

2015 Ozone NAAQS – Sunland Park, New Mexico Ozone Nonattainment Area State Implementation Plan (SIP) Revision

Periodic Emissions Inventory for Sunland Park, New Mexico

Air Quality Bureau | 11/4/26 | Public Review Draft

Picture Courtesy of businessviewmagazine.com

The New Mexico Environment Department's Air Quality Bureau prepared this document. It is available at the website located at www.env.nm.gov/air-quality/ or in person at the address listed below. The Air Quality Bureau will accept public comments on this document from November 4, 2026, to December 11, 2026. The comment period has been extended due to an error in the title of the introductory document and accompanying explanation, but no changes were made to the inventory itself (Appendix B). Comments may include requests to hold a public hearing. 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
Phone: (505) 476-4600

DRAFT

Table of Contents

INTRODUCTION 1

OVERVIEW 1

Base Year 2023 Emissions Inventory Summary 2

EMISSIONS INVENTORY 2

APPENDICES 3

APPENDIX A PUBLIC COMMENT AND HEARING REQUEST NOTICE 4

APPENDIX B ERG EMISSIONS INVENTORY DOCUMENTATION REPORT 9

1.0 INTRODUCTION 1

2.0 INVENTORY SCOPE 1

2.1 Pollutants 1

2.2 Source Sector Types 1

2.3 Geographical Domain 1

2.4 Temporal Resolution 2

3.0 EMISSIONS INVENTORY DEVELOPMENT 2

3.1 Point Source Emissions 3

3.2 County-Level Emissions Allocation Procedure 3

3.2.1 Nonpoint Area Sources 5

3.2.2 Onroad Sources 8

3.2.3 Nonroad Sources 11

4.0 EMISSION INVENTORY ADJUSTMENTS 15

5.0 FINAL EMISSIONS 18

5.1 Final Nonpoint Area, Onroad, and Nonroad Source Emissions 18

5.2 Final Emissions By SCC 21

5.3 Calculating Ozone Season Daily Emissions 28

5.4 Final Emissions By Sector 40

6.0 SUPPORTING CALCULATIONS 41

DRAFT

INTRODUCTION

OVERVIEW

The New Mexico Environment Department (NMED) Air Quality Bureau contracted the Eastern Research Group, Inc. (ERG) to prepare this periodic emissions inventory for the tropospheric ozone precursors nitrogen oxides (NO_X) and volatile organic compounds (VOC). This submittal fulfills the statutory requirements promulgated in Title I of the federal Clean Air Act (CAA) sections 172(c)(3) and 182(a)(3)(A) for the portion of Doña Ana County failing 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 a marginal nonattainment area for the 2015 ozone standard (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).

Following a judicial remand in *Clean Wisconsin v. EPA*, the U.S. Environmental Protection Agency (EPA) expanded the nonattainment boundary to include neighboring El Paso County, Texas, officially renaming the region the El Paso-Las Cruces TX/NM Ozone Nonattainment Area effective December 30, 2021 (86 FR 67864). However, on June 30, 2023, the D.C. Circuit Court of Appeals ruled in favor of a petition filed by the State of Texas, reversing and vacating the EPA's nonattainment designation for El Paso County on the grounds that the multi-state expansion was impermissibly retroactive. As a result of this vacatur, El Paso County, Texas reverted back to its original attainment/unclassifiable status, and the standalone New Mexico portion of the Sunland Park nonattainment area was legally decoupled.

The periodic emissions inventory must be submitted every three years after the baseline inventory until the Sunland Park ozone nonattainment area is designated as attainment of the NAAQS. This State Implementation Plan (SIP) satisfies the recurring three-year periodic emissions inventory reporting cycle mandated by the CAA specifically for New Mexico's independent jurisdiction within the shared border airshed. This revision includes the updated periodic emissions inventory to meet the CAA requirements for New Mexico's portion of the historical El Paso-Las Cruces TX/NM ozone nonattainment area, including public comment and hearing request window launching October 31, 2026, as detailed in Appendix A.

Because ambient air monitoring confirms that the shared interstate air basin functions as a single physical airshed, preserving the refined spatial allocation data from the ERG modeling platform ensures maximum technical precision. The previous 2020 periodic emissions inventory was submitted and approved by EPA on October 11, 2024 (89 FR 82508). This inventory isolates and reports metrics strictly for the New Mexico geographic domain. However, the foundational multi-state data baseline remains scientifically valid for understanding the localized ambient precursor concentrations driving regional nonattainment.

DRAFT

Base Year 2023 Emissions Inventory Summary

The table below provides a comprehensive breakdown of the final annual and peak ozone season daily precursor emissions for the Sunland Park, New Mexico nonattainment domain, categorized by primary source sector types:

Sources	Annual NO_X Estimates (TPY)	Annual VOC Estimates (TPY)	Ozone Season Day NO_X (lbs./day)	Ozone Season Day VOC (lbs./day)
Point Sources	1,007.43	43.48	5,505	238
Area (Nonpoint) Sources	39.00	99.00	207	464
Mobile Sources	93.00	30.00	505	173
Total Inventory Output	**1,139.43**	**172.48**	**6,217 (3.11 TPD)**	**875 (0.44 TPD)**

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

APPENDIX A PUBLIC COMMENT AND HEARING REQUEST NOTICE

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 Ozone Nonattainment Area, as applicable to the 2015 ozone National Ambient Air Quality Standard ("NAAQS"). Specifically, NMED addresses Section 182(a)(3)(A) with 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 Sunland Park Ozone Nonattainment Area.

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 *New Mexico's proposed 2015 Ozone NAAQS – Sunland Park, New Mexico Ozone Nonattainment Area State Implementation Plan (SIP) 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 December 11, 2026. 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 *2015 Ozone NAAQS – Sunland Park, New Mexico Ozone Nonattainment Area State Implementation Plan (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/public-notices/.

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
(Office): (505) 629-3242
(Fax): (575) 526-6161

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, you may contact:

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

If you believe that you have been discriminated against with respect to an NMED program or activity, you may contact the Non-Discrimination coordinator identified above or visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination.

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 de Incumplimiento de Ozono de Sunland Park, Nuevo México, según se aplica al Estándar Nacional de Calidad del Aire Ambiental ("NAAQS" por sus siglas en inglés) de ozono de 2015. Específicamente, el NMED aborda la seccione 182(a)(3)(A) con respecto al inventario periódico de emisiones. 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_3 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 Incumplimiento 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 a más tardar el 11 de diciembre de 2026. 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 período 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/public-notices/.

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
(Office): (505) 629-3242
(Fax): (575) 526-6161

NMED no discrimina por motivos de raza, color, origen nacional, discapacidad, edad o sexo en la administración de sus programas o actividades, según lo exigen las leyes y regulaciones aplicables. NMED es responsable de la coordinación de los esfuerzos de cumplimiento y la recepción de consultas sobre los requisitos de no discriminación implementados por 40 C.F.R. Partes 5 y 7, incluido el Título VI de la Ley de Derechos Civiles de 1964, según enmendada; Sección 504 de la Ley de Rehabilitación de 1973; la Ley de Discriminación por Edad de 1975, el Título IX de las Enmiendas de Educación de 1972 y la Sección 13 de las Enmiendas de la Ley de Control de la Contaminación del Agua de 1972. Si tiene alguna pregunta sobre este aviso o alguno de los programas, políticas o procedimientos de no discriminación de NMED o si cree que ha sido discriminado con respecto a un programa o actividad de NMED, puede comunicarse con:

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

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.

APPENDIX B ERG EMISSIONS INVENTORY DOCUMENTATION REPORT

DEVELOPMENT OF THE YEAR 2023 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

Prepared by:

Eastern Research Group, Inc.
3800 Gateway Centre Boulevard, Suite 307
Morrisville, NC 27560

Prepared for:

New Mexico Environment Department
Harold Runnels Building
1190 St. Francis Drive, Suite N4050
Santa Fe, NM 87505

August 27, 2026

Table of Contents

1.0 INTRODUCTION 1
2.0 INVENTORY SCOPE 1
2.1 Pollutants 1
2.2 Source Sector Types 1
2.3 Geographical Domain 1
2.4 Temporal Resolution 2
3.0 EMISSIONS INVENTORY DEVELOPMENT 2
3.1 Point Source Emissions 3
3.2 County-Level Emissions Allocation Procedure 3
3.2.1 Nonpoint Area Sources 5
3.2.2 Onroad Sources 8
3.2.3 Nonroad Sources 11
4.0 EMISSION INVENTORY ADJUSTMENTS 15
5.0 FINAL EMISSIONS 18
5.1 Final Nonpoint Area, Onroad, and Nonroad Source Emissions 18
5.2 Final Emissions By SCC 21
5.3 Calculating Ozone Season Daily Emissions 28
5.4 Final Emissions By Sector 40
6.0 SUPPORTING CALCULATIONS 41

Attachment A: Attachment_A_Emissions_Sunland_Park_v1_20260821

DRAFT

List of Tables

Table 3-1. Sunland Park, NM Point Source 2023 Emissions 3
Table 3-2. Grid Apportionments for the Sunland Park, NM Study Area 4-km Grid Squares 5
Table 3-3. Top 10 Doña Ana County, NM 2023 Nonpoint Area NO_x Sources 5
Table 3-4. Top 10 Doña Ana County, NM 2023 Nonpoint Area VOC Sources 6
Table 3-5. Top 10 Sunland Park, NM Study 2023 Nonpoint Area NO_x Sources 7
Table 3-6. Top 10 Sunland Park, NM Study 2023 Nonpoint Area VOC Sources 8
Table 3-7. Top 10 Doña Ana County, NM 2023 Onroad NO_x Sources 9
Table 3-8. Top 10 Doña Ana County, NM 2023 Onroad VOC Sources 9
Table 3-9. Top 10 Sunland Park, NM Study Area 2023 Onroad NO_x Sources 11
Table 3-10. Top 10 Sunland Park, NM Study Area 2023 Onroad VOC Sources 11
Table 3-11. Top 10 Doña Ana County, NM 2023 Nonroad NO_x Sources 12
Table 3-12. Top 10 Doña Ana County, NM 2023 Nonroad VOC Sources 12
Table 3-13. Top 10 Sunland Park, NM Study Area 2023 Nonroad NO_x Sources 14
Table 3-14. Top 10 Sunland Park, NM Study Area 2023 Nonroad VOC Sources 15
Table 4-1. Emissions Inventory Considerations 16
Table 5-1. Top 10 Sunland Park, NM Study 2023 Nonpoint Area NO_x Sources, Final 18
Table 5-2. Top 10 Sunland Park, NM Study 2023 Nonpoint Area VOC Sources, Final 18
Table 5-3. Top 10 Sunland Park, NM Study 2023 Onroad NO_x Sources, Final 19
Table 5-4. Top 10 Sunland Park, NM Study 2023 Onroad VOC Sources, Final 19
Table 5-5. Top 10 Sunland Park, NM Study 2023 Nonroad NO_x Sources, Final 20
Table 5-6. Top 10 Sunland Park, NM Study 2023 Nonroad VOC Sources, Final 20
Table 5-7. 2023 Final Emissions by SCC 21
Table 5-8. 2023 Ozone Season Daily Emissions by SCC 30
Table 5-9. Final 2023 NO_x Emissions By Sector 40
Table 5-10. Final 2023 VOC Emissions By Sector 40
Table 5-11. Final 2023 NO_x Emissions By Sector 40
Table 5-12. Final 2023 VOC Emissions By Sector 41

