sup>2</sup> Ozone season day emissions means an average day's emissions for a typical ozone season work weekday. The state shall select, subject to EPA approval, the particular month(s) in the ozone season and the day(s) in the work week to be represented, considering the conditions assumed in the development of RFP plans and/or emissions budgets for transportation conformity. Website link: [https://www.epa.gov/sites/default/files/2017-07/documents/ei\\_guidance\\_may\\_2017\\_final\\_rev.pdf](https://www.epa.gov/sites/default/files/2017-07/documents/ei_guidance_may_2017_final_rev.pdf)

<sup>3</sup> Although the Ozone Season is defined for New Mexico as the entire year (January 1-December 31), as listed at: [https://aqs.epa.gov/aqsweb/documents/codetables/ozone\\_seasons.html](https://aqs.epa.gov/aqsweb/documents/codetables/ozone_seasons.html), for this inventory, NMED is focusing on the peak ozone season emissions for the 3-month period from June 1 through August 31.

<sup>4</sup> 2020 National Emissions Inventory (NEI). Website link: <https://www.epa.gov/air-emissions-inventories/2020-nei-supporting-data-and-summaries>



**Figure 3-1. Sunland Park, NM**

The 2020 NEI is intended to be comprehensive for all sectors. While point source emissions are presented by latitude/longitude coordinate pairs, the nonpoint area, onroad, and nonroad are presented at the county-level.

### 3.1 Point Source Emissions

The 2020 NEI identifies three point source facilities with NO<sub>x</sub> or VOC emissions, and they are presented in Table 3-1.

**Table 3-1. Sunland Park, NM Point Source Emissions**

EIS Facility ID	NAICS Code	Facility Name	NO <sub>x</sub> Emission (tpy)	VOC Emissions (tpy)
18874611	221112	Four Peaks Energy Plant No. 1	34.5	5.9
7581811	221112	Rio Grande Generating Station	704.89	23.18
7991011	562212	Camino Real Landfill	1.21	12.7
			<b>740.60</b>	<b>41.78</b>

### 3.2 County-Level Emissions Allocation Procedure

Due to the specific geographic description for the ozone nonattainment area being a subset of the county, the county-level emissions estimates for area nonpoint, onroad, and nonroad are

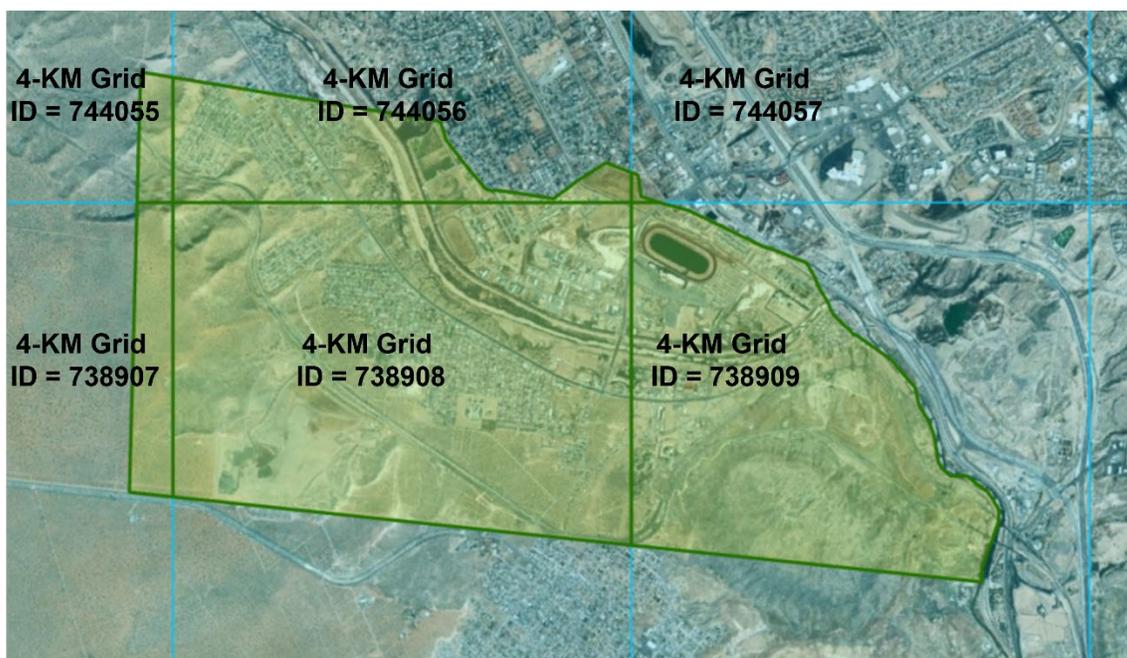
apportioned for the Sunland Park, NM area using 4-km spatial allocation surrogates, also prepared by U.S. EPA.<sup>5</sup>

As part of 2020 NEI emissions modeling, EPA prepares a crosswalk of SCCs to spatial allocation factor surrogate files. ERG retrieved and uploaded all of the surrogate files, and extracted the data for Doña Ana County, NM.

A total of 704 4-km grids are in Doña Ana County. Using GIS technology, ERG overlaid the U.S. EPA's 4-km gridded map on top of Doña Ana County, NM. As such, the following grid squares cover all or part of the Sunland Park, NM ozone nonattainment area:

- Grid ID = 738907 (Grid Row = 478, Grid Column = 511)
- Grid ID = 738908 (Grid Row = 478, Grid Column = 512)
- Grid ID = 738909 (Grid Row = 478, Grid Column = 513)
- Grid ID = 744055 (Grid Row = 479, Grid Column = 511)
- Grid ID = 744056 (Grid Row = 479, Grid Column = 512)
- Grid ID = 744057 (Grid Row = 479, Grid Column = 513)

Figure 3-2 presents the “grid” for the Sunland Park, NM ozone nonattainment area and the surrounding areas.



**Figure 3-2. 4-km Grid Squares Overlaid on the Sunland Park, NM Ozone Nonattainment Area.**

The 738908, 738909, and 744057 grid squares are completely within the study area, and do not need to be apportioned. However, the 738907, 744055, and 744056 grid squares are both in and

<sup>5</sup> 2020 NEI Spatial Surrogates. Website link:  
[https://gaftp.epa.gov/Air/emismod/2020/spatial\\_surrogates/CONUS4\\_2020NEI\\_12jun2023\\_surrogates.zip](https://gaftp.epa.gov/Air/emismod/2020/spatial_surrogates/CONUS4_2020NEI_12jun2023_surrogates.zip)

out of the study area, and were apportioned by land area. Table 3-2 presents the final apportioned grids.

**Table 3-2. Grid Apportionments for the Sunland Park, NM Study Area 4-km Grid Squares**

Grid ID	Fraction of Grid in the Study Area
738907	0.093534
738908	1.000000
738909	1.000000
744055	0.020709
744056	0.447414
744057	1.000000

### 3.2.1 Nonpoint Area Sources

The starting point for the nonpoint area sources inventory is the 2020 NEI. Many of the estimates were developed through EPA estimations tools, such as the Wagon Wheel and Oil and Gas Emissions Estimation Tool. These tools use consistent methodologies, activity data, assumptions, and set of emission factors.

Table 3-3 presents the Top 10 NO<sub>x</sub> nonpoint area source emission sources for Doña Ana County, which account for over 93% of the total NO<sub>x</sub> nonpoint area source emissions.

**Table 3-3. Top 10 Doña Ana County, NM Nonpoint Area NO<sub>x</sub> Sources**

Rank	SCC	SCC Description	Surrogate Spatial Code	NO <sub>x</sub> Emissions (tpy)
1	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	271	760.93
2	2701220000	Biogenic - Vegetation/Agriculture - Total	310	336.41
3	2104006000	Stationary Fuel Comb /Residential /Natural Gas /Total: All Combustor Types	150	165.36
4	2102006000	Stationary Fuel Comb /Industrial /Natural Gas /Total: Boilers and IC Engines	306	60.31
5	2102004002	Stationary Fuel Comb /Industrial /Distillate Oil /Total: IC Engines	306	55.14
6	2104007000	Stationary Fuel Comb /Residential /Liquified Petroleum Gas /Total: All Combustor Types	190	35.75
7	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	261	32.70
8	2102002000	Stationary Fuel Comb /Industrial /Bituminous/Subbituminous Coal /Total: All Boiler Types	306	14.88

Rank	SCC	SCC Description	Surrogate Spatial Code	NO <sub>x</sub> Emissions (tpy)
9	2104008100	Stationary Fuel Comb /Residential /Wood /Fireplace: general	136	13.93
10	2810001002	Forest Wildfires - Wildland Fire Use - ANTHROPOG (Restoration), unsp fire stage, ownership	320	13.39
<i>Remaining 32 NO<sub>x</sub> Nonpoint SCCs</i>				99.82
<b>Total</b>				<b>1,588.62</b>

Table 3-4 presents the Top 10 VOC nonpoint area source emission sources for Doña Ana County, which account for over 85% of the total VOC nonpoint area source emissions.

**Table 3-4. Top 10 Doña Ana County, NM Nonpoint Area VOC Sources**

Rank	SCC	SCC Description	Surrogate Spatial Code	VOC Emissions (tpy)
1	2701200000	Biogenic - Vegetation - Total	319	6,983.96
2	2802004001	Ag Silage - Storage	4011	347.15
3	2460100000	Misc Non-indus: Consumer & Comm /All Personal Care Products /Total: All Solvent Types	100	315.30
4	2460500000	Misc Non-indus: Consumer & Comm /All Coatings & Related Products /Total: All Solvent Types	100	315.30
5	2802004003	Ag Silage - Feeding	4011	253.21
6	2460200000	Misc Non-indus: Consumer & Comm /All Household Products /Total: All Solvent Types	100	237.86
7	2805018000	Agric - Livestock /Dairy cattle composite /Not Elsewhere Classified	4013	235.36
8	2461022000	Misc Non-industrial: Commercial /Emulsified Asphalt /Total: All Solvent Types	901	225.83
9	2501060051	Gasoline Service Stations /Stage 1: Submerged Filling	900	208.89
10	2460600000	Misc Non-indus: Consumer & Comm /All Adhesives & Sealants /Total: All Solvent Types	100	203.56
<i>Remaining 88 VOC Nonpoint Area SCCs</i>				1,607.15
<b>Total</b>				<b>10,933.55</b>

Using the spatial allocation surrogate data, the Doña Ana County, NM county-level nonpoint area emissions were allocated to the six Sunland Park, NM grid squares, as listed earlier. After this, the grid square emissions were apportioned to just the study area using the fractions in Table 3-2.

