# Emissions Inventory Guidance Document
# Appendices

# Appendix A: List of Unit Categories and Unit Types

Category: Activity

Accumulation and Storage
Beryllium Work
Food Processing
Operations
Open Burn
Transportation / Hauling
Research/Testing
Sandblasting

Category: Area

Coal Pile
Landfill
Mine
Processing
Raw Material Pile
Remediation area Roads

Surface Impoundment
Transfer
Unpaved roads

Category: Equipment

Air Curtain
Air Stripper
Amine sweetening unit
Asphalt Drum/Burner
Baler
Batcher
Benzene Waste Operation
Bins-Disposal
Bins-Recycle
Blower/Fan
Boiler
Bottoms Receiver

Burner
Chipper

Compressor
Condenser
Cogeneration
Container
Conveyor
Compactor
Cooling Tower
Crusher
Cryogenic Unit
Distillation unit
Digester
Dryer
Fermenter
Filtration Unit
Fluidized Catalytic Cracking Unit
Foundry
Freon/Refrig Equipment
Fuel Gas System
Furnace
Gas Collection System
Glycol Dehy Reboiler Burner
Glycol Dehy Still Vent/Flash Tank
Grain elevator
Heat Exchanger
Heater
Heater Treater/Stack Pak
Hopper
Incinerator
Internal combustion engine
Kiln
Loading/Unloading Rack
Machining Equipment
Medical Sterilization Equipment
Mixer
Nuclear Reactor
Oil/Water Separator
Paint Booth

Parts Washer
Precipitation Plant
Process Cyclone
Process Flare
Process Heater
Pump Station
Pump
Screen
Saws
Shredder
Separator
Silo
Sulfur Recovery Unit
Tank - Above Ground
Tank - Underground
Tank - Vat/Open
Thermal Oxidizer
(Incinerator)
Turbine

Category: Release Point
Fugitives
Stack/Vent
Transfer Point

Category: Treatment
Pump and Treat
Soil Vapor Extraction
Vapor Recovery System
Wastewater Treatment
System

# Appendix B: Required General Parameters in AEIR

| Unit Category | Unit Type | Required General Parameters |
|---|---|---|
| Activity | Accumulation and Storage | Materials Processed |
| Activity | Aerospace Manf & Rework | Fuel Consumption |
| Activity | Aerospace Manf & Rework | Fuel Heating Value |
| Activity | Aerospace Manf & Rework | Fuel Type |
| Activity | Beryllium Work | Fuel Consumption |
| Activity | Beryllium Work | Materials Processed |
| Activity | Open Burn | Materials Processed |
| Activity | Operations | Fuel Consumption |
| Activity | Operations | Fuel Heating Value |
| Activity | Operations | Fuel Type |
| Activity | Operations | Materials Processed |
| Activity | Operations | Percent Ash of Fuel |
| Activity | Operations | Percent Carbon Content |
| Activity | Operations | Percent Sulfur of Fuel |
| Activity | Research/Testing | Fuel Type |
| Activity | Sandblasting | Fuel Type |
| Area | Landfill | Fuel Type |
| Area | Landfill | Materials Processed |
| Area | Processing | Fuel Consumption |
| Area | Processing | Fuel Type |
| Area | Processing | Materials Processed |
| Control Device | Bag House/Filter | Materials Processed |
| Control Device | Emergency Flare | Fuel Consumption |
| Control Device | Emergency Flare | Fuel Heating Value |
| Control Device | Emergency Flare | Fuel Type |
| Control Device | Emergency Flare | Materials Processed |
| Control Device | Emergency Flare | Percent Carbon Content |
| Control Device | Emergency Flare | Percent Sulfur of Fuel |
| Equipment | Air Curtain | Fuel Consumption |
| Equipment | Air Curtain | Fuel Heating Value |
| Equipment | Air Curtain | Fuel Type |
| Equipment | Air Curtain | Materials Processed |
| Equipment | Air Curtain | Percent Ash of Fuel |