List of Figures

Figure 2-1. Geographic Area of Interest 2
Figure 3-1. Sunland Park, NM 3
Figure 3-2. 4-km Grid Squares Overlaid on the Sunland Park, NM Ozone Nonattainment Area 4

DRAFT

Abbreviations, Acronyms, and Symbols

C&C	Commercial and consumer
CNG	Compressed natural gas
EGU	Electric generating unit
ERG	Eastern Research Group, Inc.
FIPS	Federal Information Processing System
HH	Hydronic heater
ICE	Internal combustion engine
lb/day	pounds per day
LPG	Liquified petroleum gas
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_x	Nitrogen oxides
O&G	Oil and gas
POTW	Publicly-owned treatment work
RFP	Reasonable further progress
RWC	Residential wood combustion
SIC	Standard Industrial Classification
SCC	Source classification code
TCEQ	Texas Commission on Environmental Quality
tpy	tons per year
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compounds

DRAFT

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_x), 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_x)
- 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, 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, primarily encompassing Sunland Park, NM. The specific geographic description of the nonattainment 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.*[1]

Figure 2-1 presents the study area.

[1] U.S. Greenbook. Website link: 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[2,3] for the 2023 base year. This matches the base year for the emissions inventory that TCEQ has developed for the El Paso, TX nonattainment portion.

3.0 EMISSIONS INVENTORY DEVELOPMENT

This section provides the procedure used to develop the 2023 Sunland Park, NM emissions inventory for the ozone nonattainment area. The starting point is the recently prepared 2023 National Emissions Inventory (NEI), which was submitted by NMED and quality-assured by U.S. Environmental Protection Agency (USEPA).[4] Sunland Park is a small portion of Doña Ana County, as presented in Figure 3-1. The Federal Information Processing System (FIPS) county code for Doña Ana County is 35013.

---

[2] Ozone season day emissions means an average day's emissions for a typical ozone season work weekday. The state shall select, subject to USEPA 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 Reasonable Further Progress (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

[3] 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, NMED is requesting an adjusted ozone season for the 3-month period from June 1 through August 31.

[4] 2023 National Emissions Inventory (NEI). Website link: https://gaftp.epa.gov/Air/nei/2023/flat_files/ and the USEPA's Emissions Inventory System (EIS) Gateway: https://www.epa.gov/air-emissions-inventories/emissions-inventory-system-eis-gateway

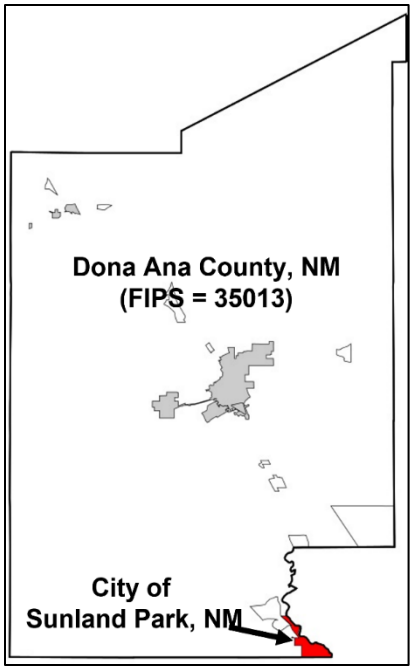


Figure 3-1. Sunland Park, NM

The 2023 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 2023 NEI identifies two point source facilities with NO_x or VOC emissions. Additionally, the USEPA's 2022v2 modeling platform identified a third facility with NO_x and VOC emissions in the study area (Four Peaks Energy Plant No. 1), and NMED provided updated 2023 emissions for this facility. These facilities are presented in Table 3-1.

Table 3-1. Sunland Park, NM Point Source 2023 Emissions

EIS Facility ID	NAICS Code	Facility Name	NO_x Emission (tpy)	VOC Emissions (tpy)
18874611	221112	Four Peaks Energy Plant No. 1	32.7	5.8
7581811	221112	Rio Grande Generating Station	969.258	26.45
7991011	562212	Camino Real Landfill	5.473	11.233
			1,007.43	**43.48**

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 USEPA.[5] At the time of the development of the Sunland Park, NM 2023 Ozone Nonattainment Emissions Inventory development, the USEPA has not released the 2023 spatial surrogates. The 2022v2 modeling platform spatial surrogates are the most recent publicly available spatial surrogates, which are used for development of this inventory.

As part of the 2022v2 emissions modeling platform, USEPA prepared a crosswalk of Source Classification Codes (SCCs) to spatial allocation factor surrogate files. Eastern Research Group, Inc. (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 USEPA'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 = 740455 (Grid Row = 479, Grid Column = 511)
- Grid ID = 740456 (Grid Row = 479, Grid Column = 512)
- Grid ID = 740457 (Grid Row = 479, Grid Column = 513)

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

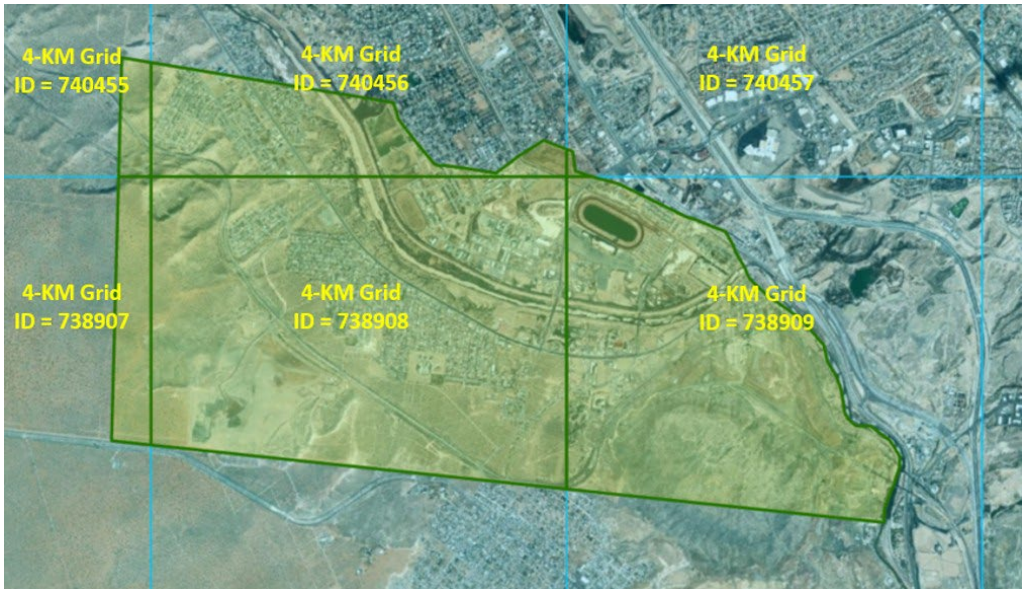


Figure 3-2. 4-km Grid Squares Overlaid on the Sunland Park, NM Ozone Nonattainment Area.

[5] 2022v2 Modeling Platform Spatial Surrogates. Website link: https://gaftp.epa.gov/Air/emismod/2022/v2/spatial_surrogates/CONUS4_2022v2_04apr2025_surrogates.zip

The 738908, 738909, and 740457 grid squares are completely within the study area, and do not need to be apportioned. However, the 738907, 740455, and 740456 grid squares are both in and 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
740455	0.020709
740456	0.447414
740457	1.000000

3.2.1 Nonpoint Area Sources

The starting point for the nonpoint area sources inventory is the 2023 NEI. Many of the estimates were developed through USEPA 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_x nonpoint area source emission sources, sorted by tons per year (tpy), for Doña Ana County, which account for almost 97% of the total NO_x nonpoint area source emissions.

Table 3-3. Top 10 Doña Ana County, NM 2023 Nonpoint Area NO_x Sources

Rank	SCC	SCC Description	Surrogate Spatial Code	NO_x Emissions (tpy)
1	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	271	806.25
2	2701220000	Biogenics: Vegetation and Agriculture Total	310	236.99
3	2104006000	Residential Heating: Natural Gas	150	168.59
4	2801700200	Fertilizer Application; Ag Biogenic Total	310	101.88
5	2102004002	Fuel Combustion; Industrial; Distillate Oil Engine	306	38.86
6	2104007000	Residential Heating: Liquified Petroleum Gas (LPG)	190	33.12

Rank	SCC	SCC Description	Surrogate Spatial Code	NO_x Emissions (tpy)
7	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	261	20.87
8	2102002000	Fuel Combustion; Industrial; Bit Coal	306	16.22
9	2610030000	Open Burning - Household Waste	135	11.84
10	2285002007	Railroad Equipment /Diesel /Line Haul Locomotives: Class II / III Operations	271	9.75
		Remaining 33 NO_x Nonpoint SCCs		52.18
			Total	**1,496.53**

Table 3-4 presents the Top 10 VOC nonpoint area source emission sources for Doña Ana County, which account for approximately 88% of the total VOC nonpoint area source emissions.