For example, apportioning the county-level NO<sub>x</sub> emissions for residential heating using natural gas to the Sunland, NM study area is calculated as follows:

Doña Ana County, NM Residential Heating using Natural Gas (SCC = 2104006000)

$$\text{NO}_x \text{ Emissions} = 165.3603 \text{ tpy}$$

Spatial Allocation Surrogate Code = 150

Spatial Allocation Surrogate Description = Residential Heating – Natural Gas

Surrogate 150 Grid ID 738907 fraction of the county = 0.000054

Surrogate 150 Grid ID 738908 fraction of the county = 0.031167

Surrogate 150 Grid ID 738909 fraction of the county = 0.005707

Surrogate 150 Grid ID 744055 fraction of the county = 0.009132

Surrogate 150 Grid ID 744056 fraction of the county = 0.009033

Surrogate 150 Grid ID 744057 fraction of the county = 0.000019

Surrogate 150 Grid ID 738907 NO<sub>x</sub> emissions = 165.3603 tpy \* 0.000054 = 0.009 tpy

Surrogate 150 Grid ID 738908 NO<sub>x</sub> emissions = 165.3603 tpy \* 0.031167 = 5.51 tpy

Surrogate 150 Grid ID 738909 NO<sub>x</sub> emissions = 165.3603 tpy \* 0.005707 = 0.94 tpy

Surrogate 150 Grid ID 744055 NO<sub>x</sub> emissions = 165.3603 tpy \* 0.009132 = 1.51 tpy

Surrogate 150 Grid ID 744056 NO<sub>x</sub> emissions = 165.3603 tpy \* 0.009033 = 1.49 tpy

Surrogate 150 Grid ID 744057 NO<sub>x</sub> emissions = 165.3603 tpy \* 0.000019 = 0.003 tpy

$$\text{Total NO}_x \text{ gridded emissions} = 9.113 \text{ tpy}$$

*Using the 4-km grid apportionments, the study NO<sub>x</sub> emissions are calculated as:*

Grid ID 738907 Study Area NO<sub>x</sub> emissions = 0.009 tpy \* 0.093534 = 0.001 tpy

Grid ID 738908 Study Area NO<sub>x</sub> emissions = 5.51 tpy \* 1.000000 = 5.51 tpy

Grid ID 738909 Study Area NO<sub>x</sub> emissions = 0.94 tpy \* 1.000000 = 0.94 tpy

Grid ID 744055 Study Area NO<sub>x</sub> emissions = 1.51 tpy \* 0.020709 = 0.03 tpy

Grid ID 744056 Study Area NO<sub>x</sub> emissions = 1.49 tpy \* 0.447414 = 0.67 tpy

Grid ID 744057 Study Area NO<sub>x</sub> emissions = 0.003 tpy \* 1.000000 = 0.003 tpy

$$\text{Total NO}_x \text{ gridded study area emissions} = 6.801 \text{ tpy}$$

Table 3-5 presents the Top 10 NO<sub>x</sub> source categories for the study area, while Table 3-6 presents the Top 10 VOC source categories for the study area.

**Table 3-5. Top 10 Sunland Park, NM Study Nonpoint Area NO<sub>x</sub> Sources**

Rank	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)
1	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	24.09
2	2104006000	Stationary Fuel Comb /Residential /Natural Gas /Total: All Combustor Types	6.80
3	2102006000	Stationary Fuel Comb /Industrial /Natural Gas /Total: Boilers and IC Engines	2.13
4	2102004002	Stationary Fuel Comb /Industrial /Distillate Oil /Total: IC Engines	1.95
5	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.92
6	2701220000	Biogenic - Vegetation/Agriculture - Total	1.69
7	2104008100	Stationary Fuel Comb /Residential /Wood /Fireplace: general	0.67
8	2610030000	Open Burning /Residential /Household Waste (use 26-10-000-xxx for Yard Wastes)	0.59
9	2102002000	Stationary Fuel Comb /Industrial /Bituminous/Subbituminous Coal /Total: All Boiler Types	0.53
10	2104008700	Stationary Fuel Comb /Residential /Wood /Outdoor wood burning device, NEC (fire-pits, chimneys, etc.)	0.40
<i>Remaining 28 NO<sub>x</sub> Nonpoint Area SCCs</i>			2.98
<b>Total</b>			<b>43.73</b>

**Table 3-6. Top 10 Sunland Park, NM Study Nonpoint Area VOC Sources**

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2701200000	Biogenic - Vegetation - Total	35.00
2	2460100000	Misc Non-indus: Consumer & Comm /All Personal Care Products /Total: All Solvent Types	15.58
3	2460500000	Misc Non-indus: Consumer & Comm /All Coatings & Related Products /Total: All Solvent Types	15.58
4	2460200000	Misc Non-indus: Consumer & Comm /All Household Products /Total: All Solvent Types	11.75
5	2461022000	Misc Non-industrial: Commercial /Emulsified Asphalt /Total: All Solvent Types	11.38
6	2460600000	Misc Non-indus: Consumer & Comm /All Adhesives & Sealants /Total: All Solvent Types	10.06
7	2802004001	Ag Silage - Storage	8.98

Rank	SCC	SCC Description	VOC Emissions (tpy)
8	2104008310	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, non-EPA certified	7.45
9	2802004003	Ag Silage - Feeding	6.55
10	2805018000	Agric - Livestock /Dairy cattle composite /Not Elsewhere Classified	6.09
<i>Remaining 79 VOC Nonpoint Area SCCs</i>			40.86
<b>Total</b>			<b>169.27</b>

### 3.2.2 Onroad Sources

The starting point for the onroad area sources inventory is the 2020 NEI. Many of the estimates were developed through EPA MOVES estimation tools.

Table 3-7 presents the Top 10 NO<sub>x</sub> onroad source emission sources for Doña Ana County, which account for over 97% of the total NO<sub>x</sub> onroad source emissions.

**Table 3-7. Top 10 Doña Ana County, NM Onroad NO<sub>x</sub> Sources**

Rank	SCC	SCC Description	Surrogate Spatial Code	NO <sub>x</sub> Emissions (tpy)
1	2202620080	Mobile-Combination Long-haul Truck-Diesel	306	1,142.41
2	2202610080	Mobile-Combination Short-haul Truck-Diesel	306	897.89
3	2201310080	Mobile-Passenger Truck-Gas	307	661.48
4	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	306	261.63
5	2201210080	Mobile-Passenger Car-Gas	307	218.81
6	2202310080	Mobile-Passenger Truck-Diesel	307	179.82
7	2202430080	Mobile-School Bus-Diesel	508	50.35
8	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	306	35.14
9	2201320080	Mobile-Light Commercial Truck-Gas	308	34.98
10	2201520080	Mobile-Single Unit Short-haul Truck-Gas	306	22.46
<i>Remaining 17 NO<sub>x</sub> Onroad SCCs</i>				83.10
<b>Total</b>				<b>3,588.07</b>

Table 3-8 presents the Top 10 VOC onroad source emission sources for Doña Ana County, which account for over 98% of the total VOC onroad source emissions.

Table 3-8. Top 10 Doña Ana County, NM Onroad VOC Sources

Rank	SCC	SCC Description	Surrogate Spatial Code	VOC Emissions (tpy)
1	2201310080	Mobile-Passenger Truck-Gas	307	507.38
2	2201210080	Mobile-Passenger Car-Gas	307	304.83
3	2201110080	Mobile-Motorcycle-Gas	307	79.69
4	2202620080	Mobile-Combination Long-haul Truck-Diesel	306	43.03
5	2202610080	Mobile-Combination Short-haul Truck-Diesel	306	35.34
6	2201320080	Mobile-Light Commercial Truck-Gas	308	26.36
7	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	306	21.24
8	2202310080	Mobile-Passenger Truck-Diesel	307	28.07
9	2201520080	Mobile-Single Unit Short-haul Truck-Gas	306	15.27
10	2201540080	Mobile-Motor Home-Gas	304	8.03
<i>Remaining 17 VOC Onroad SCCs</i>				17.85
<b>Total</b>				<b>1,087.09</b>

Using the spatial allocation surrogate data, the Doña Ana County, NM county-level onroad area emissions were allocated to the six Sunland Park, NM grid squares, as listed earlier. After this, the grid square emissions were apportioned to just the study area using the fractions in Table 3-2.

For example, apportioning the county-level VOC emissions for Passenger Trucks using gasoline to the Sunland, NM study area is calculated as follows:

Doña Ana County, NM Passenger Trucks using Gasoline (SCC = 2201310080)

VOC Emissions = 507.38 tpy

Spatial Allocation Surrogate Code = 307

Spatial Allocation Surrogate Description = National Land Cover Data (NLCD) locations where impervious surface >0%

Surrogate 307 Grid ID 738907 fraction of the county = 0

Surrogate 307 Grid ID 738908 fraction of the county = 0.011950

Surrogate 307 Grid ID 738909 fraction of the county = 0.006483

Surrogate 307 Grid ID 744055 fraction of the county = 0.001662

Surrogate 307 Grid ID 744056 fraction of the county = 0.007029

Surrogate 307 Grid ID 744057 fraction of the county = 0

Surrogate 307 Grid ID 738907 VOC emissions = 507.38 tpy \* 0 = 0 tpy

Surrogate 307 Grid ID 738908 VOC emissions = 507.38 tpy \* 0.011950 = 6.06 tpy

Surrogate 307 Grid ID 738909 VOC emissions = 507.38 tpy \* 0.006483 = 3.29 tpy

Surrogate 307 Grid ID 744055 VOC emissions = 507.38 tpy \* 0.001662 = 0.84 tpy

Surrogate 307 Grid ID 744056 VOC emissions = 507.38 tpy \* 0.007029 = 3.57 tpy

Surrogate 307 Grid ID 744057 VOC emissions = 507.38 tpy \* 0 = 0 tpy

Total VOC gridded emissions = 13.762 tpy

Using the 4-km grid apportionments, the study NO<sub>x</sub> emissions are calculated as:

Grid ID 738907 Study Area VOC emissions = 0 \* 0.093534 = 0 tpy

Grid ID 738908 Study Area VOC emissions = 6.06 tpy \* 1.000000 = 6.06 tpy

Grid ID 738909 Study Area VOC emissions = 3.29 tpy \* 1.000000 = 3.29 tpy

Grid ID 744055 Study Area VOC emissions = 0.84 tpy \* 0.020709 = 0.02 tpy

Grid ID 744056 Study Area VOC emissions = 3.57 tpy \* 0.447414 = 1.60 tpy

Grid ID 744057 Study Area VOC emissions = 0 tpy \* 1.000000 = 0 tpy

Total VOC gridded study area emissions = 10.97 tpy

Table 3-9 presents the Top 10 NO<sub>x</sub> onroad source categories for the study area, while Table 3-10 presents the Top 10 VOC onroad source categories for the study area.