| | | |
|---|---|---|
| Equipment | Air Curtain | Percent Sulfur of Fuel |
| Equipment | Asphalt Drum/Burner | Fuel Consumption |
| Equipment | Asphalt Drum/Burner | Fuel Heating Value |
| Equipment | Asphalt Drum/Burner | Fuel Type |
| Equipment | Asphalt Drum/Burner | Materials Processed |
| Equipment | Asphalt Drum/Burner | Percent Sulfur of Fuel |
| Equipment | Baler | Materials Processed |
| Equipment | Bins-Disposal | Materials Processed |
| Equipment | Bins-Recycle | Materials Processed |
| Equipment | Boiler | Fuel Consumption |
| Equipment | Boiler | Fuel Heating Value |
| Equipment | Boiler | Fuel Type |
| Equipment | Boiler | Materials Processed |
| Equipment | Boiler | Percent Ash of Fuel |
| Equipment | Boiler | Percent Carbon Content |
| Equipment | Boiler | Percent Sulfur of Fuel |
| Equipment | Burner | Fuel Consumption |
| Equipment | Burner | Fuel Heating Value |
| Equipment | Burner | Fuel Type |
| Equipment | Burner | Materials Processed |
| Equipment | Burner | Percent Carbon Content |
| Equipment | Chipper | Materials Processed |
| Equipment | Cogeneration | Fuel Consumption |
| Equipment | Cogeneration | Fuel Heating Value |
| Equipment | Cogeneration | Fuel Type |
| Equipment | Cogeneration | Percent Ash of Fuel |
| Equipment | Cogeneration | Percent Sulfur of Fuel |
| Equipment | Compactor | Materials Processed |
| Equipment | Container | Materials Processed |
| Equipment | Conveyor | Materials Processed |
| Equipment | Crusher | Materials Processed |
| Equipment | Distillation unit | Fuel Consumption |
| Equipment | Distillation unit | Fuel Heating Value |
| Equipment | Distillation unit | Fuel Type |
| Equipment | Distillation unit | Materials Processed |
| Equipment | Distillation unit | Percent Ash of Fuel |
| Equipment | Distillation unit | Percent Sulfur of Fuel |
| Equipment | Dryer | Fuel Consumption |
| Equipment | Dryer | Fuel Heating Value |
| Equipment | Dryer | Fuel Type |
| Equipment | Dryer | Materials Processed |

| | | |
|---|---|---|
| Equipment | Dryer | Percent Ash of Fuel |
| Equipment | Dryer | Percent Carbon Content |
| Equipment | Dryer | Percent Sulfur of Fuel |
| Equipment | Filtration Unit | Fuel Consumption |
| Equipment | Flash Emissions | Fuel Consumption |
| Equipment | Flash Emissions | Fuel Heating Value |
| Equipment | Flash Emissions | Fuel Type |
| Equipment | Flash Emissions | Percent Ash of Fuel |
| Equipment | Flash Emissions | Percent Sulfur of Fuel |
| Equipment | Fluidized Catalytic Cracking Unit | Fuel Consumption |
| Equipment | Fluidized Catalytic Cracking Unit | Fuel Heating Value |
| Equipment | Fluidized Catalytic Cracking Unit | Fuel Type |
| Equipment | Fluidized Catalytic Cracking Unit | Percent Ash of Fuel |
| Equipment | Fluidized Catalytic Cracking Unit | Percent Sulfur of Fuel |
| Equipment | Foundry | Fuel Consumption |
| Equipment | Foundry | Fuel Heating Value |
| Equipment | Foundry | Fuel Type |
| Equipment | Foundry | Materials Processed |
| Equipment | Foundry | Percent Ash of Fuel |
| Equipment | Foundry | Percent Sulfur of Fuel |
| Equipment | Fuel Gas System | Fuel Consumption |
| Equipment | Fuel Gas System | Fuel Heating Value |
| Equipment | Fuel Gas System | Fuel Type |
| Equipment | Fuel Gas System | Materials Processed |
| Equipment | Fuel Gas System | Percent Ash of Fuel |
| Equipment | Fuel Gas System | Percent Sulfur of Fuel |
| Equipment | Furnace | Fuel Consumption |
| Equipment | Furnace | Fuel Heating Value |
| Equipment | Furnace | Fuel Type |
| Equipment | Furnace | Percent Ash of Fuel |
| Equipment | Furnace | Percent Carbon Content |
| Equipment | Furnace | Percent Sulfur of Fuel |
| Equipment | Gas Collection System | Fuel Consumption |
| Equipment | Gas Collection System | Fuel Heating Value |
| Equipment | Gas Collection System | Fuel Type |
| Equipment | Gas Collection System | Percent Carbon Content |
| Equipment | Glycol Dehy Reboiler Burner | Fuel Consumption |