Table 3-4. Top 10 Doña Ana County, NM 2023 Nonpoint Area VOC Sources

Rank	SCC	SCC Description	Surrogate Spatial Code	VOC Emissions (tpy)
1	2701200000	Biogenics: Vegetation Total	319	7,690.69
2	2460100000	Consumer and Commercial (C&C): Cosmetics and Toiletries	100	314.17
3	2460500000	C&C: Coatings and Related Products	100	300.66
4	2460600000	C&C: adhesives and sealants	100	244.35
5	2501060051	Gas Dist Stg I; Gas Serv Stn Unload Submerged fill	900	225.68
6	2460200000	C&C: Cleaning Products; Household	100	209.45
7	2461022000	Emulsified Asphalt	901	205.93
8	2802004001	Ag Silage - Storage	4011	202.36
9	2401001000	Architectural Coatings	307	189.18
10	2802004003	Ag Silage - Feeding	4011	147.60
		Remaining 93 VOC Nonpoint Area SCCs		1,313.76
			Total	**11,043.82**

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_x 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)

2023 NO_x Emissions = 168.5897 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 740455 fraction of the county = 0.009132
Surrogate 150 Grid ID 740456 fraction of the county = 0.009033
Surrogate 150 Grid ID 740457 fraction of the county = 0.000019

Surrogate 150 Grid ID 738907 NO_x emissions = 168.5897tpy * 0.000054 = 0.009 tpy
Surrogate 150 Grid ID 738908 NO_x emissions = 168.5897tpy * 0.031167 = 5.254 tpy
Surrogate 150 Grid ID 738909 NO_x emissions = 168.5897tpy * 0.005707 = 0.962 tpy
Surrogate 150 Grid ID 740455 NO_x emissions = 168.5897tpy * 0.009132 = 1.54 tpy
Surrogate 150 Grid ID 740456 NO_x emissions = 168.5897tpy * 0.009033 = 1.523 tpy
Surrogate 150 Grid ID 740457 NO_x emissions = 168.5897tpy * 0.000019 = 0.003 tpy

Total NO_x gridded emissions = 9.291 tpy

Using the 4-km grid apportionments, the study NO_x emissions are calculated as:

Grid ID 738907 Study Area NO_x emissions = 0.009 tpy * 0.093534 = 0.001 tpy
Grid ID 738908 Study Area NO_x emissions = 5.254 tpy * 1.000000 = 5.254 tpy
Grid ID 738909 Study Area NO_x emissions = 0.962 tpy * 1.000000 = 0.962 tpy
Grid ID 740455 Study Area NO_x emissions = 1.54 tpy * 0.020709 = 0.032 tpy
Grid ID 740456 Study Area NO_x emissions = 1.523 tpy * 0.447414 = 0.681 tpy
Grid ID 740457 Study Area NO_x emissions = 0.003 tpy * 1.000000 = 0.003 tpy

Total NO_x gridded study area emissions = 6.934 tpy

Table 3-5 presents the Top 10 NO_x 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 2023 Nonpoint Area NO_x Sources

Rank	SCC	SCC Description	NO_x Emissions (tpy)
1	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	25.53
2	2104006000	Residential Heating: Natural Gas	6.93
3	2102004002	Fuel Combustion; Industrial; Distillate Oil Engine	1.37
4	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.23

Rank	SCC	SCC Description	NO_x Emissions (tpy)
5	2701220000	Biogenics: Vegetation and Agriculture Total	1.19
6	2610030000	Open Burning - Household Waste	0.58
7	2102002000	Fuel Combustion; Industrial; Bit Coal	0.57
8	2801700200	Fertilizer Application; Ag Biogenic Total	0.51
9	2104008700	Res. Heating: Outdoor woodburning device, Not Elsewhere Classified (NEC)	0.32
10	2285002007	Railroad Equipment /Diesel /Line Haul Locomotives: Class II / III Operations	0.31
		Remaining 22 NO_x Nonpoint Area SCCs	1.50
		Total	**40.04**

Table 3-6. Top 10 Sunland Park, NM Study 2023 Nonpoint Area VOC Sources

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2701200000	Biogenics: Vegetation Total	38.55
2	2460100000	C&C: Cosmetics and Toiletries	15.52
3	2460500000	C&C: Coatings and Related Products	14.85
4	2460600000	C&C: adhesives and sealants	12.07
5	2461022000	Emulsified Asphalt	10.38
6	2460200000	C&C: Cleaning Products; Household	10.35
7	2802004001	Ag Silage - Storage	5.23
8	2104008011	Residential Wood Combustion (RWC): non-certified wood stoves <=4FT3	4.25
9	2401001000	Architectural Coatings	4.09
10	2104008021	RWC: USEPA certified wood stoves non-cat	3.89
		Remaining 76 VOC Nonpoint Area SCCs	32.06
		Total	**151.25**

3.2.2 Onroad Sources

The starting point for the onroad area sources inventory is the 2023 NEI. Many of the estimates were developed through USEPA MOVES estimation tools.

Table 3-7 presents the Top 10 NO_x onroad source emission sources for Doña Ana County, which account for over 96% of the total NO_x onroad source emissions.

Table 3-7. Top 10 Doña Ana County, NM 2023 Onroad NO_x Sources

Rank	SCC	SCC Description	Surrogate Spatial Code	NO_x Emissions (tpy)
1	2202610080	Mobile-Combination Short-haul Truck-Diesel	306	836.85
2	2202620080	Mobile-Combination Long-haul Truck-Diesel	306	568.24
3	2201310080	Mobile-Passenger Truck-Gas	307	567.44
4	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	306	265.16
5	2201210080	Mobile-Passenger Car-Gas	307	165.41
6	2202310080	Mobile-Passenger Truck-Diesel	307	159.17
7	2202410080	Mobile-Intercity Bus-Diesel	258	110.72
8	2202430080	Mobile-School Bus-Diesel	508	70.33
9	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	306	34.63
10	2201320080	Mobile-Light Commercial Truck-Gas	308	32.09
		Remaining 18 NO_x Onroad SCCs		106.79
			Total	**2,916.85**

Table 3-8 presents the Top 10 VOC onroad source emission sources for Doña Ana County, which account for over 96% of the total VOC onroad source emissions.

Table 3-8. Top 10 Doña Ana County, NM 2023 Onroad VOC Sources

Rank	SCC	SCC Description	Surrogate Spatial Code	VOC Emissions (tpy)
1	2201310080	Mobile-Passenger Truck-Gas	307	494.06
2	2201210080	Mobile-Passenger Car-Gas	307	280.96
3	2201000062	Mobile-Refueling-Gas	900	133.83
4	2201110080	Mobile-Motorcycle-Gas	307	50.32
5	2202610080	Mobile-Combination Short-haul Truck-Diesel	306	31.19
6	2201320080	Mobile-Light Commercial Truck-Gas	308	25.88
7	2202310080	Mobile-Passenger Truck-Diesel	307	25.28
8	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	306	19.28
9	2202000062	Mobile-Refueling-Diesel	900	18.57
10	2202620080	Mobile-Combination Long-haul Truck-Diesel	306	17.56
		Remaining 21 VOC Onroad SCCs		40.60
			Total	**1,137.51**

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 = 494.06 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 740455 fraction of the county = 0.001662
Surrogate 307 Grid ID 740456 fraction of the county = 0.007029
Surrogate 307 Grid ID 740457 fraction of the county = 0

Surrogate 307 Grid ID 738907 VOC emissions = 494.06 tpy * 0 = 0 tpy
Surrogate 307 Grid ID 738908 VOC emissions = 494.06 tpy * 0. 011950 = 5.90 tpy
Surrogate 307 Grid ID 738909 VOC emissions = 494.06 tpy * 0. 006483 = 3.20 tpy
Surrogate 307 Grid ID 740455 VOC emissions = 494.06 tpy * 0. 001662 = 0.82 tpy
Surrogate 307 Grid ID 740456 VOC emissions = 494.06 tpy * 0. 007029 = 3.47 tpy
Surrogate 307 Grid ID 740457 VOC emissions = 494.06 tpy * 0 = 0 tpy

Total VOC gridded emissions = 13.40 tpy

Using the 4-km grid apportionments, the study VOC emissions are calculated as:

Grid ID 738907 Study Area VOC emissions = 0 * 0.093534 = 0 tpy
Grid ID 738908 Study Area VOC emissions = 5.90 tpy * 1.000000 = 5.90 tpy
Grid ID 738909 Study Area VOC emissions = 3.20 tpy * 1.000000 = 3.20 tpy
Grid ID 740455 Study Area VOC emissions = 0.82 tpy * 0.020709 = 0.02 tpy
Grid ID 740456 Study Area VOC emissions = 3.47 tpy * 0.447414 = 1.55 tpy
Grid ID 740457 Study Area VOC emissions = 0 tpy * 1.000000 = 0 tpy

Total VOC gridded study area emissions = 10.68 tpy

Table 3-9 presents the Top 10 NO_x 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 2023 Onroad NO_x Sources

Rank	SCC	SCC Description	NO_x Emissions (tpy)
1	2202610080	Mobile-Combination Short-haul Truck-Diesel	29.55
2	2202620080	Mobile-Combination Long-haul Truck-Diesel	20.06
3	2201310080	Mobile-Passenger Truck-Gas	12.26
4	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	9.36
5	2202410080	Mobile-Intercity Bus-Diesel	5.47
6	2201210080	Mobile-Passenger Car-Gas	3.57
7	2202310080	Mobile-Passenger Truck-Diesel	3.44
8	2202430080	Mobile-School Bus-Diesel	1.84
9	2202420080	Mobile-Transit Bus-Diesel	1.26
10	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	1.22
		Remaining 18 NO_x Onroad SCCs	3.17
		Total	**91.21**

Table 3-10. Top 10 Sunland Park, NM Study Area 2023 Onroad VOC Sources

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2201310080	Mobile-Passenger Truck-Gas	10.68
2	2201210080	Mobile-Passenger Car-Gas	6.07
3	2202610080	Mobile-Combination Short-haul Truck-Diesel	1.10
4	2201110080	Mobile-Motorcycle-Gas	1.09
5	2201320080	Mobile-Light Commercial Truck-Gas	0.79
6	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	0.68
7	2202620080	Mobile-Combination Long-haul Truck-Diesel	0.62
8	2202310080	Mobile-Passenger Truck-Diesel	0.55
9	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.39
10	2202410080	Mobile-Intercity Bus-Diesel	0.22
		Remaining 18 VOC Onroad SCCs	0.66
		Total	**22.84**

3.2.3 Nonroad Sources

The starting point for the nonroad area sources inventory is the 2023 NEI. Many of the estimates were developed through USEPA MOVES estimation tools.

Table 3-11 presents the Top 10 NO_x nonroad source emission sources for Doña Ana County, which account for approximately 92% of the total NO_x nonroad source emissions.