**Table 3-9. Top 10 Sunland Park, NM Study Area Onroad NO<sub>x</sub> Sources**

Rank	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)
1	2202620080	Mobile-Combination Long-haul Truck-Diesel	40.34
2	2202610080	Mobile-Combination Short-haul Truck-Diesel	31.70
3	2201310080	Mobile-Passenger Truck-Gas	14.30
4	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	9.24
5	2201210080	Mobile-Passenger Car-Gas	4.73
6	2202310080	Mobile-Passenger Truck-Diesel	3.89
7	2202430080	Mobile-School Bus-Diesel	1.32
8	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	1.24
9	2201320080	Mobile-Light Commercial Truck-Gas	1.07
10	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.79
<i>Remaining 17 NO<sub>x</sub> Onroad SCCs</i>			2.44
<b>Total</b>			<b>111.04</b>

**Table 3-10. Top 10 Sunland Park, NM Study Area Onroad VOC Sources**

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2201310080	Mobile-Passenger Truck-Gas	10.97
2	2201210080	Mobile-Passenger Car-Gas	6.59
3	2201110080	Mobile-Motorcycle-Gas	1.72
4	2202620080	Mobile-Combination Long-haul Truck-Diesel	1.52
5	2202610080	Mobile-Combination Short-haul Truck-Diesel	1.25
6	2201320080	Mobile-Light Commercial Truck-Gas	0.80

Rank	SCC	SCC Description	VOC Emissions (tpy)
7	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	0.75
8	2202310080	Mobile-Passenger Truck-Diesel	0.61
9	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.54
10	2202430080	Mobile-School Bus-Diesel	0.13
<i>Remaining 17 VOC Onroad SCCs</i>			0.54
<b>Total</b>			<b>25.41</b>

### 3.2.3 Nonroad Sources

The starting point for the nonroad area sources inventory is the 2020 NEI. Many of the estimates were developed through EPA MOVES estimation tools.

Table 3-11 presents the Top 10 NO<sub>x</sub> nonroad source emission sources for Doña Ana County, which account for over 93% of the total NO<sub>x</sub> nonroad source emissions.

**Table 3-11. Top 10 Doña Ana County, NM Nonroad NO<sub>x</sub> Sources**

Rank	SCC	SCC Description	Surrogate Spatial Code	NO <sub>x</sub> Emissions (tpy)
1	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	308	241.01
2	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	310	94.15
3	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	306	15.07
4	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	306	13.75
5	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Residential)	136	7.62
6	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eq (Commercial)	309	7.31
7	2270004044	Off-highway Diesel /Lawn & Garden Equipt /Diesel Lawn & Garden Eq (Commercial)	307	6.62
8	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	306	5.45
9	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	350	5.28
10	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	306	4.09

Rank	SCC	SCC Description	Surrogate Spatial Code	NO <sub>x</sub> Emissions (tpy)
<i>Remaining 36 NO<sub>x</sub> Nonroad SCCs</i>				29.80
<b>Total</b>				<b>430.15</b>

Table 3-12 presents the Top 10 VOC nonroad source emission sources for Doña Ana County, which account for over 78% of the total VOC nonroad source emissions.

**Table 3-12. Top 10 Doña Ana County, NM Nonroad VOC Sources**

Rank	SCC	SCC Description	Surrogate Spatial Code	VOC Emissions (tpy)
1	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Residential)	136	52.64
2	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	308	25.69
3	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	350	24.16
4	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eq (Commercial)	307	23.06
5	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eq (Commercial)	309	21.81
6	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	307	21.80
7	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	306	21.24
8	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	308	17.97
9	2260001022	Off-highway Gasoline, 2-Stroke /Recreational Equipt /2-Stroke Other Recreational Equip.	321	17.61
10	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Commercial)	307	16.41
<i>Remaining 36 VOC Nonroad SCCs</i>				66.59
<b>Total</b>				<b>308.97</b>

Using the spatial allocation surrogate data, the Doña Ana County, NM county-level nonroad area emissions were allocated to the six Sunland Park, NM grid squares, as listed earlier. After this, the grid square emissions were apportioned to just the study area using the fractions in Table 3-2.

For example, apportioning the county-level NO<sub>x</sub> emissions for diesel agricultural equipment to the Sunland, NM study area is calculated as follows:

Doña Ana County, NM Diesel Agricultural Equipment (SCC = 2270005022)

$$\text{NO}_x \text{ Emissions} = 94.15 \text{ tpy}$$

Spatial Allocation Surrogate Code = 310

Spatial Allocation Surrogate Description = National Land Cover Data (NLCD) locations of pasture/hay and row crops

Surrogate 310 Grid ID 738907 fraction of the county = 0

Surrogate 310 Grid ID 738908 fraction of the county = 0.002431

Surrogate 310 Grid ID 738909 fraction of the county = 0.000945

Surrogate 310 Grid ID 744055 fraction of the county = 0.000943

Surrogate 310 Grid ID 744056 fraction of the county = 0.003483

Surrogate 310 Grid ID 744057 fraction of the county = 0.000058

Surrogate 307 Grid ID 738907 NO<sub>x</sub> emissions = 94.15 tpy \* 0 = 0 tpy

Surrogate 307 Grid ID 738908 NO<sub>x</sub> emissions = 94.15 tpy \* 0.002431 = 0.23 tpy

Surrogate 307 Grid ID 738909 NO<sub>x</sub> emissions = 94.15 tpy \* 0.000945 = 0.09 tpy

Surrogate 307 Grid ID 744055 NO<sub>x</sub> emissions = 94.15 tpy \* 0.000943 = 0.09 tpy

Surrogate 307 Grid ID 744056 NO<sub>x</sub> emissions = 94.15 tpy \* 0.003483 = 0.33 tpy

Surrogate 307 Grid ID 744057 NO<sub>x</sub> emissions = 94.15 tpy \* 0.000058 = 0.005 tpy

$$\text{Total NO}_x \text{ gridded emissions} = 0.74 \text{ tpy}$$

*Using the 4-km grid apportionments, the study NO<sub>x</sub> emissions are calculated as:*

Grid ID 738907 Study Area NO<sub>x</sub> emissions = 0 \* 0.093534 = 0 tpy

Grid ID 738908 Study Area NO<sub>x</sub> emissions = 0.23 tpy \* 1.000000 = 0.23 tpy

Grid ID 738909 Study Area NO<sub>x</sub> emissions = 0.09 tpy \* 1.000000 = 0.09 tpy

Grid ID 744055 Study Area NO<sub>x</sub> emissions = 0.09 tpy \* 0.020709 = 0.09 tpy

Grid ID 744056 Study Area NO<sub>x</sub> emissions = 0.33 tpy \* 0.447414 = 0.15 tpy

Grid ID 744057 Study Area NO<sub>x</sub> emissions = 0.005 tpy \* 1.000000 = 0.005 tpy

$$\text{Total NO}_x \text{ gridded study area emissions} = 0.47 \text{ tpy}$$

Table 3-13 presents the Top 10 NO<sub>x</sub> nonroad source categories for the study area, while Table 3-14 presents the Top 10 VOC nonroad source categories for the study area.

**Table 3-13. Top 10 Sunland Park, NM Study Area Nonroad NO<sub>x</sub> Sources**

Rank	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)
1	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	7.35
2	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	0.53
3	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	0.51
4	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	0.49
5	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	0.47
6	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Residential)	0.37
7	2282020022	Pleasure Craft /Diesel /Diesel Pleasure Craft	0.30
8	2282010005	Pleasure Craft /Gasoline 4-Stroke /Inboard/Sterndrive	0.30
9	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.19
10	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.14
<i>Remaining 36 NO<sub>x</sub> Nonroad SCCs</i>			0.95
<b>Total</b>			<b>11.59</b>

**Table 3-14. Top 10 Sunland Park, NM Study Area Nonroad VOC Sources**

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Residential)	2.52
2	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	2.33
3	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	0.78
4	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.75
5	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eq (Residential)	0.60
6	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	0.55
7	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eq (Commercial)	0.50
8	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	0.47

Rank	SCC	SCC Description	VOC Emissions (tpy)
9	2282010005	Pleasure Craft /Gasoline 4-Stroke /Inboard/Stern-drive	0.46
10	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipment /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.42
<i>Remaining 36 VOC Nonroad SCCs</i>			1.34
<b>Total</b>			<b>10.73</b>

#### 4.0 EMISSION INVENTORY ADJUSTMENTS

After initial preparation of the emissions inventory, ERG presented several emissions inventory items for NMED to consider, which are presented in Table 4-1. The resolution is also presented after discussions with NMED.