| | | |
|---|---|---|
| Equipment | Glycol Dehy Reboiler Burner | Fuel Heating Value |
| Equipment | Glycol Dehy Reboiler Burner | Fuel Type |
| Equipment | Glycol Dehy Reboiler Burner | Percent Carbon Content |
| Equipment | Glycol Dehy Reboiler Burner | Percent Sulfur of Fuel |
| Equipment | Grain elevator | Materials Processed |
| Equipment | Heater | Fuel Consumption |
| Equipment | Heater | Fuel Heating Value |
| Equipment | Heater | Fuel Type |
| Equipment | Heater | Percent Ash of Fuel |
| Equipment | Heater | Percent Carbon Content |
| Equipment | Heater | Percent Sulfur of Fuel |
| Equipment | Heater Treater/Stack Pak | Fuel Consumption |
| Equipment | Heater Treater/Stack Pak | Fuel Heating Value |
| Equipment | Heater Treater/Stack Pak | Fuel Type |
| Equipment | Heater Treater/Stack Pak | Percent Sulfur of Fuel |
| Equipment | Hopper | Materials Processed |
| Equipment | Incinerator | Fuel Consumption |
| Equipment | Incinerator | Fuel Heating Value |
| Equipment | Incinerator | Fuel Type |
| Equipment | Incinerator | Materials Processed |
| Equipment | Internal combustion engine | Fuel Consumption |
| Equipment | Internal combustion engine | Fuel Heating Value |
| Equipment | Internal combustion engine | Fuel Type |
| Equipment | Internal combustion engine | Percent Ash of Fuel |
| Equipment | Internal combustion engine | Percent Carbon Content |
| Equipment | Internal combustion engine | Percent Sulfur of Fuel |
| Equipment | Kiln | Fuel Consumption |
| Equipment | Kiln | Fuel Heating Value |
| Equipment | Kiln | Fuel Type |
| Equipment | Kiln | Materials Processed |
| Equipment | Kiln | Percent Ash of Fuel |
| Equipment | Kiln | Percent Sulfur of Fuel |
| Equipment | Loading/Unloading Rack | Materials Processed |
| Equipment | Medical Sterilization Equipment | Fuel Consumption |
| Equipment | Medical Sterilization Equipment | Fuel Heating Value |
| Equipment | Medical Sterilization Equipment | Fuel Type |
| Equipment | Medical Sterilization Equipment | Percent Ash of Fuel |