Table 3-11. Top 10 Doña Ana County, NM 2023 Nonroad NO_x Sources

Rank	SCC	SCC Description	Surrogate Spatial Code	NO_x Emissions (tpy)
1	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	308	188.41
2	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	310	73.37
3	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	306	15.89
4	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	306	12.12
5	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	136	7.47
6	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	309	7.35
7	2270004044	Off-highway Diesel /Lawn & Garden Equipt /Diesel Lawn & Garden Eqt (Commercial)	307	5.85
8	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	306	5.60
9	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	350	5.36
10	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	306	4.39
		Remaining 37 NO_x Nonroad SCCs		28.31
			Total	**354.12**

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

Table 3-12. Top 10 Doña Ana County, NM 2023 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 Eqt (Residential)	136	52.94

Rank	SCC	SCC Description	Surrogate Spatial Code	VOC Emissions (tpy)
2	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	308	26.30
3	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Commercial)	307	23.34
4	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	306	22.68
5	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	309	22.30
6	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	307	22.04
7	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	350	18.89
8	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Commercial)	307	16.52
9	2260001022	Off-highway Gasoline, 2-Stroke /Recreational Equipt /2-Stroke Other Recreational Equip.	321	16.32
10	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	308	13.25
		Remaining 37 VOC Nonroad SCCs		66.17
			Total	**300.75**

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_x emissions for diesel agricultural equipment to the Sunland, NM study area is calculated as follows:

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

NO_x Emissions = 73.37 tpy

Spatial Allocation Surrogate Code = 310
Spatial Allocation Surrogate Description = 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 740455 fraction of the county = 0.000943
Surrogate 310 Grid ID 740456 fraction of the county = 0.003483
Surrogate 310 Grid ID 740457 fraction of the county = 0.000058

Surrogate 310 Grid ID 738907 NO_x emissions = 73.37 tpy * 0 = 0 tpy
Surrogate 310 Grid ID 738908 NO_x emissions = 73.37 tpy * 0.002431 = 0.18 tpy
Surrogate 310 Grid ID 738909 NO_x emissions = 73.37 tpy * 0.000945 = 0.07 tpy
Surrogate 310 Grid ID 740455 NO_x emissions = 73.37 tpy * 0.000943 = 0.07 tpy
Surrogate 310 Grid ID 740456 NO_x emissions = 73.37 tpy * 0.003483 = 0.26 tpy
Surrogate 310 Grid ID 740457 NO_x emissions = 73.37 tpy * 0.000058 = 0.004 tpy

Total NO_x gridded emissions = 0.58 tpy

Using the 4-km grid apportionments, the study NO_x emissions are calculated as:

Grid ID 738907 Study Area NO_x emissions = 0 * 0.093534 = 0 tpy
Grid ID 738908 Study Area NO_x emissions = 0.18 tpy * 1.000000 = 0.18 tpy
Grid ID 738909 Study Area NO_x emissions = 0.07 tpy * 1.000000 = 0.07 tpy
Grid ID 740455 Study Area NO_x emissions = 0.07 tpy * 0.020709 = 0.001 tpy
Grid ID 740456 Study Area NO_x emissions = 0.26 tpy * 0.447414 = 0.11 tpy
Grid ID 740457 Study Area NO_x emissions = 0.004 tpy * 1.000000 = 0.004 tpy

Total NO_x gridded study area emissions = 0.37 tpy

Table 3-13 presents the Top 10 NO_x 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 2023 Nonroad NO_x Sources

Rank	SCC	SCC Description	NO_x Emissions (tpy)
1	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	5.74
2	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	0.56
3	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	0.52
4	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	0.43
5	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	0.37
6	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	0.36
7	2282020022	Pleasure Craft /Diesel /Diesel Pleasure Craft	0.29

Rank	SCC	SCC Description	NO_x Emissions (tpy)
8	2282010005	Pleasure Craft /Gasoline 4-Stroke /Inboard/Sterndrive	0.24
9	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.20
10	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.16
		Remaining 36 NO_x Nonroad SCCs	0.89
		Total	**9.74**

Table 3-14. Top 10 Sunland Park, NM Study Area 2023 Nonroad VOC Sources

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	2.54
2	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	1.82
3	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	0.80
4	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.80
5	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Residential)	0.62
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)	0.48
8	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.43
9	2282010005	Pleasure Craft /Gasoline 4-Stroke /Inboard/Sterndrive	0.42
10	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.40
		Remaining 36 VOC Nonroad SCCs	1.32
		Total	**10.13**

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	Does NMED have 2023 point source emissions for the Four Peaks Energy Plant No. 1 facility?	NMED provided 2023 emissions for this facility.
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	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.
8	Abandoned oil wells (plugged and unplugged) and abandoned gas wells (plugged) are reported for Doña Ana County, but not for the study area.	ERG assumed abandoned well spatial surrogates are accurate based on surrogate development.
9	Campfire emissions are reported for Doña Ana County, but not for the study area. Are there any campgrounds in the study area?	ERG reviewed campground locations in GIS to confirm there are no campgrounds in the study area.
10	Inter-city and transit bus emissions are reported for Doña Ana County and allocated to the study area. Can NMED confirm no inter-city or transit buses were active in the study area?	NMED confirmed there are no buses are in the study area.
11	Did point source reconciliation occur between point and nonpoint area sources, such as industrial fuel combustion?	NMED believed point source reconciliation was performed

Item #	Item	Resolution
		by USEPA through its NEI compilation process.
12	Emissions from line haul locomotives including passenger trains (e.g., Amtrak) were included in the allocated emissions for the study area. Can NMED confirm that there are trains in the study area?	NMED confirmed there are train tracks in the study area but no stops or stations.
13	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 not believes there are agricultural fields/crops in the study area.
14	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.
15	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 from horses at the Sunland Park Racetrack, which is in the study area. However, the horses are not present during the ozone season. Other types of livestock are not present in the study area.
16	Emissions from agricultural silage were included in the allocated emissions for the study area. Can NMED confirm agricultural silage in the study area?	NMED confirmed there are no silos in the study area.
17	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.
18	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:

- Intercity and transit buses SCCs 2201410080, 2201420080, 2202410080, and 2202420080
- Agricultural crop/field burning: SCCs 2801500160 and 2801500171
- Vegetation: SCCs 2701200000 and 2701220000
- Pleasure craft: SCCs 2282005022, 2282010005, and 2282020022
- Agricultural silage: SCCs 2802004001, 2802004002, 2802004003

- Livestock production and waste emissions: SCCs 2805002000, 2805007100, 2805009100, 2805010100, 2805018000, 2805025000, 2805040000, and 2805045000

5.0 FINAL EMISSIONS

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

5.1 Final Nonpoint Area, Onroad, and Nonroad Source Emissions

Table 5-1 presents the final Top 10 NO_x 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 2023 Nonpoint Area NO_x Sources, Final

Rank	SCC	SCC Description	NO_x Emissions (tpy)
1	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	25.53
2	2104006000	Residential Heating: Natural Gas	6.93
3	2102004002	Fuel Combustion; Industrial; Distillate Oil Engine	1.37
4	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.23
5	2610030000	Open Burning - Household Waste	0.58
6	2102002000	Fuel Combustion; Industrial; Bit Coal	0.57
7	2801700200	Fertilizer Application; Ag Biogenic Total	0.51
8	2104008700	Res. Heating: Outdoor woodburning device, NEC	0.32
9	2285002007	Railroad Equipment /Diesel /Line Haul Locomotives: Class II / III Operations	0.31
10	2104008100	Residential Heating: Fireplaces (cordwood)	0.24
		Remaining 22 NO_x Nonpoint Area SCCs	1.25
		Total	**38.84**

Table 5-2. Top 10 Sunland Park, NM Study 2023 Nonpoint Area VOC Sources, Final

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2460100000	C&C: Cosmetics and Toiletries	15.52
2	2460500000	C&C: Coatings and Related Products	14.85
3	2460600000	C&C: adhesives and sealants	12.07
4	2461022000	Emulsified Asphalt	10.38
5	2460200000	C&C: Cleaning Products; Household	10.35
6	2104008011	RWC: non-certified wood stoves <=4FT3	4.25
7	2401001000	Architectural Coatings	4.09

Rank	SCC	SCC Description	VOC Emissions (tpy)
8	2104008021	RWC: USEPA certified wood stoves non-cat	3.89
9	2461025100	Hot Mix Asphalt	3.56
10	2425000000	Graphic Arts	2.72
		Remaining 62 VOC Nonpoint Area SCCs	17.59
		Total	**99.28**

Table 5-3 presents the final Top 10 NO_x onroad source categories for the study area, while Table 5-4 presents the final Top 10 VOC onroad source categories for the study area.

Table 5-3. Top 10 Sunland Park, NM Study 2023 Onroad NO_x Sources, Final

Rank	SCC	SCC Description	NO_x Emissions (tpy)
1	2202610080	Mobile-Combination Short-haul Truck-Diesel	29.55
2	2202620080	Mobile-Combination Long-haul Truck-Diesel	20.06
3	2201310080	Mobile-Passenger Truck-Gas	12.26
4	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	9.36
5	2201210080	Mobile-Passenger Car-Gas	3.57
6	2202310080	Mobile-Passenger Truck-Diesel	3.44
7	2202430080	Mobile-School Bus-Diesel	1.84
8	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	1.22
9	2201320080	Mobile-Light Commercial Truck-Gas	0.98
10	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.46
		Remaining 14 NO_x Onroad SCCs	1.64
		Total	**84.39**

Table 5-4. Top 10 Sunland Park, NM Study 2023 Onroad VOC Sources, Final

Rank	SCC	SCC Description	VOC Emissions (tpy)
1	2201310080	Mobile-Passenger Truck-Gas	10.68
2	2201210080	Mobile-Passenger Car-Gas	6.07
3	2202610080	Mobile-Combination Short-haul Truck-Diesel	1.10
4	2201110080	Mobile-Motorcycle-Gas	1.09
5	2201320080	Mobile-Light Commercial Truck-Gas	0.79
6	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	0.68
7	2202620080	Mobile-Combination Long-haul Truck-Diesel	0.62
8	2202310080	Mobile-Passenger Truck-Diesel	0.55
9	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.39
10	2202430080	Mobile-School Bus-Diesel	0.15

Rank	SCC	SCC Description	VOC Emissions (tpy)
		Remaining 14 VOC Onroad SCCs	0.41
		Total	**22.52**

Table 5-5 presents the final Top 10 NO_x nonroad source categories for the study area, while Table 5-6 presents the final Top 10 VOC nonroad source categories for the study area.

Table 5-5. Top 10 Sunland Park, NM Study 2023 Nonroad NO_x Sources, Final

Rank	SCC	SCC Description	NO_x Emissions (tpy)
1	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	5.74
2	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	0.56
3	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	0.43
4	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	0.37
5	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	0.36
6	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.20
7	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.16
8	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.14
9	2270004044	Off-highway Diesel /Lawn & Garden Equipt /Diesel Lawn & Garden Eqt (Commercial)	0.13
10	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.12
		Remaining 33 NO_x Nonroad SCCs	0.49
		Total	**8.70**

Table 5-6. Top 10 Sunland Park, NM Study 2023 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)	2.54
2	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	0.80
3	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.80

Rank	SCC	SCC Description	VOC Emissions (tpy)
4	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Residential)	0.62
5	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Commercial)	0.50
6	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	0.48
7	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.43
8	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.40
9	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	0.40
10	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Commercial)	0.36
		Remaining 33 VOC Nonroad SCCs	0.55
		Total	**7.88**

5.2 Final Emissions By SCC

Table 5-7 presents the final emissions by SCC.