**Table 4-1. Emissions Inventory Considerations**

Item #	Item	Resolution
1	Did NMED have any adjustments to the 2020 NEI emissions for Doña Ana County?	No further adjustments from NMED.
2	Refueling and service station refilling emissions are reported for Doña Ana County, but not for the study area. Can NMED confirm no gasoline, diesel, and/or ethanol service stations in the study area?	NMED confirmed no gasoline/diesel/ethanol service stations in the study area.
3	Aviation gasoline fuel storage emissions are reported for Doña Ana County, but not for the study area. Can NMED confirm no airports nor aviation gasoline fuel storage sources in the study area?	NMED confirmed no aviation gasoline fuel sources in the study area.
4	Gasoline-powered golf cart emissions are reported for Doña Ana County, but not for the study area. Can NMED confirm no golf courses in the study area?	NMED confirmed no golf courses in the study area.
5	Wildfire emissions are reported for Doña Ana County, but not for the study area. Can NMED confirm no wildfires occurred in the study area?	NMED confirmed no wildfires in the study area.
6	Prescribed fire burn emissions are reported for Doña Ana County, but not for the study area. Can NMED confirm no prescribed fire burns occurred in the study area?	NMED confirmed no prescribed fire burns in the study area.
7	Inter-city diesel bus emissions are reported for Doña Ana County, but not for the study area. Can NMED confirm no inter-city diesel buses were active in the study area?	NMED was unsure, as the main bus service is out of El Paso, Texas. NMED may check to see if this type of

Item #	Item	Resolution
		bus was active in the study period.
8	Residential heating using distillate oil emissions are reported for Doña Ana County, but not for the study area. Can NMED confirm no distillate oil was used for residential heating in the study area?	NMED was unsure about this type of fuel usage, but thought it would be negligible.
9	Did point source reconciliation occur between point and nonpoint area sources, such as industrial fuel combustion?	NMED believed point source reconciliation was performed by EPA through its NEI compilation process.
10	Emissions from passenger trains (e.g., Amtrak) were included in the allocated emissions for the study area. Can NMED confirm that there are passenger trains in the study area?	NMED does believe there is a passenger rail line in the study area.
11	Emissions from agricultural crop/field burning were included in the allocated emissions for the study area. Can NMED confirm that there are agricultural fields/crops in the study area?	NMED does believe there are no agricultural fields/crops in the study area.
12	Emissions from human or animal crematories were included in the allocated emissions for the study area. Can NMED confirm that there are human or animal crematories in the study area?	NMED confirms there is at least one crematory in the study area.
13	Emissions from agricultural waste were included in the allocated emissions for the study area. Can NMED confirm agricultural waste in the study area?	NMED confirms there is agricultural waste at the Sunland Park Racetrack which is in the study area.
14	Emissions from agricultural silage were included in the allocated emissions for the study area. Can NMED confirm agricultural silage in the study area?	NMED is unsure if there is agricultural silage in the study area. They will check with local officials.
15	Emissions from vegetation were included in the allocated emissions for the study area. Can NMED confirm vegetation in the study area?	NMED confirms that vegetation emissions are negligible, if any.
16	Emissions from pleasure craft were included in the allocated emissions for the study area. Can NMED confirm water bodies for pleasure craft in the study area?	NMED confirms that the water bodies in the study area are not suitable for pleasure craft.

As a result of these decisions, the following emission sources were zeroed out in the study area:

- Agricultural crop/field burning SCCs 2801500150, 2801500160, and 2801500171
- Vegetation: SCCs 2701200000 and 2701220000
- Pleasure craft: SCCs 2282005022, 2282010005, and 2282020022

## 5.0 FINAL EMISSIONS

After the adjustments in Section 4, the only changes in emissions were from the nonpoint area and the nonroad sector.

### 5.1 Final Nonpoint Area and Nonroad Source Emissions

Table 5-1 presents the final Top 10 NO<sub>x</sub> nonpoint area source categories for the study area, while Table 5-2 presents the final Top 10 VOC nonpoint area source categories for the study area.

**Table 5-1. Top 10 Sunland Park, NM Study Nonpoint Area NO<sub>x</sub> Sources, Final**

Rank	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)
1	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	24.09
2	2104006000	Stationary Fuel Comb /Residential /Natural Gas /Total: All Combustor Types	6.80
3	2102006000	Stationary Fuel Comb /Industrial /Natural Gas /Total: Boilers and IC Engines	2.13
4	2102004002	Stationary Fuel Comb /Industrial /Distillate Oil /Total: IC Engines	1.95
5	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.92
6	2104008100	Stationary Fuel Comb /Residential /Wood /Fireplace: general	0.67
7	2610030000	Open Burning /Residential /Household Waste (use 26-10-000-xxx for Yard Wastes)	0.59
8	2102002000	Stationary Fuel Comb /Industrial /Bituminous/Subbituminous Coal /Total: All Boiler Types	0.53
9	2104008700	Stationary Fuel Comb /Residential /Wood /Outdoor wood burning device, NEC (fire-pits, chimneys, etc.)	0.40
10	2104008310	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, non-EPA certified	0.39
<i>Remaining 24 NO<sub>x</sub> Nonpoint Area SCCs</i>			2.55
<b>Total</b>			<b>42.01</b>

**Table 5-2. Top 10 Sunland Park, NM Study Nonpoint Area VOC Sources, Final**

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2460100000	Misc Non-indus: Consumer & Comm /All Personal Care Products /Total: All Solvent Types	15.58

Rank	SCC	SCC Description	VOC Emissions (tpy)
2	2460500000	Misc Non-indus: Consumer & Comm /All Coatings & Related Products /Total: All Solvent Types	15.58
3	2460200000	Misc Non-indus: Consumer & Comm /All Household Products /Total: All Solvent Types	11.75
4	2461022000	Misc Non-industrial: Commercial /Emulsified Asphalt /Total: All Solvent Types	11.38
5	2460600000	Misc Non-indus: Consumer & Comm /All Adhesives & Sealants /Total: All Solvent Types	10.06
6	2802004001	Ag Silage - Storage	8.98
7	2104008310	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, non-EPA certified	7.45
8	2802004003	Ag Silage - Feeding	6.55
9	2805018000	Agric - Livestock /Dairy cattle composite /Not Elsewhere Classified	6.09
10	2104008100	Stationary Fuel Comb /Residential /Wood /Fireplace: general	4.86
<i>Remaining 75 VOC Nonpoint Area SCCs</i>			35.84
<b>Total</b>			<b>134.11</b>

Table 5-3 presents the final Top 10 NO<sub>x</sub> nonroad source categories for the study area, while Table 5-4 presents the final Top 10 VOC nonroad source categories for the study area.

**Table 5-3. Top 10 Sunland Park, NM Study Nonroad NO<sub>x</sub> Sources, Final**

Rank	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)
1	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	7.35
2	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	0.53
3	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	0.49
4	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	0.47
5	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	0.37
6	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.19
7	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.14
8	2270004044	Off-highway Diesel /Lawn & Garden Equipt /Diesel Lawn & Garden Eqt (Commercial)	0.14

Rank	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)
9	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.14
10	2270003022	Off-highway Diesel /Industrial Equipt /Diesel Industrial Equipment	0.13
<i>Remaining 33 NO<sub>x</sub> Nonroad SCCs</i>			0.54
<b>Total</b>			<b>10.49</b>

**Table 5-4. Top 10 Sunland Park, NM Study Nonroad VOC Sources, Final**

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	2.52
2	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	0.78
3	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.75
4	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Residential)	0.60
5	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	0.55
6	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Commercial)	0.50
7	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	0.47
8	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.42
9	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.39
10	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Commercial)	0.35
<i>Remaining 33 VOC Nonpoint Area SCCs</i>			0.58
<b>Total</b>			<b>7.92</b>

## 5.2 Final Emissions By SCC

Table 5-5 presents the final emissions by SCC.

Table 5-5. Final Emissions by SCC

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Point	10100601	Ext Comb /Electric Gen /Natural Gas /Boilers : 100 Million Btu/hr except Tangential	690.75	19.18
Point	20100201	Int Comb /Electric Gen /Natural Gas /Turbine	14.09	2.95
Point	20100802	Int Comb /Electric Gen /Landfill Gas /Reciprocating	34.50	5.90
Point	20200102	Int Comb /Industrial /Distillate Oil (Diesel) /Reciprocating	0.01	--
Point	20200202	Int Comb /Industrial /Natural Gas /Reciprocating	0.04	0.003
Point	31000205	Natural Gas Production /Flares	1.21	0.03
Point	31088811	Oil&Gas Prod /Fugitive Emissions /Fugitive Emissions	--	1.05
Point	50100402	Waste Disp-Govt /Landfill Dump /Fugitive Emissions	--	12.67
Nonpoint	2102002000	Stationary Fuel Comb /Industrial /Bituminous/Subbituminous Coal /Total: All Boiler Types	0.53	0.002
Nonpoint	2102004001	Stationary Fuel Comb /Industrial /Distillate Oil /Total: Boilers	0.10	0.001
Nonpoint	2102004002	Stationary Fuel Comb /Industrial /Distillate Oil /Total: IC Engines	1.95	0.14
Nonpoint	2102006000	Stationary Fuel Comb /Industrial /Natural Gas /Total: Boilers and IC Engines	2.13	0.12
Nonpoint	2102007000	Stationary Fuel Comb /Industrial /Liquified Petroleum Gas /Total: All Boiler Types	0.06	0.002
Nonpoint	2102008000	Stationary Fuel Comb /Industrial /Wood /Total: All Boiler Types	0.00	0.0002
Nonpoint	2103007000	Stationary Fuel Comb /Commercial/Institutional /Liquified Petroleum Gas /Total: All Combustor Types	0.15	0.01
Nonpoint	2103008000	Stationary Fuel Comb /Commercial/Institutional /Wood /Total: All Boiler Types	0.28	0.02
Nonpoint	2103011000	Stationary Fuel Comb /Commercial/Institutional /Kerosene /Total: All Combustor Types	0.001	0.00001
Nonpoint	2104006000	Stationary Fuel Comb /Residential /Natural Gas /Total: All Combustor Types	6.80	0.40
Nonpoint	2104007000	Stationary Fuel Comb /Residential /Liquified Petroleum Gas /Total: All Combustor Types	0.25	0.01

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Nonpoint	2104008100	Stationary Fuel Comb /Residential /Wood /Fireplace: general	0.67	4.86
Nonpoint	2104008210	Stationary Fuel Comb /Residential /Wood /Woodstove: fireplace inserts; non-EPA certified	0.10	1.98
Nonpoint	2104008220	Stationary Fuel Comb /Residential /Wood /Woodstove: fireplace inserts; EPA certified; non-catalytic	0.08	0.59
Nonpoint	2104008230	Stationary Fuel Comb /Residential /Wood /Woodstove: fireplace inserts; EPA certified; catalytic	0.07	0.51
Nonpoint	2104008310	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, non-EPA certified	0.39	7.45
Nonpoint	2104008320	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, EPA certified, non-catalytic	0.31	2.23
Nonpoint	2104008330	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, EPA certified, catalytic	0.25	1.90
Nonpoint	2104008400	Stationary Fuel Comb /Residential /Wood /Woodstove: pellet-fired, general (freestanding or FP insert)	0.09	0.05
Nonpoint	2104008510	Stationary Fuel Comb /Residential /Wood /Furnace: Indoor, cordwood-fired, non-EPA certified	0.05	0.33
Nonpoint	2104008530	Stationary Fuel Comb /Residential /Wood /Furnace: Indoor, pellet-fired, general	0.01	0.01
Nonpoint	2104008610	Stationary Fuel Comb /Residential /Wood /Hydronic heater: outdoor	0.06	1.87
Nonpoint	2104008620	Stationary Fuel Comb /Residential /Wood /Hydronic heater: indoor	0.03	1.18
Nonpoint	2104008630	Stationary Fuel Comb /Residential /Wood /Hydronic heater: pellet-fired	0.003	0.002
Nonpoint	2104008700	Stationary Fuel Comb /Residential /Wood /Outdoor wood burning device, NEC (fire-pits, chimneys, etc.)	0.40	2.87
Nonpoint	2104009000	Stationary Fuel Comb /Residential /Firelog /Total: All Combustor Types	0.10	0.49
Nonpoint	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	24.09	0.97
Nonpoint	2285002007	Railroad Equipment /Diesel /Line Haul Locomotives: Class II / III Operations	0.28	0.01