| | | |
|---|---|---|
| Equipment | Medical Sterilization Equipment | Percent Sulfur of Fuel |
| Equipment | Mixer | Materials Processed |
| Equipment | Oil/Water Separator | Fuel Consumption |
| Equipment | Piping | Materials Processed |
| Equipment | Process Flare | Fuel Consumption |
| Equipment | Process Flare | Fuel Heating Value |
| Equipment | Process Flare | Fuel Type |
| Equipment | Process Flare | Materials Processed |
| Equipment | Process Flare | Percent Carbon Content |
| Equipment | Process Flare | Percent Sulfur of Fuel |
| Equipment | Process Heater | Fuel Consumption |
| Equipment | Process Heater | Fuel Heating Value |
| Equipment | Process Heater | Fuel Type |
| Equipment | Process Heater | Percent Ash of Fuel |
| Equipment | Process Heater | Percent Sulfur of Fuel |
| Equipment | Pump Station | Materials Processed |
| Equipment | Screen | Materials Processed |
| Equipment | Separator | Materials Processed |
| Equipment | Shredder | Materials Processed |
| Equipment | Silo | Materials Processed |
| Equipment | Sulfur Recovery Unit | Fuel Consumption |
| Equipment | Sulfur Recovery Unit | Fuel Heating Value |
| Equipment | Sulfur Recovery Unit | Fuel Type |
| Equipment | Sulfur Recovery Unit | Percent Carbon Content |
| Equipment | Sulfur Recovery Unit | Percent Sulfur of Fuel |
| Equipment | Tank - Above Ground | Materials Processed |
| Equipment | Tank - Vat/Open | Materials Processed |
| Equipment | Thermal Oxidizer (Incinerator) | Fuel Consumption |
| Equipment | Thermal Oxidizer (Incinerator) | Fuel Heating Value |
| Equipment | Thermal Oxidizer (Incinerator) | Fuel Type |
| Equipment | Thermal Oxidizer (Incinerator) | Materials Processed |
| Equipment | Thermal Oxidizer (Incinerator) | Percent Carbon Content |
| Equipment | Thermal Oxidizer (Incinerator) | Percent Sulfur of Fuel |
| Equipment | Turbine | Fuel Consumption |
| Equipment | Turbine | Fuel Heating Value |

| | | |
|---|---|---|
| Equipment | Turbine | Fuel Type |
| Equipment | Turbine | Percent Ash of Fuel |
| Equipment | Turbine | Percent Carbon Content |
| Equipment | Turbine | Percent Sulfur of Fuel |
| Treatment | Wastewater Treatment System | Materials Processed |

Note: The Control Device categories, highlighted in red, are used in existing equipment; control device as a category is no longer accepted for newly added equipment. Control Devices such as flares and thermal oxidizers should be listed under the category of equipment. Refer to Appendix A for a complete list of all unit categories and types.

# Appendix C: Representative Analysis Criteria

Oil/Liquid Analysis: Oil/liquid sample analyses are; required. It should match the inputs in all applicable emission calculations. For facilities that have not been constructed yet and a representative sample analysis is used then the analysis should not be older than 3 years, and it should represent the area/basin where the facility is located. For existing facilities, the representative sample analysis must be within the past 3 years.

Gas Analysis: Gas sample analyses are required, and it should match the inputs in all applicable emission calculations.

Extended Gas Analysis (must be 3 years old or less): This data is required to match the inputs in all applicable emission calculations.

Note: If requesting to use a representative gas or oil/liquid sample, include a discussion of why the sample is representative for this facility and an explanation of how it is representative (e.g., same reservoir, same API gravity, similar composition). Provide this discussion with your attached calculations.

# Appendix D: Online Resources

Calcatenate

https://www.env.nm.gov/air-quality/calcatenate/

Emissions Inventory Submittal Webpage (contains information on how to access AEIR, this guidance document, XML tool, public training information)

https://www.env.nm.gov/air-quality/ei-submittal/

EPA Emission Factors

https://www.epa.gov/chief

Hazardous Air Pollutants (HAPs) List

https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications

NAICS Codes and Updates

https://www.naics.com
https://www.naics.com/changes-from-2012-2017-naics-structures-highlights-highlights/ https://www.naics.com/2022-naics-changes/

New Mexico Administrative Codes (NMAC)

http://www.srca.nm.gov/chapter-2-air-quality-statewide/

NMED Air Quality Bureau (AQB)

https://www.env.nm.gov

SCC

https://ofmpub.epa.gov/sccwebservices/sccsearch/
https://ofmpub.epa.gov/sccwebservices/sccsearch/docs/SCC-IntroToSCCs.pdf

SIC Codes

www.osha.gov/pls.imis/sicsearch.html

# Appendix E: Air Quality Glossary

**ACFM** Actual cubic feet per minute. A measurement of exhaust rate from a release point.

**Actual Emissions** are the actual rate of emissions of a pollutant from an emission unit calculated using the emission unit's actual operating hours, production rates, and types of materials processed, stored, or combusted for the calendar year.