Table 5-7. 2023 Final Emissions by SCC

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
Point	10100601	ExComb Electric Generating Unit (EGU) NatGas Boiler>=100M Btu/hr	965.88	24.59
Point	20100201	Internal Combustion Engine (ICE) EGU NatGas Turbine	3.35	0.77
Point	20100802	ICE EGU LandfillGas Recip	32.70	5.80
Point	20200102	ICE Ind DistilltOilDiesl Recip	0.002	--
Point	20200107	ICE Ind DistilltOilDiesl RecipExhaust	0.32	0.32
Point	20200202	ICE Ind NatGas Recip	0.03	0.002
Point	31000205	Oil and Gas (O&G) Prod NatGasProd Flares	5.15	0.07
Point	31088811	O&G Prod Fugitvs Fugitv	--	1.09
Point	50100402	Waste Govt MunicplLndfill Fugitv	--	10.84
Nonpoint	2102001000	Fuel Combustion; Industrial; Anthr Coal	0.00	0.00
Nonpoint	2102002000	Fuel Combustion; Industrial; Bit Coal	0.57	0.003
Nonpoint	2102004001	Fuel Combustion; Industrial; Distillate Oil Boiler	0.07	0.001
Nonpoint	2102004002	Fuel Combustion; Industrial; Distillate Oil Engine	1.37	0.10

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
Nonpoint	2102005000	Fuel Combustion; Industrial; Residual Oil	0.00	0.00
Nonpoint	2102006000	Fuel Combustion; Industrial; Natural Gas	0.00	0.00
Nonpoint	2102007000	Fuel Combustion; Industrial; LPG	0.00	0.00
Nonpoint	2102008000	Fuel Combustion; Industrial; Wood	1.12E-03	8.66E-05
Nonpoint	2102011000	Fuel Combustion; Industrial; Kerosene	0.00	0.00
Nonpoint	2103001000	Fuel Combustion; Comm/Inst; Anthra Coal	0.00	0.00
Nonpoint	2103002000	Fuel Combustion; Comm/Inst; Bit Coal	0.00	0.00
Nonpoint	2103004001	Fuel Combustion; Comm/Inst; Distillate Oil Boiler	0.00	0.00
Nonpoint	2103004002	Fuel Combustion; Comm/Inst; Dist. Oil Engine	0.00	0.00
Nonpoint	2103005000	Fuel Combustion; Comm/Inst; Residual Oil	0.00	0.00
Nonpoint	2103006000	Fuel Combustion; Comm/Inst; Natural Gas	0.00	0.00
Nonpoint	2103007000	Fuel Combustion; Comm/Inst; LPG	0.17	0.01
Nonpoint	2103008000	Fuel Combustion; Commercial/Inst; Wood	0.17	0.01
Nonpoint	2103011000	Fuel Combustion; Comm/Inst; Kerosene	0.00	0.00
Nonpoint	2104001000	Residential Heating: Anthracite Coal	0.00	0.00
Nonpoint	2104002000	Residential Heating: Bituminous Coal	0.00	0.00
Nonpoint	2104006000	Residential Heating: Natural Gas	6.93	0.41
Nonpoint	2104007000	Residential Heating: LPG	0.23	0.01
Nonpoint	2104008011	RWC: non-certified wood stoves <=4FT3	0.07	4.25
Nonpoint	2104008021	RWC: USEPA certified wood stoves non-cat	0.15	3.89
Nonpoint	2104008031	RWC: USEPA certified wood stoves cat	0.06	0.57
Nonpoint	2104008100	Residential Heating: Fireplaces (cordwood)	0.24	1.77
Nonpoint	2104008400	Residential Heating: Wood pellet stoves	0.03	0.03
Nonpoint	2104008500	Residntl Heating: Wood furnace indoor	0.01	0.12
Nonpoint	2104008530	RWC: Indoor Pellet Furnace, General	0.003	0.003
Nonpoint	2104008611	RWC: HH, wood: outdoor, non-USEPA cert	0.02	0.94
Nonpoint	2104008612	RWC: HH, wood: outdoor, USEPA cert	3.873E-04	0.01
Nonpoint	2104008614	RWC: HH, wood: indoor, non-USEPA cert	1.694E-04	0.01
Nonpoint	2104008615	RWC: HH, wood: indoor, USEPA cert	1.936E-04	0.004
Nonpoint	2104008630	RWC: Pellet Hydronic Heater	0.002	0.002
Nonpoint	2104008700	Res. Heating: Outdoor woodburning device, NEC	0.32	2.36
Nonpoint	2104009000	Residential Heating: Firelog	0.08	0.41
Nonpoint	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	25.53	1.03
Nonpoint	2285002007	Railroad Equipment /Diesel /Line Haul Locomotives: Class II / III Operations	0.31	0.01

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
Nonpoint	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.23	0.07
Nonpoint	2302002100	Commercial Cooking: Conveyorized Charbroiling	--	0.02
Nonpoint	2302002200	Commercial Cooking: Under-fired Charbroiling	--	0.06
Nonpoint	2302003000	Commercial Cooking: Deep Fat Frying	--	0.03
Nonpoint	2302003100	Commercial Cooking: Flat Griddle Frying	--	0.01
Nonpoint	2302003200	Commercial Cooking: Clamshell Griddle Frying	--	2.87E-04
Nonpoint	2310121802	O&G: On-ShoreGas Explor:AbandWellUnplugged	--	4.35E-07
Nonpoint	2401001000	Architectural Coatings	--	4.09
Nonpoint	2401005000	Auto Refinishing Standard Industrial Classification (SIC) 7532	--	0.40
Nonpoint	2401008000	Surface Coating - Traffic Markings	--	0.41
Nonpoint	2401020000	Surface Coating - Wood Furniture	--	0.05
Nonpoint	2401055000	Surface Coating - Machinery and Equipment: SIC 35	--	0.01
Nonpoint	2401065000	Surface Coating - Electronic/other Electric Coat'g	--	0.10
Nonpoint	2401070000	Surface Coating - Motor Vehicles	--	0.01
Nonpoint	2401090000	Surface Coating - Miscellaneous Manufacturing	--	0.00
Nonpoint	2401100000	Industrial Maintenance Coatings	--	1.83
Nonpoint	2401200000	Other Special Purpose Coatings	--	0.83
Nonpoint	2415000000	Degreasing	--	0.47
Nonpoint	2420000000	Dry Cleaning	--	0.02
Nonpoint	2425000000	Graphic Arts	--	2.72
Nonpoint	2460030999	SolvUtil MiscNonIndCons&Comm LighterFluid Total	--	0.22
Nonpoint	2460100000	C&C: Cosmetics and Toiletries	--	15.52
Nonpoint	2460200000	C&C: Cleaning Products; Household	--	10.35
Nonpoint	2460400000	C&C: Auto Aftermarket	--	1.39
Nonpoint	2460500000	C&C: Coatings and Related Products	--	14.85
Nonpoint	2460600000	C&C: adhesives and sealants	--	12.07
Nonpoint	2460800000	C&C: FIFRA Regulated Products	--	0.56
Nonpoint	2460900000	C&C: Misc. Products (not otherwise covered)	--	0.22
Nonpoint	2461021000	Cutback Asphalt	--	0.40
Nonpoint	2461022000	Emulsified Asphalt	--	10.38
Nonpoint	2461023000	Asphalt Roofing	--	0.29
Nonpoint	2461025100	Hot Mix Asphalt	--	3.56
Nonpoint	2461025200	Warm Mix Asphalt	--	0.00

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
Nonpoint	2461850000	Ag Pesticide	--	0.37
Nonpoint	2501011011	PFC: Residential Permeation	--	0.07
Nonpoint	2501011012	port fuel cont, resident, evap (w/diurnal losses)	--	0.08
Nonpoint	2501011014	port fuel cont, res, refill @ pump, vapor displace	--	0.01
Nonpoint	2501012011	portable fuel containers, commercial, permeation	--	0.01
Nonpoint	2501012012	port fuel cont, comm, evap (inc diurnal losses)	--	0.01
Nonpoint	2501012014	port fuel cont, com, refill @ pump, vapor displace	--	0.03
Nonpoint	2505030120	Gas. Dist. Stage I; Tank Trucks in Transit	--	0.07
Nonpoint	2610000100	Open Burning - Yard Waste - Leaves	0.00	0.00
Nonpoint	2610000400	Open Burning - Yard Waste - Brush	0.00	0.00
Nonpoint	2610000500	Open Burning - Land Clearing Debris	0.18	0.50
Nonpoint	2610030000	Open Burning - Household Waste	0.58	0.60
Nonpoint	2630020000	Publicly Owned Treatment Works (POTW)	--	0.01
Nonpoint	2680003000	Waste Disposal: Composting	--	0.00
Nonpoint	2701200000	Biogenics: Vegetation Total	--	0.00
Nonpoint	2701220000	Biogenics: Vegetation and Agriculture Total	0.00	--
Nonpoint	2801500160	Agricultural Field Burning: Cotton	0.00	0.00
Nonpoint	2801500171	Agricultural Field Burning: Fallow	0.00	0.00
Nonpoint	2801700200	Fertilizer Application; Ag Biogenic Total	0.51	--
Nonpoint	2802004001	Ag Silage - Storage	--	0.00
Nonpoint	2802004002	Ag Silage - Mixing	--	0.00
Nonpoint	2802004003	Ag Silage - Feeding	--	0.00
Nonpoint	2805002000	Beef cattle: prod composite; NEC	--	0.00
Nonpoint	2805007100	Poultry: layers w/dry manure manag sys; Confine	--	0.00
Nonpoint	2805009100	Poultry production - broilers; Confinement	--	0.00
Nonpoint	2805010100	Poultry production - turkeys; Confinement	--	0.00
Nonpoint	2805018000	Dairy cattle composite; Not Elsewhere Classified	--	0.00
Nonpoint	2805025000	Swine prod composite; Not Elsewhere Classified	--	0.00
Nonpoint	2805035000	Horses/Ponies Waste Emissions; NEC	--	0.13
Nonpoint	2805040000	Sheep and Lambs Waste Emissions; Total	--	0.00
Nonpoint	2805045000	Goats Waste Emissions; NEC	--	0.00
Nonpoint	2810030000	Structure Fires	0.003	0.48
Nonpoint	2810050000	Motor Vehicle Fires	0.004	0.01
Nonpoint	2810060100	Cremation - Human	0.01	4.46E-04
Nonpoint	2810060200	Cremation - Animals	9.81E-07	8.24E-08
Nonpoint	2812001000	Residential Cooking: Total	--	0.02