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Nonpoint	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.92	0.10
Nonpoint	2302002100	Food & Kindred Products /Commercial Cooking - Charbroiling /Conveyorized Charbroiling	--	0.11
Nonpoint	2302002200	Food & Kindred Products /Commercial Cooking - Charbroiling /Under-fired Charbroiling	--	0.35
Nonpoint	2302003000	Food & Kindred Products /Commercial Cooking - Frying /Deep Fat Frying	--	0.07
Nonpoint	2302003100	Food & Kindred Products /Commercial Cooking - Frying /Flat Griddle Frying	--	0.05
Nonpoint	2302003200	Food & Kindred Products /Commercial Cooking - Frying /Clamshell Griddle Frying	--	0.002
Nonpoint	2401001000	Surface Coating /Architectural Coatings /Total: All Solvent Types	--	3.37
Nonpoint	2401005000	Surface Coating /Auto Refinishing /Total: All Solvent Types	--	0.34
Nonpoint	2401008000	Surface Coating /Traffic Markings /Total: All Solvent Types	--	0.20
Nonpoint	2401015000	Surface Coating /Factory Finished Wood /Total: All Solvent Types	--	0.01
Nonpoint	2401020000	Surface Coating /Wood Furniture /Total: All Solvent Types	--	0.07
Nonpoint	2401055000	Surface Coating /Machinery & Equipment /Total: All Solvent Types	--	0.01
Nonpoint	2401065000	Surface Coating /Electronic & Other Electrical /Total: All Solvent Types	--	0.09
Nonpoint	2401070000	Surface Coating /Motor Vehicles /Total: All Solvent Types	--	0.003
Nonpoint	2401090000	Surface Coating /Misc Manufacturing /Total: All Solvent Types	--	0.05
Nonpoint	2401100000	Surface Coating /Industrial Maintenance Coatings /Total: All Solvent Types	--	1.72
Nonpoint	2401200000	Surface Coating /Other Special Purpose Coatings /Total: All Solvent Types	--	0.82
Nonpoint	2415000000	Degreasing /All Processes/All Industries /Total: All Solvent Types	--	0.56
Nonpoint	2420000000	Dry Cleaning /All Processes /Total: All Solvent Types	--	0.02
Nonpoint	2425000000	Graphic Arts /All Processes /Total: All Solvent Types	--	2.16

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Nonpoint	2460030999	Misc Non-indus: Consumer & Comm /All Processes /Solvents: NEC	--	0.22
Nonpoint	2460100000	Misc Non-indus: Consumer & Comm /All Personal Care Products /Total: All Solvent Types	--	15.58
Nonpoint	2460200000	Misc Non-indus: Consumer & Comm /All Household Products /Total: All Solvent Types	--	11.75
Nonpoint	2460400000	Misc Non-indus: Consumer & Comm /All Auto Aftermarket Products /Total: All Solvent Types	--	1.59
Nonpoint	2460500000	Misc Non-indus: Consumer & Comm /All Coatings & Related Products /Total: All Solvent Types	--	15.58
Nonpoint	2460600000	Misc Non-indus: Consumer & Comm /All Adhesives & Sealants /Total: All Solvent Types	--	10.06
Nonpoint	2460800000	Misc Non-indus: Consumer & Comm /All FIFRA Related Products /Total: All Solvent Types	--	0.44
Nonpoint	2460900000	Misc Non-indus: Consumer & Comm /Misc Products (Not Otherwise Covered) /Total: All Solvent Types	--	0.22
Nonpoint	2461021000	Misc Non-industrial: Commercial /Cutback Asphalt /Total: All Solvent Types	--	0.44
Nonpoint	2461022000	Misc Non-industrial: Commercial /Emulsified Asphalt /Total: All Solvent Types	--	11.38
Nonpoint	2461025100	Misc Non-industrial: Commercial /Hot Mix Asphalt /Total: All Solvent Types	--	3.91
Nonpoint	2461850000	Misc Non-industrial: Commercial /Pesticide Application: Agricultural /All Processes	--	0.32
Nonpoint	2501011011	Residential Portable Gas Cans /Permeation	--	0.07
Nonpoint	2501011012	Residential Portable Gas Cans /Evaporation (includes Diurnal losses)	--	0.08
Nonpoint	2501011014	Residential Portable Gas Cans /Refilling at the Pump - Vapor Displacement	--	0.01
Nonpoint	2501012011	Commercial Portable Gas Cans /Permeation	--	0.01
Nonpoint	2501012012	Commercial Portable Gas Cans /Evaporation (includes Diurnal losses)	--	0.01
Nonpoint	2501012014	Commercial Portable Gas Cans /Refilling at the Pump - Vapor Displacement	--	0.02
Nonpoint	2505030120	Petrol & Petrol Product Transport /Truck /Gasoline	--	0.06

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Nonpoint	2610000500	Open Burning /All Categories /Land Clearing Debris (use 28-10-005-000 for Logging Debris Burning)	0.23	0.66
Nonpoint	2610030000	Open Burning /Residential /Household Waste (use 26-10-000-xxx for Yard Wastes)	0.59	0.61
Nonpoint	2630020000	Wastewater Treatment /Public Owned /Total Processed	--	0.06
Nonpoint	2802004001	Ag Silage - Storage	--	8.98
Nonpoint	2802004002	Ag Silage - Mixing	--	0.67
Nonpoint	2802004003	Ag Silage - Feeding	--	6.55
Nonpoint	2805002000	Agric - Livestock /Beef cattle production composite /Not Elsewhere Classified	--	0.45
Nonpoint	2805007100	Agric - Livestock /Poultry production - layers with dry manure management systems /Confinement	--	0.02
Nonpoint	2805009100	Agric - Livestock /Poultry production - broilers /Confinement	--	0.002
Nonpoint	2805010100	Agric - Livestock /Poultry production - turkeys /Confinement	--	0.0002
Nonpoint	2805018000	Agric - Livestock /Dairy cattle composite /Not Elsewhere Classified	--	6.09
Nonpoint	2805025000	Agric - Livestock /Swine production composite /Not Elsewhere Classified (see also 28-05-039, -047, -053)	--	0.0004
Nonpoint	2805035000	Agric - Livestock /Horses & Ponies Waste Emissions /Not Elsewhere Classified	--	0.10
Nonpoint	2805040000	Agric - Livestock /Sheep & Lambs Waste Emissions /Total	--	0.02
Nonpoint	2805045000	Agric - Livestock /Goats Waste Emissions /Not Elsewhere Classified	--	0.01
Nonpoint	2810025000	Charcoal Grilling - Residential /Total	0.03	0.07
Nonpoint	2810060100	Cremation /Humans	0.01	0.0005
Nonpoint	2810060200	Cremation /Animals	0.000001	0.000001
Onroad	2201110080	Mobile-Motorcycle-Gas	0.43	1.72
Onroad	2201210080	Mobile-Passenger Car-Gas	4.73	6.59
Onroad	2201310080	Mobile-Passenger Truck-Gas	14.30	10.97
Onroad	2201320080	Mobile-Light Commercial Truck-Gas	1.07	0.80
Onroad	2201420080	Mobile-Transit Bus-Gas	0.02	0.01
Onroad	2201430080	Mobile-School Bus-Gas	0.03	0.01
Onroad	2201510080	Mobile-Refuse Truck-Gas	0.002	0.001
Onroad	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.79	0.54

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Onroad	2201530080	Mobile-Single Unit Long-haul Truck-Gas	0.13	0.08
Onroad	2201540080	Mobile-Motor Home-Gas	0.11	0.12
Onroad	2201610080	Mobile-Combination Short-haul Truck-Gas	0.18	0.06
Onroad	2202210080	Mobile-Passenger Car-Diesel	0.04	0.02
Onroad	2202310080	Mobile-Passenger Truck-Diesel	3.89	0.61
Onroad	2202320080	Mobile-Light Commercial Truck-Diesel	0.44	0.06
Onroad	2202420080	Mobile-Transit Bus-Diesel	0.60	0.04
Onroad	2202430080	Mobile-School Bus-Diesel	1.32	0.13
Onroad	2202510080	Mobile-Refuse Truck-Diesel	0.33	0.02
Onroad	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	9.24	0.75
Onroad	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	1.24	0.09
Onroad	2202540080	Mobile-Motor Home-Diesel	0.12	0.01
Onroad	2202610080	Mobile-Combination Short-haul Truck-Diesel	31.70	1.25
Onroad	2202620080	Mobile-Combination Long-haul Truck-Diesel	40.34	1.52
Onroad	2203520080	Mobile-Single Unit Short-haul Truck-CNG	0.01	0.005
Onroad	2203530080	Mobile-Single Unit Long-haul Truck-CNG	0.003	0.002
Onroad	2205210080	Mobile-Passenger Car-E85	0.001	0.002
Onroad	2205310080	Mobile-Passenger Truck-E85	0.01	0.01
Onroad	2205320080	Mobile-Light Commercial Truck-E85	0.001	0.001
Nonroad	2260001022	Off-highway Gasoline, 2-Stroke /Recreational Equipt /2-Stroke Other Recreational Equip.	0.0004	0.02
Nonroad	2260001060	Off-highway Gasoline, 2-Stroke /Recreational Equipt /Specialty Vehicles/Carts	0.001	0.01
Nonroad	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	0.02	0.78
Nonroad	2260003022	Off-highway Gasoline, 2-Stroke /Industrial Equipt /2-Stroke Industrial Equipment	0.00004	0.001
Nonroad	2260004020	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Residential)	0.005	0.16
Nonroad	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	0.01	0.47
Nonroad	2260004022	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.000005	0.0001
Nonroad	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Residential)	0.02	0.60