***AEIR* Air Emissions Inventory Reporting** is the web-based application used to submit emissions inventory.

**Agency Interest** is NMED's identifier for a facility, which is a number that is usually between three and five digits.

***Annual Throughput*** is the quantity of raw material processed, handled, or used in an emission unit, such as fuels, solvents, coatings, or quantity of dust-producing material processed, handled, or transferred.

***Air Pollutant*** is generally any substance in the air not part of the naturally occurring makeup of ambient air or that occurs in un-natural concentrations. In New Mexico, this usually refers to toxic air pollutants, hazardous air pollutants, and criteria air pollutants.

***Allowable Emissions*** refers to the emissions rate that represents a limit on the emissions that can occur from an emissions unit. This limit may be based on federal, state, or local regulations.

***Ambient Standards*** limit the concentration of a given pollutant in the ambient air. Ambient standards are not emissions limitations on sources, but usually result in such limits being placed on source operation as part of a control strategy to achieve or maintain an ambient standard.

***Ammonia*** is a colorless gas with a very distinct odor. Ammonia emissions are important to air quality analyses because ammonia is involved in the formation of sulfate and nitrate, which are precursors for PM2.5. Primary ammonia remains in the same chemical form as when it was emitted into the atmosphere. Secondary ammonia, such as ammonium sulfate and ammonium nitrate, is formed by chemical reactions in the atmosphere. Only primary ammonia needs to be reported.

***Attainment Area*** is an area considered to have air quality as good as or better than the National Ambient Air Quality Standards (NAAQS) as defined in the Clean Air Act. An area may be in attainment for one or more pollutants but be a nonattainment area for one or more other pollutants.

***Capture Efficiency*** is the percentage of pollutant emitted from an emission unit that is caught or

captured by a hood or other collection mechanism. An example is a fume hood above a painting/coating station.

***Carbon Monoxide (CO)*** is a colorless, odorless gas that is a product of incomplete combustion. It depletes the oxygen-carrying capacity of blood. Example sources of CO emissions include industrial boilers, incinerators, and motor vehicles.

***CAS Number*** refers to the Chemical Abstract Services number. CAS numbers are often found on Material Safety Data Sheets and are sometimes used to identify air pollutants.

***CFR*** is the Code of Federal Regulations. This is a collection of rules published by the federal government. Title 40 of the CFR pertains to Protection of the Environment.

***Continuous Emissions Monitoring*** Equipment that measures the concentration or emission rate of a gas or particulate matter using analyzer measurements and a conversion equation, graph, or computer program. Installation and operation of a CEM may be required by EPA or NMED to determine compliance with specific standards. The operation of a CEM must meet performance specifications, certification procedures, and recordkeeping and reporting requirements as specified in applicable regulations.

***Construction Permits*** are required before installing or altering equipment or control equipment, with a goal of preventing significant deterioration or degrading of clean air areas from new industrial development or expansion.

***Control Efficiency*** is the emission reduction efficiency of a device and is a percentage value representing the amount of an emission unit's emissions that are removed from the exhaust stream by a control device.

***Criteria Pollutant*** refers to a pollutant for which a National Ambient Air Quality Standard has been set. Criteria pollutants are carbon monoxide (CO), lead (Pb), nitrogen oxides ($NO_X$), ozone ($O_3$), particulate matter with aerodynamic diameter less than or equal to 10 micrometers (PM10) or less than or equal to 2.5 micrometers (PM2.5), and sulfur dioxide ($SO_2$).