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
Nonroad	2260001022	Off-highway Gasoline, 2-Stroke /Recreational Equipt /2-Stroke Other Recreational Equip.	3.85E-04	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	0.80
Nonroad	2260003022	Off-highway Gasoline, 2-Stroke /Industrial Equipt /2-Stroke Industrial Equipment	4.12E-05	9.81E-04
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	0.48
Nonroad	2260004022	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Mowers, Tractors, Turf Eqt (Commercial)	4.74E-06	9.30E-05
Nonroad	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Residential)	0.02	0.62
Nonroad	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Commercial)	0.02	0.50
Nonroad	2260005022	Off-highway Gasoline, 2-Stroke /Agricultural Equipt /2-Stroke Agriculture Equipment	2.02E-05	4.54E-04
Nonroad	2260006022	Off-highway Gasoline, 2-Stroke /Commercial Equipt /2-Stroke Commercial Equipment	0.004	0.12
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	0.001	0.01
Nonroad	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.12	0.40
Nonroad	2265003022	Off-highway Gasoline, 4-Stroke /Industrial Equipt /4-Stroke Industrial Equipment	0.03	0.04
Nonroad	2265003060	Off-highway Gasoline, 4-Stroke /Industrial Equipt /AC\Refrigeration	4.17E-04	0.001
Nonroad	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.14	0.43
Nonroad	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	0.36	2.54
Nonroad	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Commercial)	0.07	0.36

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
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	0.20	0.80
Nonroad	2267001060	Off-highway LPG /Recreational Equipt /Specialty Vehicles/Carts	2.26E-04	4.89E-05
Nonroad	2267002022	Off-highway LPG /Construction & Mining Equipt /LPG Construction Equipment	0.01	0.002
Nonroad	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.16	0.02
Nonroad	2267004044	Off-highway LPG /Lawn & Garden Equipt /LPG Lawn & Garden Eqt (Commercial)	0.002	2.26E-04
Nonroad	2267005022	Off-highway LPG /Agricultural Equipt /LPG Agriculture Equipment	2.29E-05	5.27E-06
Nonroad	2267006022	Off-highway LPG /Commercial Equipt /LPG Commercial Equipment	0.031	0.005
Nonroad	2268002022	Off-highway Compressed Natural Gas (CNG) /Construction & Mining Equipt /CNG Construction Equipment	6.06E-05	3.23E-05
Nonroad	2268003022	Off-highway CNG /Industrial Equipt /CNG Industrial Equipment	0.01	0.01
Nonroad	2268003060	Off-highway CNG /Industrial Equipt /AC\Refrigeration	9.43E-05	4.18E-05
Nonroad	2268005022	Off-highway CNG /Agricultural Equipt /CNG Agriculture Equipment	3.91E-04	1.87E-04
Nonroad	2268006022	Off-highway CNG /Commercial Equipt /CNG Commercial Equipment	0.02	0.01
Nonroad	2270001060	Off-highway Diesel /Recreational Equipt /Specialty Vehicles/Carts	0.003	0.001
Nonroad	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	5.74	0.40
Nonroad	2270003022	Off-highway Diesel /Industrial Equipt /Diesel Industrial Equipment	0.10	0.01
Nonroad	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	0.56	0.02
Nonroad	2270004022	Off-highway Diesel /Lawn & Garden Equipt /Diesel Mowers, Tractors, Turf Eqt (Commercial)	0.02	0.001
Nonroad	2270004044	Off-highway Diesel /Lawn & Garden Equipt /Diesel Lawn & Garden Eqt (Commercial)	0.13	0.01
Nonroad	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	0.37	0.03

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
Nonroad	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	0.43	0.04
Nonroad	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	0.00	0.00
Nonroad	2282010005	Pleasure Craft /Gasoline 4-Stroke /Inboard/Sterndrive	0.00	0.00
Nonroad	2282020022	Pleasure Craft /Diesel /Diesel Pleasure Craft	0.00	0.00
Nonroad	2285002015	Railroad Equipt /Diesel /Railway Maintenance	0.10	0.01
Nonroad	2285004015	Railroad Equipt /Gasoline, 4-Stroke /Railway Maintenance	0.002	0.01
Nonroad	2285006015	Railroad Equipt /LPG /Railway Maintenance	7.52E-05	1.17E-05
Onroad	2201110080	Mobile-Motorcycle-Gas	0.41	1.09
Onroad	2201210080	Mobile-Passenger Car-Gas	3.57	6.07
Onroad	2201310080	Mobile-Passenger Truck-Gas	12.26	10.68
Onroad	2201320080	Mobile-Light Commercial Truck-Gas	0.98	0.79
Onroad	2201410080	Mobile-Intercity Bus-Gas	0.00	0.00
Onroad	2201420080	Mobile-Transit Bus-Gas	0.00	0.00
Onroad	2201430080	Mobile-School Bus-Gas	0.02	0.01
Onroad	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.46	0.39
Onroad	2201530080	Mobile-Single Unit Long-haul Truck-Gas	0.09	0.06
Onroad	2201540080	Mobile-Motor Home-Gas	0.13	0.11
Onroad	2202210080	Mobile-Passenger Car-Diesel	0.03	0.02
Onroad	2202310080	Mobile-Passenger Truck-Diesel	3.44	0.55
Onroad	2202320080	Mobile-Light Commercial Truck-Diesel	0.42	0.06
Onroad	2202410080	Mobile-Intercity Bus-Diesel	0.00	0.00
Onroad	2202420080	Mobile-Transit Bus-Diesel	0.00	0.00
Onroad	2202430080	Mobile-School Bus-Diesel	1.84	0.15
Onroad	2202510080	Mobile-Refuse Truck-Diesel	0.34	0.02
Onroad	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	9.36	0.68
Onroad	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	1.22	0.08
Onroad	2202540080	Mobile-Motor Home-Diesel	0.14	0.01
Onroad	2202610080	Mobile-Combination Short-haul Truck-Diesel	29.55	1.10
Onroad	2202620080	Mobile-Combination Long-haul Truck-Diesel	20.06	0.62
Onroad	2203530080	Mobile-Single Unit Long-haul Truck-CNG	0.005	0.003
Onroad	2203610080	Mobile-Combination Short-haul Truck-CNG	0.01	0.01
Onroad	2203620080	Mobile-Combination Long-haul Truck-CNG	0.02	0.02
Onroad	2205210080	Mobile-Passenger Car-E85	0.002	0.004

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)
Onroad	2205310080	Mobile-Passenger Truck-E85	0.01	0.02
Onroad	2205320080	Mobile-Light Commercial Truck-E85	0.001	0.002
		2023 Totals	**1,139.36**	**173.16**

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 (tpy) emissions estimates to pounds per day (lb/day) by multiplying by 2000 and dividing by 365.
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 2104008011, 2104008021, 2104008031, 2104008400, 2104008500, 2104008530, 2104008611, 2104008612, 2104008614, 2104008615, 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, 2265004044
- LPG-powered Land and Garden Equipment: SCC 2267004044
- Diesel-powered Lawn and Garden Equipment: SCCs 2270004022 and 2270004044

Table 5-8 presents the annual emissions, the Ozone Season Daily Fraction, and the final Ozone Season Daily emissions.

Table 5-8. 2023 Ozone Season Daily Emissions by SCC

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Point	10100601	ExComb EGU NatGas Boiler>=100M Btu/hr	965.88	24.59	1	5,278.05	134.36
Point	20100201	ICE EGU NatGas Turbine	3.35	0.77	1	18.28	4.19
Point	20100802	ICE EGU LandfillGas Recip	32.70	5.80	1	178.69	31.69
Point	20200102	ICE Ind DistilltOilDiesl Recip	0.002	--	1	0.01	--
Point	20200107	ICE Ind DistilltOilDiesl RecipExhaust	0.32	0.32	1	1.77	1.77
Point	20200202	ICE Ind NatGas Recip	0.03	0.002	1	0.14	0.01
Point	31000205	O&G Prod NatGasProd Flares	5.15	0.07	1	28.14	0.38
Point	31088811	O&G Prod Fugitvs Fugitv	--	1.09	1	--	5.97
Point	50100402	Waste Govt MunicplLndfill Fugitv	--	10.84	1	--	59.23
Nonpoint	2102001000	Fuel Combustion; Industrial; Anthr Coal	0.00	0.00	1	0.00	0.00
Nonpoint	2102002000	Fuel Combustion; Industrial; Bit Coal	0.57	0.003	1	3.13	0.01
Nonpoint	2102004001	Fuel Combustion; Industrial; Distillate Oil Boiler	0.07	0.001	1	0.37	0.004
Nonpoint	2102004002	Fuel Combustion; Industrial; Distillate Oil Engine	1.37	0.10	1	7.50	0.52
Nonpoint	2102005000	Fuel Combustion; Industrial; Residual Oil	0.00	0.00	1	0.00	0.00
Nonpoint	2102006000	Fuel Combustion; Industrial; Natural Gas	0.00	0.00	1	0.00	0.00
Nonpoint	2102007000	Fuel Combustion; Industrial; LPG	0.00	0.00	1	0.00	0.00
Nonpoint	2102008000	Fuel Combustion; Industrial; Wood	1.12E-03	8.66E-05	1	0.01	4.73E-04
Nonpoint	2102011000	Fuel Combustion; Industrial; Kerosene	0.00	0.00	1	0.00	0.00
Nonpoint	2103001000	Fuel Combustion; Comm/Inst; Anthra Coal	0.00	0.00	1	0.00	0.00
Nonpoint	2103002000	Fuel Combustion; Comm/Inst; Bit Coal	0.00	0.00	1	0.00	0.00
Nonpoint	2103004001	Fuel Combustion; Comm/Inst; Distillate Oil Boiler	0.00	0.00	1	0.00	0.00

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Nonpoint	2103004002	Fuel Combustion; Comm/Inst; Dist. Oil Engine	0.00	0.00	1	0.00	0.00
Nonpoint	2103005000	Fuel Combustion; Comm/Inst; Residual Oil	0.00	0.00	1	0.00	0.00
Nonpoint	2103006000	Fuel Combustion; Comm/Inst; Natural Gas	0.00	0.00	1	0.00	0.00
Nonpoint	2103007000	Fuel Combustion; Comm/Inst; LPG	0.17	0.01	1	0.95	0.03
Nonpoint	2103008000	Fuel Combustion; Commercial/Inst; Wood	0.17	0.01	1	0.90	0.07
Nonpoint	2103011000	Fuel Combustion; Comm/Inst; Kerosene	0.00	0.00	1	0.00	0.00
Nonpoint	2104001000	Residential Heating: Anthracite Coal	0.00	0.00	1	0.00	0.00
Nonpoint	2104002000	Residential Heating: Bituminous Coal	0.00	0.00	1	0.00	0.00
Nonpoint	2104006000	Residential Heating: Natural Gas	6.93	0.41	1	37.89	2.22
Nonpoint	2104007000	Residential Heating: LPG	0.23	0.01	1	1.26	0.05
Nonpoint	2104008011	RWC: non-certified wood stoves <=4FT3	0.07	4.25	0	0.00	0.00
Nonpoint	2104008021	RWC: USEPA certified wood stoves non-cat	0.15	3.89	0	0.00	0.00
Nonpoint	2104008031	RWC: USEPA certified wood stoves cat	0.06	0.57	0	0.00	0.00
Nonpoint	2104008100	Residential Heating: Fireplaces (cordwood)	0.24	1.77	0	0.00	0.00
Nonpoint	2104008400	Residential Heating: Wood pellet stoves	0.03	0.03	0	0.00	0.00
Nonpoint	2104008500	Residntl Heating: Wood furnace indoor	0.01	0.12	0	0.00	0.00
Nonpoint	2104008530	RWC: Indoor Pellet Furnace, General	0.003	0.003	0	0.00	0.00
Nonpoint	2104008611	RWC: HH, wood: outdoor, non-USEPA cert	0.02	0.94	0	0.00	0.00
Nonpoint	2104008612	RWC: HH, wood: outdoor, USEPA cert	3.873E-04	0.01	0	0.00	0.00
Nonpoint	2104008614	RWC: HH, wood: indoor, non-USEPA cert	1.694E-04	0.01	0	0.00	0.00
Nonpoint	2104008615	RWC: HH, wood: indoor, USEPA cert	1.936E-04	0.004	0	0.00	0.00
Nonpoint	2104008630	RWC: Pellet Hydronic Heater	0.002	0.002	0	0.00	0.00
Nonpoint	2104008700	Res. Heating: Outdoor woodburning device, NEC	0.32	2.36	0	0.00	0.00