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Nonroad	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eq (Commercial)	0.02	0.50
Nonroad	2260005022	Off-highway Gasoline, 2-Stroke /Agricultural Equipt /2-Stroke Agriculture Equipment	0.00002	0.0005
Nonroad	2260006022	Off-highway Gasoline, 2-Stroke /Commercial Equipt /2-Stroke Commercial Equipment	0.004	0.11
Nonroad	2265001022	Off-highway Gasoline, 4-Stroke /Recreational Equipt /4-Stroke Other Recreational Equip.	0.001	0.01
Nonroad	2265001060	Off-highway Gasoline, 4-Stroke /Recreational Equipt /Specialty Vehicles/Carts	0.002	0.01
Nonroad	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.12	0.39
Nonroad	2265003022	Off-highway Gasoline, 4-Stroke /Industrial Equipt /4-Stroke Industrial Equipment	0.02	0.03
Nonroad	2265003060	Off-highway Gasoline, 4-Stroke /Industrial Equipt /AC\Refrigeration	0.0004	0.001
Nonroad	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eq (Commercial)	0.14	0.42
Nonroad	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Residential)	0.37	2.52
Nonroad	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Commercial)	0.07	0.35
Nonroad	2265005022	Off-highway Gasoline, 4-Stroke /Agricultural Equipt /4-Stroke Agriculture Equipment	0.01	0.02
Nonroad	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.19	0.75
Nonroad	2267001060	Off-highway LPG /Recreational Equipt /Specialty Vehicles/Carts	0.0003	0.0001
Nonroad	2267002022	Off-highway LPG /Construction & Mining Equipt /LPG Construction Equipment	0.02	0.002
Nonroad	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.14	0.02
Nonroad	2267004044	Off-highway LPG /Lawn & Garden Equipt /LPG Lawn & Garden Eq (Commercial)	0.002	0.0002
Nonroad	2267005022	Off-highway LPG /Agricultural Equipt /LPG Agriculture Equipment	0.00003	0.00001

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)
Nonroad	2267006022	Off-highway LPG /Commercial Equipt /LPG Commercial Equipment	0.04	0.01
Nonroad	2268002022	Off-highway CNG /Construction & Mining Equipt /CNG Construction Equipment	0.0001	0.00004
Nonroad	2268003022	Off-highway CNG /Industrial Equipt /CNG Industrial Equipment	0.01	0.01
Nonroad	2268003060	Off-highway CNG /Industrial Equipt /AC\Refrigeration	0.0001	0.00004
Nonroad	2268005022	Off-highway CNG /Agricultural Equipt /CNG Agriculture Equipment	0.0004	0.0002
Nonroad	2268006022	Off-highway CNG /Commercial Equipt /CNG Commercial Equipment	0.02	0.01
Nonroad	2270001060	Off-highway Diesel /Recreational Equipt /Specialty Vehicles/Carts	0.004	0.001
Nonroad	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	7.35	0.55
Nonroad	2270003022	Off-highway Diesel /Industrial Equipt /Diesel Industrial Equipment	0.13	0.01
Nonroad	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	0.53	0.02
Nonroad	2270004022	Off-highway Diesel /Lawn & Garden Equipt /Diesel Mowers, Tractors, Turf Eq (Commercial)	0.02	0.001
Nonroad	2270004044	Off-highway Diesel /Lawn & Garden Equipt /Diesel Lawn & Garden Eq (Commercial)	0.14	0.01
Nonroad	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	0.47	0.04
Nonroad	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	0.49	0.05
Nonroad	2285002015	Railroad Equipt /Diesel /Railway Maintenance	0.12	0.02
Nonroad	2285004015	Railroad Equipt /Gasoline, 4-Stroke /Railway Maintenance	0.002	0.01
Nonroad	2285006015	Railroad Equipt /LPG /Railway Maintenance	0.0001	0.00002
<b>Totals</b>			<b>904.14</b>	<b>209.23</b>

### 5.3 Calculating Ozone Season Daily Emissions

This section discusses the calculation method for developing ozone season daily emissions. The general approach is to review each source category, and to determine if the emissions are different during the summer ozone season. For example, nearly all residences in Sunland Park would not heat their homes from June through August using a fireplace, and thus would have

negligible emissions during that time period. Alternatively, most residences would use lawn and garden equipment more during the June through August timeframe, as opposed to other times in the year.

The approach to calculating the ozone season daily emissions, is as follows:

- 1) Convert the tons per year emissions estimates to pounds per day (lb/day) by multiplying by 2000 and dividing by 366
- 2) Evaluate each source category to determine if the emissions occur year-round with little seasonal variability, if the source category would not occur from June 1 through August 31, if the source category would be reduced from June 1 through August 31, or if the source category would increase from June 1 through August 31.

The following source categories were recommended to be zeroed out (i.e., not typically occurring between June 1 through August 31):

- Residential heating at fireplaces and woodstoves: SCCs 2104008100, 2104008210, 2104008220, 2104008230, 2104008310, 2104008320, 2104008330, 2104008400, 2104008510, 2104008530, 2104008610, 2104008620, 2104008630, 2104008700, and 2104009000
- Agricultural Livestock Waste: SCCs 2805002000, 2805007100, 2805009100, 2805010100, 2805018000, 2805025000, 2805035000, 2805040000, and 2805045000

The following source categories were recommended to be cut in half from June 1 through August 31:

- School Buses using Diesel and Gas: SCCs 2201430080 and 2202430080

The following source categories were recommended a 25% increase from June 1 through August 31:

- Residential Portable Fuel Cans: SCCs 2501011011, 2501011012, and 2501011014
- Commercial Portable Fuel Cans: SCCs 2501012011, 2501012012, and 2501012014
- Gasoline-powered Lawn and Garden Equipment (2-stroke): SCCs 2260004020, 2260004021, 2260004022, 2260004033, 2260004044, 2260006022
- Gasoline-powered Lawn and Garden Equipment (4-stroke): SCCs 2265001022, 2265004022, 2265004033, 2265006044
- LPG-powered Land and Garden Equipment: SCC 2267004044
- Diesel-powered Lawn and Garden Equipment: SCCs 2270004022 and 2270004044

Table 5-6 presents the annual emissions, the Ozone Season Daily Fraction, and the final Ozone Season Daily emissions.

Table 5-6. Ozone Season Daily Emissions by SCC

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
POINT	10100601	Ext Comb /Electric Gen /Natural Gas /Boilers: 100 Million Btu/hr except Tangential	690.75	19.18	1.00	3,774.58	104.83
POINT	20100201	Int Comb /Electric Gen /Natural Gas /Turbine	14.09	2.95	1.00	76.99	16.10
POINT	20100802	Int Comb /Electric Gen /Landfill Gas /Reciprocating	34.50	5.90	1.00	188.52	32.24
POINT	20200102	Int Comb /Industrial /Distillate Oil (Diesel) /Reciprocating	0.01	--	1.00	0.05	--
POINT	20200202	Int Comb /Industrial /Natural Gas /Reciprocating	0.04	0.003	1.00	0.22	0.02
POINT	31000205	Natural Gas Production /Flares	1.21	0.03	1.00	6.61	0.16
POINT	31088811	Oil&Gas Prod /Fugitive Emissions /Fugitive Emissions	--	1.05	1.00	--	5.74
POINT	50100402	Waste Disp-Govt /Landfill Dump /Fugitive Emissions	--	12.67	1.00	--	69.23
NONPOINT	2102002000	Stationary Fuel Comb /Industrial /Bituminous/Subbituminous Coal /Total: All Boiler Types	0.53	0.002	1.00	2.87	0.01
NONPOINT	2102004001	Stationary Fuel Comb /Industrial /Distillate Oil /Total: Boilers	0.10	0.001	1.00	0.53	0.01
NONPOINT	2102004002	Stationary Fuel Comb /Industrial /Distillate Oil /Total: IC Engines	1.95	0.14	1.00	10.64	0.74
NONPOINT	2102006000	Stationary Fuel Comb /Industrial /Natural Gas /Total: Boilers and IC Engines	2.13	0.12	1.00	11.64	0.64

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONPOINT	2102007000	Stationary Fuel Comb /Industrial /Liquified Petroleum Gas /Total: All Boiler Types	0.06	0.002	1.00	0.34	0.01
NONPOINT	2102008000	Stationary Fuel Comb /Industrial /Wood /Total: All Boiler Types	0.003	0.0002	1.00	0.02	0.001
NONPOINT	2103007000	Stationary Fuel Comb /Commercial/Institutional /Liquified Petroleum Gas /Total: All Combustor Types	0.15	0.01	1.00	0.80	0.03
NONPOINT	2103008000	Stationary Fuel Comb /Commercial/Institutional /Wood /Total: All Boiler Types	0.28	0.02	1.00	1.52	0.12
NONPOINT	2103011000	Stationary Fuel Comb /Commercial/Institutional /Kerosene /Total: All Combustor Types	0.001	0.00001	1.00	0.003	0.0001
NONPOINT	2104006000	Stationary Fuel Comb /Residential /Natural Gas /Total: All Combustor Types	6.80	0.40	1.00	37.16	2.17
NONPOINT	2104007000	Stationary Fuel Comb /Residential /Liquified Petroleum Gas /Total: All Combustor Types	0.25	0.01	1.00	1.36	0.05
NONPOINT	2104008100	Stationary Fuel Comb /Residential /Wood /Fireplace: general	0.67	4.86	0.00	0	0
NONPOINT	2104008210	Stationary Fuel Comb /Residential /Wood /Woodstove: fireplace inserts; non-EPA certified	0.10	1.98	0.00	0	0
NONPOINT	2104008220	Stationary Fuel Comb /Residential /Wood /Woodstove: fireplace inserts; EPA certified; non-catalytic	0.08	0.59	0.00	0	0

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONPOINT	2104008230	Stationary Fuel Comb /Residential /Wood /Woodstove: fireplace inserts; EPA certified; catalytic	0.07	0.51	0.00	0	0
NONPOINT	2104008310	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, non-EPA certified	0.39	7.45	0.00	0	0
NONPOINT	2104008320	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, EPA certified, non-catalytic	0.31	2.23	0.00	0	0
NONPOINT	2104008330	Stationary Fuel Comb /Residential /Wood /Woodstove: freestanding, EPA certified, catalytic	0.25	1.90	0.00	0	0
NONPOINT	2104008400	Stationary Fuel Comb /Residential /Wood /Woodstove: pellet-fired, general (freestanding or FP insert)	0.09	0.05	0.00	0	0
NONPOINT	2104008510	Stationary Fuel Comb /Residential /Wood /Furnace: Indoor, cordwood-fired, non-EPA certified	0.05	0.33	0.00	0	0
NONPOINT	2104008530	Stationary Fuel Comb /Residential /Wood /Furnace: Indoor, pellet-fired, general	0.01	0.01	0.00	0	0
NONPOINT	2104008610	Stationary Fuel Comb /Residential /Wood /Hydronic heater: outdoor	0.06	1.87	0.00	0	0
NONPOINT	2104008620	Stationary Fuel Comb /Residential /Wood /Hydronic heater: indoor	0.03	1.18	0.00	0	0
NONPOINT	2104008630	Stationary Fuel Comb /Residential /Wood /Hydronic heater: pellet-fired	0.003	0.002	0.00	0	0