***Emergency Generator*** means any generator whose sole function is to provide backup power during an interruption of electrical power from the electric utility. An emergency generator does not include peaking units at electric generating facilities; generators at industrial facilities that typically operate at low rates but are not confined to emergency purposes; or any standby generators that are used during time periods when power is available from the electric utility. An emergency is an unforeseeable condition that is beyond the control of the owner or operator.

***Emission*** means pollution discharged into the atmosphere from exhaust stacks, other vents,

and surface areas of commercial or industrial facilities; from residential chimneys; and from motor vehicle, locomotive, aircraft, or other non- road engines.

***Emission Factors*** represent the relationship between the amount of pollution produced and the amount of raw material(s) processed. For example – pounds of CO per ton of coal fired.

***Emission Inventory*** is a listing, by source, of the amount of air pollutants discharged into the atmosphere.

***Emission Limits*** are limits on emissions that may be federally enforceable and exist in a permit. Such limits are usually expressed as a rate, generally in pounds per hour of emissions or as a concentration, such as grains per dry standard cubic foot (7,000 grains equals one pound).

***Release point*** is the point where emissions enter the atmosphere, such as stacks, vents, and ventilation exhausts. The term release point is used interchangeably with release point.

***Emission Unit*** is a piece of equipment where emissions are generated. Emission units may have one or more processes with actual emissions. Some examples of an emission unit with one or more processes are boilers (the ability to burn both natural gas and fuel oil), generators (the ability to burn both fuel oil and dual fuel), and grain dryers (the ability to dry grain and burn natural gas).

***Engineering Estimate*** is a term commonly applied to the best approximation that can be made when specific emission estimation techniques such as stack testing, material balance, or emission factors are not possible. This estimation is usually made by an engineer familiar with the specific process and is based on process information.

***Federally Enforceable*** means all limitations and conditions which are enforceable by the EPA administrator including, but not limited to, the requirements of new source performance standards, national emission standards for hazardous air pollutants, state rules (included as part of the state implementation plan (SIP)), administrative orders, construction permits, and operating permits.

***Fugitive Emissions*** are emissions that cannot reasonably pass through a stack, chimney, duct, vent or other opening. Fugitive emission sources can include haul roads, exposed storage piles, and wastewater retention ponds, etc.

***HAP or Hazardous Air Pollutants*** are any of the 187 pollutants listed in Section 112 of the 1990 Clean Air Act Amendments. HAPs are known or suspected of being toxic or carcinogenic.

***Indirect Heating*** occurs when the material being heated does not come in direct contact with the combustion gas, such as a hot water boiler.

***MMcf*** equals 1,000,000 cubic feet. This unit of measure is most typically associated with the amount of natural gas combusted.

***Material Balance or Mass Balance*** A process of estimating emissions using knowledge of the process, process rate, material used, and material properties.

***MACT or Maximum Achievable Control Technology*** are standards set under Title III of the 1990 Clean Air Act Amendments with an emphasis on technology control of hazardous air pollutants.

***Maximum True Vapor Pressure*** means the equilibrium partial pressure of the material considering: 1) for a material stored at ambient temperature, the maximum monthly average temperature as reported by the National Weather Service, or 2) for a material stored above or below the ambient temperature, the temperature equal to the highest calendar-month average of the material storage temperature.

***National Ambient Air Quality Standards (NAAQS)*** are the main ambient standards for the six criteria pollutants identified above.

***National Emission Standards for Hazardous Air Pollutants (NESHAP)*** are health-based standards set under the 1970 Clean Air Act for beryllium, mercury, vinyl chloride, benzene, arsenic, asbestos, radon, radionuclides and other HAPs. Under the 1990 Act, roughly 170 source categories are identified for eventual MACT regulations. See MACT definition above. The NESHAPs are published in 40 CFR Parts 61 and 63.