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Nonpoint	2104009000	Residential Heating: Firelog	0.08	0.41	0	0.00	0.00
Nonpoint	2285002006	Railroad Equipment /Diesel /Line Haul Locomotives: Class I Operations	25.53	1.03	1	139.49	5.61
Nonpoint	2285002007	Railroad Equipment /Diesel /Line Haul Locomotives: Class II / III Operations	0.31	0.01	1	1.69	0.08
Nonpoint	2285002008	Railroad Equipment /Diesel /Line Haul Locomotives: Passenger Trains (Amtrak)	1.23	0.07	1	6.70	0.36
Nonpoint	2302002100	Commercial Cooking: Conveyorized Charbroiling	--	0.02	1	--	0.11
Nonpoint	2302002200	Commercial Cooking: Under-fired Charbroiling	--	0.06	1	--	0.32
Nonpoint	2302003000	Commercial Cooking: Deep Fat Frying	--	0.03	1	--	0.15
Nonpoint	2302003100	Commercial Cooking: Flat Griddle Frying	--	0.01	1	--	0.06
Nonpoint	2302003200	Commercial Cooking: Clamshell Griddle Frying	--	2.87E-04	1	--	0.002
Nonpoint	2310121802	O&G: On-ShoreGas Explor:AbandWellUnplugged	--	4.35E-07	1	--	2.38E-06
Nonpoint	2401001000	Architectural Coatings	--	4.09	1	--	22.34
Nonpoint	2401005000	Auto Refinishing SIC 7532	--	0.40	1	--	2.20
Nonpoint	2401008000	Surface Coating - Traffic Markings	--	0.41	1	--	2.24
Nonpoint	2401020000	Surface Coating - Wood Furniture	--	0.05	1	--	0.25
Nonpoint	2401055000	Surface Coating - Machinery and Equipment: SIC 35	--	0.01	1	--	0.03
Nonpoint	2401065000	Surface Coating - Electronic/other Electric Coat'g	--	0.10	1	--	0.54
Nonpoint	2401070000	Surface Coating - Motor Vehicles	--	0.01	1	--	0.04
Nonpoint	2401090000	Surface Coating - Miscellaneous Manufacturing	--	0.00	1	--	0.00
Nonpoint	2401100000	Industrial Maintenance Coatings	--	1.83	1	--	9.99
Nonpoint	2401200000	Other Special Purpose Coatings	--	0.83	1	--	4.56

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Nonpoint	2415000000	Degreasing	--	0.47	1	--	2.57
Nonpoint	2420000000	Dry Cleaning	--	0.02	1	--	0.09
Nonpoint	2425000000	Graphic Arts	--	2.72	1	--	14.88
Nonpoint	2460030999	SolvUtil MiscNonIndCons&Comm LighterFluid Total	--	0.22	1	--	1.22
Nonpoint	2460100000	C&C: Cosmetics and Toiletries	--	15.52	1	--	84.82
Nonpoint	2460200000	C&C: Cleaning Products; Household	--	10.35	1	--	56.55
Nonpoint	2460400000	C&C: Auto Aftermarket	--	1.39	1	--	7.60
Nonpoint	2460500000	C&C: Coatings and Related Products	--	14.85	1	--	81.17
Nonpoint	2460600000	C&C: adhesives and sealants	--	12.07	1	--	65.97
Nonpoint	2460800000	C&C: FIFRA Regulated Products	--	0.56	1	--	3.04
Nonpoint	2460900000	C&C: Misc. Products (not otherwise covered)	--	0.22	1	--	1.22
Nonpoint	2461021000	Cutback Asphalt	--	0.40	1	--	2.19
Nonpoint	2461022000	Emulsified Asphalt	--	10.38	1	--	56.71
Nonpoint	2461023000	Asphalt Roofing	--	0.29	1	--	1.57
Nonpoint	2461025100	Hot Mix Asphalt	--	3.56	1	--	19.46
Nonpoint	2461025200	Warm Mix Asphalt	--	0.00	1	--	0.00
Nonpoint	2461850000	Ag Pesticide	--	0.37	1	--	2.03
Nonpoint	2501011011	PFC: Residential Permeation	--	0.07	1	--	0.48
Nonpoint	2501011012	port fuel cont, resident, evap (w/diurnal losses)	--	0.08	1	--	0.54
Nonpoint	2501011014	port fuel cont, res, refill @ pump, vapor displace	--	0.01	1	--	0.05
Nonpoint	2501012011	portable fuel containers, commercial, permeation	--	0.01	1	--	0.04
Nonpoint	2501012012	port fuel cont, comm, evap (inc diurnal losses)	--	0.01	1	--	0.04
Nonpoint	2501012014	port fuel cont, com, refill @ pump, vapor displace	--	0.03	1	--	0.22

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Nonpoint	2505030120	Gas. Dist. Stage I; Tank Trucks in Transit	--	0.07	1	--	0.37
Nonpoint	2610000100	Open Burning - Yard Waste - Leaves	0.00	0.00	1	0.00	0.00
Nonpoint	2610000400	Open Burning - Yard Waste - Brush	0.00	0.00	1	0.00	0.00
Nonpoint	2610000500	Open Burning - Land Clearing Debris	0.18	0.50	1	0.96	2.72
Nonpoint	2610030000	Open Burning - Household Waste	0.58	0.60	1	3.15	3.29
Nonpoint	2630020000	POTWs	--	0.01	1	--	0.06
Nonpoint	2680003000	Waste Disposal: Composting	--	0.00	1	--	0.00
Nonpoint	2701200000	Biogenics: Vegetation Total	--	0.00	1	--	0.00
Nonpoint	2701220000	Biogenics: Vegetation and Agriculture Total	0.00	--	1	0.00	--
Nonpoint	2801500160	Agricultural Field Burning: Cotton	0.00	0.00	1	0.00	0.00
Nonpoint	2801500171	Agricultural Field Burning: Fallow	0.00	0.00	1	0.00	0.00
Nonpoint	2801700200	Fertilizer Application; Ag Biogenic Total	0.51	--	1	2.79	--
Nonpoint	2802004001	Ag Silage – Storage	--	0.00	1	--	0.00
Nonpoint	2802004002	Ag Silage – Mixing	--	0.00	1	--	0.00
Nonpoint	2802004003	Ag Silage – Feeding	--	0.00	1	--	0.00
Nonpoint	2805002000	Beef cattle: prod composite; NEC	--	0.00	0	--	0.00
Nonpoint	2805007100	Poultry: layers w/dry manure manag sys; Confine	--	0.00	0	--	0.00
Nonpoint	2805009100	Poultry production – broilers; Confinement	--	0.00	0	--	0.00
Nonpoint	2805010100	Poultry production – turkeys; Confinement	--	0.00	0	--	0.00
Nonpoint	2805018000	Dairy cattle composite; Not Elsewhere Classified	--	0.00	0	--	0.00
Nonpoint	2805025000	Swine prod composite; Not Elsewhere Classified	--	0.00	0	--	0.00
Nonpoint	2805035000	Horses/Ponies Waste Emissions; NEC	--	0.13	0	--	0.00
Nonpoint	2805040000	Sheep and Lambs Waste Emissions; Total	--	0.00	0	--	0.00

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Nonpoint	2805045000	Goats Waste Emissions; NEC	--	0.00	0	--	0.00
Nonpoint	2810030000	Structure Fires	0.003	0.48	1	0.01	2.62
Nonpoint	2810050000	Motor Vehicle Fires	0.004	0.01	1	0.02	0.06
Nonpoint	2810060100	Cremation – Human	0.01	4.46E-04	1	0.03	0.002
Nonpoint	2810060200	Cremation – Animals	9.81E-07	8.24E-08	1	5.36E-06	4.50E-07
Nonpoint	2812001000	Residential Cooking: Total	--	0.02	1	--	0.13
Nonroad	2260001022	Off-highway Gasoline, 2-Stroke /Recreational Equipt /2-Stroke Other Recreational Equip.	3.85E-04	0.02	1	0.002	0.12
Nonroad	2260001060	Off-highway Gasoline, 2-Stroke /Recreational Equipt /Specialty Vehicles/Carts	0.001	0.01	1	0.01	0.03
Nonroad	2260002022	Off-highway Gasoline, 2-Stroke /Construction & Mining Equipt /2-Stroke Construction Equipment	0.02	0.80	1	0.11	4.38
Nonroad	2260003022	Off-highway Gasoline, 2-Stroke /Industrial Equipt /2-Stroke Industrial Equipment	4.12E-05	9.81E-04	1	2.25E-04	0.01
Nonroad	2260004020	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Residential)	0.005	0.16	1	0.03	1.12
Nonroad	2260004021	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /Chain Saws < 6 HP (Commercial)	0.01	0.48	1	0.07	3.25
Nonroad	2260004022	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Mowers, Tractors, Turf Eqt (Commercial)	4.74E-06	9.30E-05	1	3.24E-05	6.35E-04
Nonroad	2260004033	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Residential)	0.02	0.62	1	0.14	4.21
Nonroad	2260004044	Off-highway Gasoline, 2-Stroke /Lawn & Garden Equipt /2-Stroke Lawn & Garden Eqt (Commercial)	0.02	0.50	1	0.13	3.44