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONPOINT	2104008700	Stationary Fuel Comb /Residential /Wood /Outdoor wood burning device, NEC (fire-pits, chimneys, etc.)	0.40	2.87	0.00	0	0
NONPOINT	2104009000	Stationary Fuel Comb /Residential /Firelog /Total: All Combustor Types	0.10	0.49	0.00	0	0
NONPOINT	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	24.09	0.97	1.00	131.65	5.30
NONPOINT	2285002007	Railroad Equipment /Diesel /Line Haul Locomotives: Class II / III Operations	0.28	0.01	1.00	1.54	0.07
NONPOINT	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.92	0.10	1.00	10.49	0.56
NONPOINT	2302002100	Food & Kindred Products /Commercial Cooking - Charbroiling /Conveyorized Charbroiling	--	0.11	1.00	--	0.57
NONPOINT	2302002200	Food & Kindred Products /Commercial Cooking - Charbroiling /Under-fired Charbroiling	--	0.35	1.00	--	1.89
NONPOINT	2302003000	Food & Kindred Products /Commercial Cooking - Frying /Deep Fat Frying	--	0.07	1.00	--	0.36
NONPOINT	2302003100	Food & Kindred Products /Commercial Cooking - Frying /Flat Griddle Frying	--	0.05	1.00	--	0.25
NONPOINT	2302003200	Food & Kindred Products /Commercial Cooking - Frying /Clamshell Griddle Frying	--	0.002	1.00	--	0.01
NONPOINT	2401001000	Surface Coating /Architectural Coatings /Total: All Solvent Types	--	3.37	1.00	--	18.42
NONPOINT	2401005000	Surface Coating /Auto Refinishing /Total: All Solvent Types	--	0.34	1.00	--	1.87

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONPOINT	2401008000	Surface Coating /Traffic Markings /Total: All Solvent Types	--	0.20	1.00	--	1.09
NONPOINT	2401015000	Surface Coating /Factory Finished Wood /Total: All Solvent Types	--	0.01	1.00	--	0.05
NONPOINT	2401020000	Surface Coating /Wood Furniture /Total: All Solvent Types	--	0.07	1.00	--	0.36
NONPOINT	2401055000	Surface Coating /Machinery & Equipment /Total: All Solvent Types	--	0.01	1.00	--	0.06
NONPOINT	2401065000	Surface Coating /Electronic & Other Electrical /Total: All Solvent Types	--	0.09	1.00	--	0.52
NONPOINT	2401070000	Surface Coating /Motor Vehicles /Total: All Solvent Types	--	0.003	1.00	--	0.01
NONPOINT	2401090000	Surface Coating /Misc Manufacturing /Total: All Solvent Types	--	0.05	1.00	--	0.25
NONPOINT	2401100000	Surface Coating /Industrial Maintenance Coatings /Total: All Solvent Types	--	1.72	1.00	--	9.39
NONPOINT	2401200000	Surface Coating /Other Special Purpose Coatings /Total: All Solvent Types	--	0.82	1.00	--	4.48
NONPOINT	2415000000	Degreasing /All Processes/All Industries /Total: All Solvent Types	--	0.56	1.00	--	3.06
NONPOINT	2420000000	Dry Cleaning /All Processes /Total: All Solvent Types	--	0.02	1.00	--	0.08
NONPOINT	2425000000	Graphic Arts /All Processes /Total: All Solvent Types	--	2.16	1.00	--	11.80
NONPOINT	2460030999	Misc Non-indus: Consumer & Comm /All Processes /Solvents: NEC	--	0.22	1.00	--	1.19
NONPOINT	2460100000	Misc Non-indus: Consumer & Comm /All Personal Care Products /Total: All Solvent Types	--	15.58	1.00	--	85.12

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONPOINT	2460200000	Misc Non-indus: Consumer & Comm /All Household Products /Total: All Solvent Types	--	11.75	1.00	--	64.22
NONPOINT	2460400000	Misc Non-indus: Consumer & Comm /All Auto Aftermarket Products /Total: All Solvent Types	--	1.59	1.00	--	8.66
NONPOINT	2460500000	Misc Non-indus: Consumer & Comm /All Coatings & Related Products /Total: All Solvent Types	--	15.58	1.00	--	85.12
NONPOINT	2460600000	Misc Non-indus: Consumer & Comm /All Adhesives & Sealants /Total: All Solvent Types	--	10.06	1.00	--	54.96
NONPOINT	2460800000	Misc Non-indus: Consumer & Comm /All FIFRA Related Products /Total: All Solvent Types	--	0.44	1.00	--	2.39
NONPOINT	2460900000	Misc Non-indus: Consumer & Comm /Misc Products (Not Otherwise Covered) /Total: All Solvent Types	--	0.22	1.00	--	1.19
NONPOINT	2461021000	Misc Non-industrial: Commercial /Cutback Asphalt /Total: All Solvent Types	--	0.44	1.00	--	2.41
NONPOINT	2461022000	Misc Non-industrial: Commercial /Emulsified Asphalt /Total: All Solvent Types	--	11.38	1.00	--	62.20
NONPOINT	2461025100	Misc Non-industrial: Commercial /Hot Mix Asphalt /Total: All Solvent Types	--	3.91	1.00	--	21.34
NONPOINT	2461850000	Misc Non-industrial: Commercial /Pesticide Application: Agricultural /All Processes	--	0.32	1.00	--	1.77

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONPOINT	2501011011	Residential Portable Gas Cans /Permeation	--	0.07	1.25	--	0.47
NONPOINT	2501011012	Residential Portable Gas Cans /Evaporation (includes Diurnal losses)	--	0.08	1.25	--	0.53
NONPOINT	2501011014	Residential Portable Gas Cans /Refilling at the Pump - Vapor Displacement	--	0.01	1.25	--	0.04
NONPOINT	2501012011	Commercial Portable Gas Cans /Permeation	--	0.01	1.25	--	0.04
NONPOINT	2501012012	Commercial Portable Gas Cans /Evaporation (includes Diurnal losses)	--	0.01	1.25	--	0.04
NONPOINT	2501012014	Commercial Portable Gas Cans /Refilling at the Pump - Vapor Displacement	--	0.02	1.25	--	0.15
NONPOINT	2505030120	Petrol & Petrol Product Transport /Truck /Gasoline	--	0.06	1.00	--	0.34
NONPOINT	2610000500	Open Burning /All Categories /Land Clearing Debris (use 28-10-005-000 for Logging Debris Burning)	0.23	0.66	1.00	1.28	3.60
NONPOINT	2610030000	Open Burning /Residential /Household Waste (use 26-10-000-xxx for Yard Wastes)	0.59	0.61	1.00	3.21	3.34
NONPOINT	2630020000	Wastewater Treatment /Public Owned /Total Processed	--	0.06	1.00	--	0.31
NONPOINT	2802004001	Ag Silage - Storage	--	8.98	1.00	--	49.07
NONPOINT	2802004002	Ag Silage - Mixing	--	0.67	1.00	--	3.68
NONPOINT	2802004003	Ag Silage - Feeding	--	6.55	1.00	--	35.79
NONPOINT	2805002000	Agric - Livestock /Beef cattle production composite /Not Elsewhere Classified	--	0.45	0.00	--	--

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONPOINT	2805007100	Agric - Livestock /Poultry production - layers with dry manure management systems /Confinement	--	0.02	0.00	--	--
NONPOINT	2805009100	Agric - Livestock /Poultry production - broilers /Confinement	--	0.002	0.00	--	--
NONPOINT	2805010100	Agric - Livestock /Poultry production - turkeys /Confinement	--	0.0002	0.00	--	--
NONPOINT	2805018000	Agric - Livestock /Dairy cattle composite /Not Elsewhere Classified	--	6.09	0.00	--	--
NONPOINT	2805025000	Agric - Livestock /Swine production composite /Not Elsewhere Classified (see also 28-05-039, -047, -053)	--	0.0004	0.00	--	--
NONPOINT	2805035000	Agric - Livestock /Horses & Ponies Waste Emissions /Not Elsewhere Classified	--	0.10	0.00	--	--
NONPOINT	2805040000	Agric - Livestock /Sheep & Lambs Waste Emissions /Total	--	0.02	0.00	--	--
NONPOINT	2805045000	Agric - Livestock /Goats Waste Emissions /Not Elsewhere Classified	--	0.01	0.00	--	--
NONPOINT	2810025000	Charcoal Grilling - Residential /Total	0.03	0.07	1.00	0.14	0.38
NONPOINT	2810060100	Cremation /Humans	0.01	0.0005	1.00	0.03	0.003
NONPOINT	2810060200	Cremation /Animals	0.000001	0.0000001	1.00	0.00001	0.0000004
ONROAD	2201110080	Mobile-Motorcycle-Gas	0.43	1.72	1.00	2.34	9.41
ONROAD	2201210080	Mobile-Passenger Car-Gas	4.73	6.59	1.00	25.84	36.00
ONROAD	2201310080	Mobile-Passenger Truck-Gas	14.30	10.97	1.00	78.12	59.92
ONROAD	2201320080	Mobile-Light Commercial Truck-Gas	1.07	0.80	1.00	5.82	4.39
ONROAD	2201420080	Mobile-Transit Bus-Gas	0.02	0.01	1.00	0.11	0.05
ONROAD	2201430080	Mobile-School Bus-Gas	0.03	0.01	0.50	0.07	0.03