***New Source Performance Standards (NSPS)*** are promulgated for criteria and other pollutant emissions from new, modified, or reconstructed sources that the U.S. EPA determines contribute significantly to air pollution. These are typically emission standards but may be expressed in other forms such as concentration and opacity. The NSPS are published in 40 CFR Part 60.

***Nitrogen Oxides ($NO_X$)*** are a class of compounds that are respiratory irritants that react with volatile organic compounds (VOC\s) in the presence of sunlight to form Ozone. $NO_X$ compounds are also precursors to acid rain. Motor vehicles, power plants, and other stationary combustion facilities emit large quantities of NOx.

***North American Industrial Classification System (NAICS)*** A North American system for classifying industries by a six-digit code. This six-digit hierarchical structure allows greater coding flexibility than the four-digit structure of the SIC. NAICS allows for the identification of 1,063 industries compared to the 1,004 found in the SIC system.

***Operating Permits*** are permits required by Title V of the 1990 Act for major sources. Operating permits are for the facility as a whole and differ from construction permits, which are issued for individual release points.

***Overall Control Efficiency*** is obtained by multiplying the capture efficiency by the control

equipment control efficiency to provide the overall control efficiency for reporting emissions.

***Ozone ($O_3$)*** is a colorless gas that damages lungs and can damage materials and vegetation. It is the primary constituent of smog and is formed primarily when nitrogen oxides (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight.

***Particulate Matter of aerodynamic diameter less than or equal to 10 micrometers (PM10)*** is a measure of small solid matter suspended in the atmosphere. Small particles can penetrate deeply into the lung where they can cause respiratory problems. Emissions of PM10 are significant from fugitive dust, power plants, commercial boilers, metallurgical industries, mineral industries, fires, and motor vehicles.

***Particulate Matter of aerodynamic diameter less than or equal to 2.5 micrometers (PM2.5)*** is another measure of small solid matter suspended in the atmosphere. Primary PM2.5 particulate results largely from combustion of fossil fuels or biomass, although selected industrial processes can also be significant in some areas. The sources of PM2.5 include, but are not limited to, gasoline and diesel exhaust, wood stoves and fireplaces, land clearing, wildland prescribed burning, and wildfires. Sources of primary particulate including fugitive emissions from paved and unpaved roads, dust from ore processing and refining, and to a lesser extent, crustal material from construction activities, agricultural tilling, wind erosion and other crustal sources are less important based on their relatively small contribution to ambient PM2.5 concentrations. The condensable components are largely made up of semi-volatile organic compounds that condense at ambient temperature to form aerosol.

***Release Point*** is the point where emissions enter the atmosphere such as stacks, vents and ventilation exhausts. The term release point is used interchangeably with release point.

***Reported Emissions*** are those emission estimates that are submitted to a regulatory agency. Emission inventories are used for a variety of purposes such as planning pollution control programs, promoting compliance with laws and regulations, and conducting permit reviews.

***MSDS or Material Safety Data Sheets*** are an information source with details about the chemical composition of a material, safe handling, and transportation data and other environmental information. An MSDS can be a useful source of emission information and are available for all chemical substances from the supplier of the material.

***Source Classification Codes (SCCs)*** are codes defined by EPA that classify air emission sources by individual processes and/or operations.

***Stack Tests*** A test that measures the concentration of pollutants in the exhaust stack. Measurements are performed following procedures specified and developed by the US EPA. Such testing is required by NMED to be conducted by various stationary sources to determine compliance with applicable air emission limits.

***SCFM*** Standard cubic feet per minute. A measurement of exhaust rate from a release point.

***Standard Industrial Classification (SIC)*** A United States government system for classifying industries by a four-digit code.

***State Implementation Plan (SIP)*** is a state plan approved by EPA for the implementation, regulation, and enforcement of air pollution standards.