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x 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	2.02E-05	4.54E-04	1	1.10E-04	0.002
Nonroad	2260006022	Off-highway Gasoline, 2-Stroke /Commercial Equipt /2-Stroke Commercial Equipment	0.004	0.12	1	0.03	0.79
Nonroad	2265001022	Off-highway Gasoline, 4-Stroke /Recreational Equipt /4-Stroke Other Recreational Equip.	0.001	0.01	1	0.01	0.09
Nonroad	2265001060	Off-highway Gasoline, 4-Stroke /Recreational Equipt /Specialty Vehicles/Carts	0.001	0.01	1	0.01	0.03
Nonroad	2265002022	Off-highway Gasoline, 4-Stroke /Construction & Mining Equipt /4-Stroke Construction Equipment	0.12	0.40	1	0.68	2.21
Nonroad	2265003022	Off-highway Gasoline, 4-Stroke /Industrial Equipt /4-Stroke Industrial Equipment	0.03	0.04	1	0.14	0.21
Nonroad	2265003060	Off-highway Gasoline, 4-Stroke /Industrial Equipt /AC\Refrigeration	4.17E-04	0.001	1	0.002	0.01
Nonroad	2265004022	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Mowers, Tractors, Turf Eqt (Commercial)	0.14	0.43	1	0.97	2.94
Nonroad	2265004033	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Residential)	0.36	2.54	1	2.45	17.34
Nonroad	2265004044	Off-highway Gasoline, 4-Stroke /Lawn & Garden Equipt /4-Stroke Lawn & Garden Eqt (Commercial)	0.07	0.36	1	0.48	2.44
Nonroad	2265005022	Off-highway Gasoline, 4-Stroke /Agricultural Equipt /4-Stroke Agriculture Equipment	0.01	0.02	1	0.05	0.09
Nonroad	2265006022	Off-highway Gasoline, 4-Stroke /Commercial Equipt /4-Stroke Commercial Equipment	0.20	0.80	1	1.08	4.38
Nonroad	2267001060	Off-highway LPG /Recreational Equipt /Specialty Vehicles/Carts	2.26E-04	4.89E-05	1	0.001	2.67E-04

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Nonroad	2267002022	Off-highway LPG /Construction & Mining Equipt /LPG Construction Equipment	0.01	0.002	1	0.08	0.01
Nonroad	2267003022	Off-highway LPG /Industrial Equipt /LPG Industrial Equipment	0.16	0.02	1	0.85	0.10
Nonroad	2267004044	Off-highway LPG /Lawn & Garden Equipt /LPG Lawn & Garden Eqt (Commercial)	0.002	2.26E-04	1	0.01	0.002
Nonroad	2267005022	Off-highway LPG /Agricultural Equipt /LPG Agriculture Equipment	2.29E-05	5.27E-06	1	1.25E-04	2.88E-05
Nonroad	2267006022	Off-highway LPG /Commercial Equipt /LPG Commercial Equipment	0.031	0.005	1	0.17	0.03
Nonroad	2268002022	Off-highway CNG /Construction & Mining Equipt /CNG Construction Equipment	6.06E-05	3.23E-05	1	3.31E-04	1.77E-04
Nonroad	2268003022	Off-highway CNG /Industrial Equipt /CNG Industrial Equipment	0.01	0.01	1	0.07	0.03
Nonroad	2268003060	Off-highway CNG /Industrial Equipt /AC\Refrigeration	9.43E-05	4.18E-05	1	5.16E-04	2.28E-04
Nonroad	2268005022	Off-highway CNG /Agricultural Equipt /CNG Agriculture Equipment	3.91E-04	1.87E-04	1	0.002	0.001
Nonroad	2268006022	Off-highway CNG /Commercial Equipt /CNG Commercial Equipment	0.02	0.01	1	0.10	0.05
Nonroad	2270001060	Off-highway Diesel /Recreational Equipt /Specialty Vehicles/Carts	0.003	0.001	1	0.02	0.003
Nonroad	2270002022	Off-highway Diesel /Construction & Mining Equipt /Diesel Construction Equipment	5.74	0.40	1	31.38	2.17
Nonroad	2270003022	Off-highway Diesel /Industrial Equipt /Diesel Industrial Equipment	0.10	0.01	1	0.57	0.03
Nonroad	2270003060	Off-highway Diesel /Industrial Equipt /AC\Refrigeration	0.56	0.02	1	3.07	0.11

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Nonroad	2270004022	Off-highway Diesel /Lawn & Garden Equipt /Diesel Mowers, Tractors, Turf Eqt (Commercial)	0.02	0.001	1	0.10	0.01
Nonroad	2270004044	Off-highway Diesel /Lawn & Garden Equipt /Diesel Lawn & Garden Eqt (Commercial)	0.13	0.01	1	0.86	0.07
Nonroad	2270005022	Off-highway Diesel /Agricultural Equipt /Diesel Agriculture Equipment	0.37	0.03	1	2.01	0.14
Nonroad	2270006022	Off-highway Diesel /Commercial Equipt /Diesel Commercial Equipment	0.43	0.04	1	2.34	0.21
Nonroad	2282005022	Pleasure Craft /Gasoline 2-Stroke /2-Stroke Pleasure Craft	0.00	0.00	1	0.00	0.00
Nonroad	2282010005	Pleasure Craft /Gasoline 4-Stroke /Inboard/Sterndrive	0.00	0.00	1	0.00	0.00
Nonroad	2282020022	Pleasure Craft /Diesel /Diesel Pleasure Craft	0.00	0.00	1	0.00	0.00
Nonroad	2285002015	Railroad Equipt /Diesel /Railway Maintenance	0.10	0.01	1	0.54	0.08
Nonroad	2285004015	Railroad Equipt /Gasoline, 4-Stroke /Railway Maintenance	0.002	0.01	1	0.01	0.05
Nonroad	2285006015	Railroad Equipt /LPG /Railway Maintenance	7.52E-05	1.17E-05	1	4.11E-04	6.37E-05
Onroad	2201110080	Mobile-Motorcycle-Gas	0.41	1.09	1	2.26	5.94
Onroad	2201210080	Mobile-Passenger Car-Gas	3.57	6.07	1	19.53	33.18
Onroad	2201310080	Mobile-Passenger Truck-Gas	12.26	10.68	1	67.01	58.35
Onroad	2201320080	Mobile-Light Commercial Truck-Gas	0.98	0.79	1	5.34	4.31
Onroad	2201410080	Mobile-Intercity Bus-Gas	0.00	0.00	1	0.00	0.00
Onroad	2201420080	Mobile-Transit Bus-Gas	0.00	0.00	1	0.00	0.00
Onroad	2201430080	Mobile-School Bus-Gas	0.02	0.01	1	0.06	0.02
Onroad	2201520080	Mobile-Single Unit Short-haul Truck-Gas	0.46	0.39	1	2.52	2.11

Sector	SCC	SCC Description	NO_x Emissions (tpy)	VOC Emissions (tpy)	Ozone Season Daily Fraction	NO_x Ozone Season Daily Emissions (lb/day)	VOC Ozone Season Daily Emissions (lb/day)
Onroad	2201530080	Mobile-Single Unit Long-haul Truck-Gas	0.09	0.06	1	0.50	0.33
Onroad	2201540080	Mobile-Motor Home-Gas	0.13	0.11	1	0.69	0.60
Onroad	2202210080	Mobile-Passenger Car-Diesel	0.03	0.02	1	0.14	0.09
Onroad	2202310080	Mobile-Passenger Truck-Diesel	3.44	0.55	1	18.80	2.99
Onroad	2202320080	Mobile-Light Commercial Truck-Diesel	0.42	0.06	1	2.32	0.33
Onroad	2202410080	Mobile-Intercity Bus-Diesel	0.00	0.00	1	0.00	0.00
Onroad	2202420080	Mobile-Transit Bus-Diesel	0.00	0.00	1	0.00	0.00
Onroad	2202430080	Mobile-School Bus-Diesel	1.84	0.15	1	5.03	0.41
Onroad	2202510080	Mobile-Refuse Truck-Diesel	0.34	0.02	1	1.88	0.09
Onroad	2202520080	Mobile-Single Unit Short-haul Truck-Diesel	9.36	0.68	1	51.16	3.72
Onroad	2202530080	Mobile-Single Unit Long-haul Truck-Diesel	1.22	0.08	1	6.68	0.42
Onroad	2202540080	Mobile-Motor Home-Diesel	0.14	0.01	1	0.75	0.07
Onroad	2202610080	Mobile-Combination Short-haul Truck-Diesel	29.55	1.10	1	161.47	6.02
Onroad	2202620080	Mobile-Combination Long-haul Truck-Diesel	20.06	0.62	1	109.64	3.39
Onroad	2203530080	Mobile-Single Unit Long-haul Truck-CNG	0.005	0.003	1	0.02	0.02
Onroad	2203610080	Mobile-Combination Short-haul Truck-CNG	0.01	0.01	1	0.04	0.03
Onroad	2203620080	Mobile-Combination Long-haul Truck-CNG	0.02	0.02	1	0.13	0.09
Onroad	2205210080	Mobile-Passenger Car-E85	0.002	0.004	1	0.01	0.02
Onroad	2205310080	Mobile-Passenger Truck-E85	0.01	0.02	1	0.08	0.11
Onroad	2205320080	Mobile-Light Commercial Truck-E85	0.001	0.002	1	0.01	0.01
		2023 Totals	**1,139.36**	**173.16**	--	**6,216.59**	**873.94**

5.4 Final Emissions By Sector

Table 5-9 presents the final 2023 NO_x emissions by Sector.

Table 5-9. Final 2023 NO_x 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	1,464.44	1,007.43	1,007.43	5,505.09
Nonpoint Area	1,496.53	44.72	38.84	206.86
Onroad	2,916.85	103.38	84.39	456.08
Nonroad	354.12	11.78	8.70	48.57
Total	**6,231.95**	**1,167.31**	**1,139.36**	**6,216.59**

Table 5-10 presents the final 2023 VOC emissions by Sector.

Table 5-10. Final 2023 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	127.12	43.48	43.48	237.61
Nonpoint Area	11,043.82	204.70	99.28	463.51
Onroad	1,137.51	28.13	22.52	122.64
Nonroad	300.75	13.08	7.88	50.18
Total	**12,609.21**	**289.39**	**173.16**	**873.94**

For comparison, Table 5-11 presents the final 2020 NO_x emissions by Sector.

Table 5-11. Final 2023 NO_x 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	1,155.22	740.60	740.60	4,046.97
Nonpoint Area	1,588.62	49.44	42.01	215.22

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)
Onroad	3,590.66	122.55	111.04	603.13
Nonroad	430.87	14.02	10.49	58.42
Total	**6,765.36**	**926.61**	**904.14**	**4,923.74**

For comparison, Table 5-12 presents the final 2020 VOC emissions by Sector.

Table 5-12. Final 2023 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
Total	**12,565.66**	**314.73**	**209.23**	**969.82**

6.0 SUPPORTING CALCULATIONS

Supporting calculations and data tables are presented in Attachment A, entitled "ATTACHMENT_A_EMISSIONS_SUNLAND_PARK_v1_20260821"

Attachment A

ATTACHMENT_A_EMISSIONS_SUNLAND_PARK_v1_20260821