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
ONROAD	2201510080	Mobile-Refuse Truck-Gas	0.002	0.001	1.00	0.01	0.003
ONROAD	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.79	0.54	1.00	4.33	2.95
ONROAD	2201530080	Mobile-Single Unit Long-haul Truck-Gas	0.13	0.08	1.00	0.70	0.44
ONROAD	2201540080	Mobile-Motor Home-Gas	0.11	0.12	1.00	0.59	0.67
ONROAD	2201610080	Mobile-Combination Short-haul Truck-Gas	0.18	0.06	1.00	0.96	0.33
ONROAD	2202210080	Mobile-Passenger Car-Diesel	0.04	0.02	1.00	0.21	0.11
ONROAD	2202310080	Mobile-Passenger Truck-Diesel	3.89	0.61	1.00	21.24	3.32
ONROAD	2202320080	Mobile-Light Commercial Truck-Diesel	0.44	0.06	1.00	2.42	0.34
ONROAD	2202420080	Mobile-Transit Bus-Diesel	0.60	0.04	1.00	3.30	0.21
ONROAD	2202430080	Mobile-School Bus-Diesel	1.32	0.13	0.50	3.60	0.35
ONROAD	2202510080	Mobile-Refuse Truck-Diesel	0.33	0.02	1.00	1.80	0.10
ONROAD	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	9.24	0.75	1.00	50.48	4.10
ONROAD	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	1.24	0.09	1.00	6.78	0.49
ONROAD	2202540080	Mobile-Motor Home-Diesel	0.12	0.01	1.00	0.65	0.06
ONROAD	2202610080	Mobile-Combination Short-haul Truck-Diesel	31.70	1.25	1.00	173.24	6.82
ONROAD	2202620080	Mobile-Combination Long-haul Truck-Diesel	40.34	1.52	1.00	220.42	8.30
ONROAD	2203520080	Mobile-Single Unit Short-haul Truck-CNG	0.01	0.005	1.00	0.03	0.03
ONROAD	2203530080	Mobile-Single Unit Long-haul Truck-CNG	0.003	0.002	1.00	0.01	0.01
ONROAD	2205210080	Mobile-Passenger Car-E85	0.001	0.002	1.00	0.01	0.01

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
ONROAD	2205310080	Mobile-Passenger Truck-E85	0.01	0.01	1.00	0.04	0.05
ONROAD	2205320080	Mobile-Light Commercial Truck-E85	0.001	0.001	1.00	0.004	0.01
NONROAD	2260001022	Off-highway Gasoline, 2-Stroke /Recreational Equipt /2-Stroke Other Recreational Equip.	0.0004	0.02	1.00	0.002	0.13
NONROAD	2260001060	Off-highway Gasoline, 2-Stroke /Recreational Equipt /Specialty Vehicles/Carts	0.001	0.01	1.00	0.01	0.03
NONROAD	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	0.02	0.78	1.00	0.11	4.28
NONROAD	2260003022	Off-highway Gasoline, 2-Stroke /Industrial Equipt /2-Stroke Industrial Equipment	0.00004	0.001	1.00	0.0002	0.005
NONROAD	2260004020	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Residential)	0.005	0.16	1.25	0.03	1.11
NONROAD	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	0.01	0.47	1.25	0.07	3.22
NONROAD	2260004022	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Mowers, Tractors, Turf Eq (Commercial)	0.000005	0.0001	1.25	0.00003	0.001
NONROAD	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eq (Residential)	0.02	0.60	1.25	0.14	4.13
NONROAD	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eq (Commercial)	0.02	0.50	1.25	0.13	3.40

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONROAD	2260005022	Off-highway Gasoline, 2-Stroke /Agricultural Equipt /2-Stroke Agriculture Equipment	0.00002	0.0005	1.00	0.0001	0.003
NONROAD	2260006022	Off-highway Gasoline, 2-Stroke /Commercial Equipt /2-Stroke Commercial Equipment	0.004	0.11	1.25	0.03	0.74
NONROAD	2265001022	Off-highway Gasoline, 4-Stroke /Recreational Equipt /4-Stroke Other Recreational Equip.	0.001	0.01	1.25	0.01	0.09
NONROAD	2265001060	Off-highway Gasoline, 4-Stroke /Recreational Equipt /Specialty Vehicles/Carts	0.002	0.01	1.00	0.01	0.03
NONROAD	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.12	0.39	1.00	0.68	2.14
NONROAD	2265003022	Off-highway Gasoline, 4-Stroke /Industrial Equipt /4-Stroke Industrial Equipment	0.02	0.03	1.00	0.14	0.19
NONROAD	2265003060	Off-highway Gasoline, 4-Stroke /Industrial Equipt /AC\Refrigeration	0.0004	0.001	1.00	0.002	0.01
NONROAD	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eq (Commercial)	0.14	0.42	1.25	0.97	2.88
NONROAD	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Residential)	0.37	2.52	1.25	2.49	17.24
NONROAD	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eq (Commercial)	0.07	0.35	1.25	0.49	2.42

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONROAD	2265005022	Off-highway Gasoline, 4-Stroke /Agricultural Equipt /4-Stroke Agriculture Equipment	0.01	0.02	1.00	0.06	0.10
NONROAD	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.19	0.75	1.00	1.05	4.10
NONROAD	2267001060	Off-highway LPG /Recreational Equipt /Specialty Vehicles/Carts	0.0003	0.0001	1.00	0.002	0.0003
NONROAD	2267002022	Off-highway LPG /Construction & Mining Equipt /LPG Construction Equipment	0.02	0.002	1.00	0.08	0.01
NONROAD	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.14	0.02	1.00	0.79	0.10
NONROAD	2267004044	Off-highway LPG /Lawn & Garden Equipt /LPG Lawn & Garden Eq (Commercial)	0.002	0.0002	1.25	0.01	0.002
NONROAD	2267005022	Off-highway LPG /Agricultural Equipt /LPG Agriculture Equipment	0.00003	0.00001	1.00	0.0001	0.00003
NONROAD	2267006022	Off-highway LPG /Commercial Equipt /LPG Commercial Equipment	0.04	0.01	1.00	0.21	0.03
NONROAD	2268002022	Off-highway CNG /Construction & Mining Equipt /CNG Construction Equipment	0.0001	0.00004	1.00	0.0004	0.0002
NONROAD	2268003022	Off-highway CNG /Industrial Equipt /CNG Industrial Equipment	0.01	0.01	1.00	0.06	0.03
NONROAD	2268003060	Off-highway CNG /Industrial Equipt /ACRefrigeration	0.0001	0.00004	1.00	0.0005	0.0002
NONROAD	2268005022	Off-highway CNG /Agricultural Equipt /CNG Agriculture Equipment	0.0004	0.0002	1.00	0.002	0.001

Sector	SCC	SCC Description	NO <sub>x</sub> Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO <sub>x</sub> Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
NONROAD	2268006022	Off-highway CNG /Commercial Equipmt /CNG Commercial Equipment	0.02	0.01	1.00	0.11	0.06
NONROAD	2270001060	Off-highway Diesel /Recreational Equipmt /Specialty Vehicles/Carts	0.004	0.001	1.00	0.02	0.004
NONROAD	2270002022	Off-highway Diesel /Construction & Mining Equipmt /Diesel Construction Equipment	7.35	0.55	1.00	40.14	2.99
NONROAD	2270003022	Off-highway Diesel /Industrial Equipmt /Diesel Industrial Equipment	0.13	0.01	1.00	0.69	0.04
NONROAD	2270003060	Off-highway Diesel /Industrial Equipmt /AC\Refrigeration	0.53	0.02	1.00	2.91	0.13
NONROAD	2270004022	Off-highway Diesel /Lawn & Garden Equipmt /Diesel Mowers, Tractors, Turf Eqmt (Commercial)	0.02	0.001	1.25	0.11	0.01
NONROAD	2270004044	Off-highway Diesel /Lawn & Garden Equipmt /Diesel Lawn & Garden Eqmt (Commercial)	0.14	0.01	1.25	0.98	0.08
NONROAD	2270005022	Off-highway Diesel /Agricultural Equipmt /Diesel Agriculture Equipment	0.47	0.04	1.00	2.58	0.19
NONROAD	2270006022	Off-highway Diesel /Commercial Equipmt /Diesel Commercial Equipment	0.49	0.05	1.00	2.65	0.28
NONROAD	2285002015	Railroad Equipmt /Diesel /Railway Maintenance	0.12	0.02	1.00	0.65	0.10
NONROAD	2285004015	Railroad Equipmt /Gasoline, 4-Stroke /Railway Maintenance	0.002	0.01	1.00	0.01	0.04
NONROAD	2285006015	Railroad Equipmt /LPG /Railway Maintenance	0.0001	0.00002	1.00	0.001	0.0001
<b>Totals</b>			<b>904.14</b>	<b>209.23</b>		<b>4,923.74</b>	<b>969.82</b>

## 5.4 Final Emissions By Sector

Table 5-7 presents the final NO<sub>x</sub> emissions by Sector.

**Table 5-7. Final NO<sub>x</sub> Emissions By Sector**

Sector	Doña Ana County Emissions (tpy)	Sunland Park, NM Gridded Emissions <sup>6</sup> (tpy)	Sunland Park, NM Study Area Emissions (tpy)	Sunland Park, NM Study Area Ozone Season Daily Emissions (lb/day)
Point	1,155.22	740.60	740.60	4,046.97
Nonpoint Area	1,588.62	49.44	42.01	215.22
Onroad	3,590.66	122.55	111.04	603.13
Nonroad	430.87	14.02	10.49	58.42
<b>Total</b>	<b>6,765.36</b>	<b>926.61</b>	<b>904.14</b>	<b>4,923.74</b>

Table 5-8 presents the final VOC emissions by Sector.

**Table 5-8. Final VOC Emissions By Sector**

Sector	Doña Ana County Emissions (tpy)	Sunland Park, NM Gridded Emissions (tpy)	Sunland Park, NM Study Area Emissions (tpy)	Sunland Park, NM Study Area Ozone Season Daily Emissions (lb/day)
Point	114.84	41.78	41.78	282.32
Nonpoint Area	10,933.55	227.98	134.11	552.64
Onroad	1,206.00	31.05	25.41	138.49
Nonroad	311.27	13.92	7.92	50.36
<b>Total</b>	<b>12,565.66</b>	<b>314.73</b>	<b>209.23</b>	<b>969.82</b>

## 6.0 SUPPORTING CALCULATIONS

Supporting calculations and data tables are presented in Attachment A, entitled “ATTACHMENT\_A\_EMISSIONS\_SUNLAND\_PARK\_v2\_20230622”

<sup>6</sup> As described in Section 3.2.

**Attachment A**

**ATTACHMENT\_A\_EMISSIONS\_SUNLAND\_PARK\_v2\_20230622**