***Stationary Source*** is any building, structure, facility or installation which emits or may emit any air pollutant subject to regulation under the Clean Air Act. It includes all pollutant emitting activities which belong in the same major industrial grouping as identified by the first two digits in the facilities SIC code, are located on one or more contiguous or adjacent properties and are under common ownership or control.

***Sulfur Oxides ($SO_X$)*** are a class of colorless, pungent gases that are respiratory irritants and precursors to acid rain. Sulfur oxides are emitted from various combustion or incineration sources, particularly from coal combustion.

***Threshold*** is the level of emissions that once reached, triggers certain requirements to obtain a permit, to submit GHG emissions, etc.

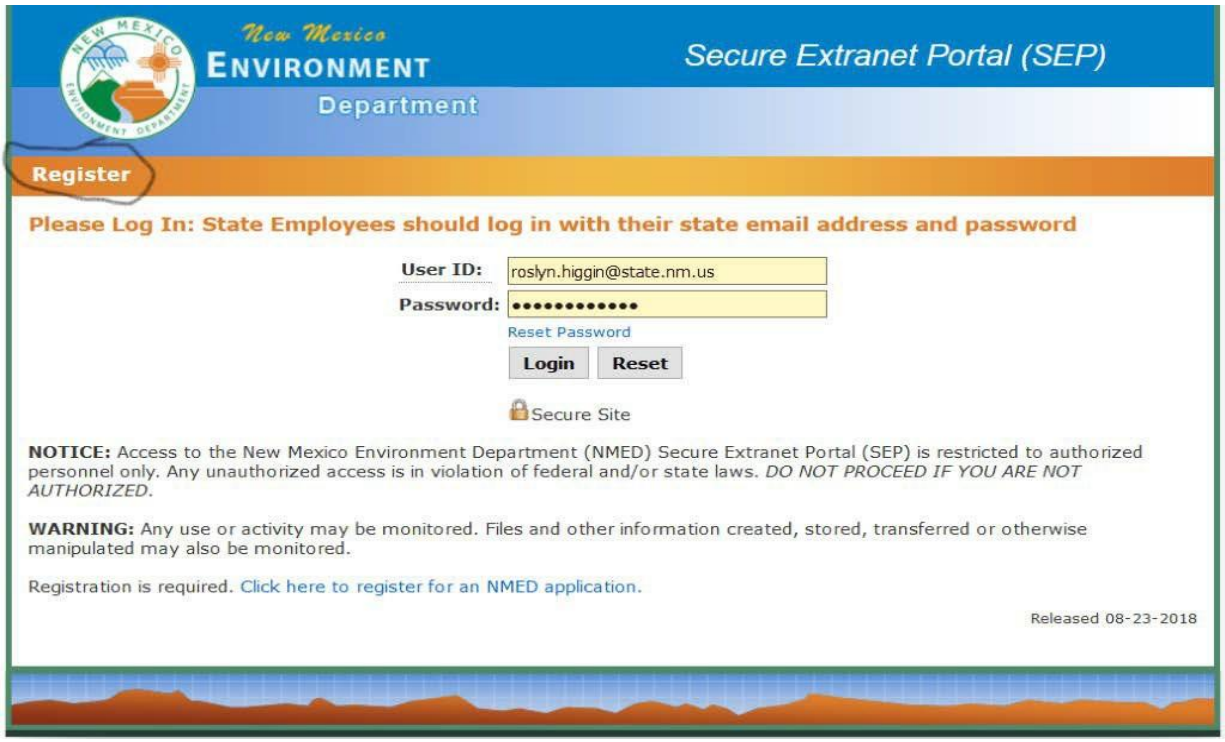
***Volatile Organic Compounds (VOCs)*** are organic compounds that contribute to ground-level ozone or smog formation. Ground level ozone is a strong lung oxidant. Large amounts of VOCs are emitted from fuel distribution, chemical manufacturing, motor vehicles, and a wide variety of industrial, commercial, and consumer solvent use.

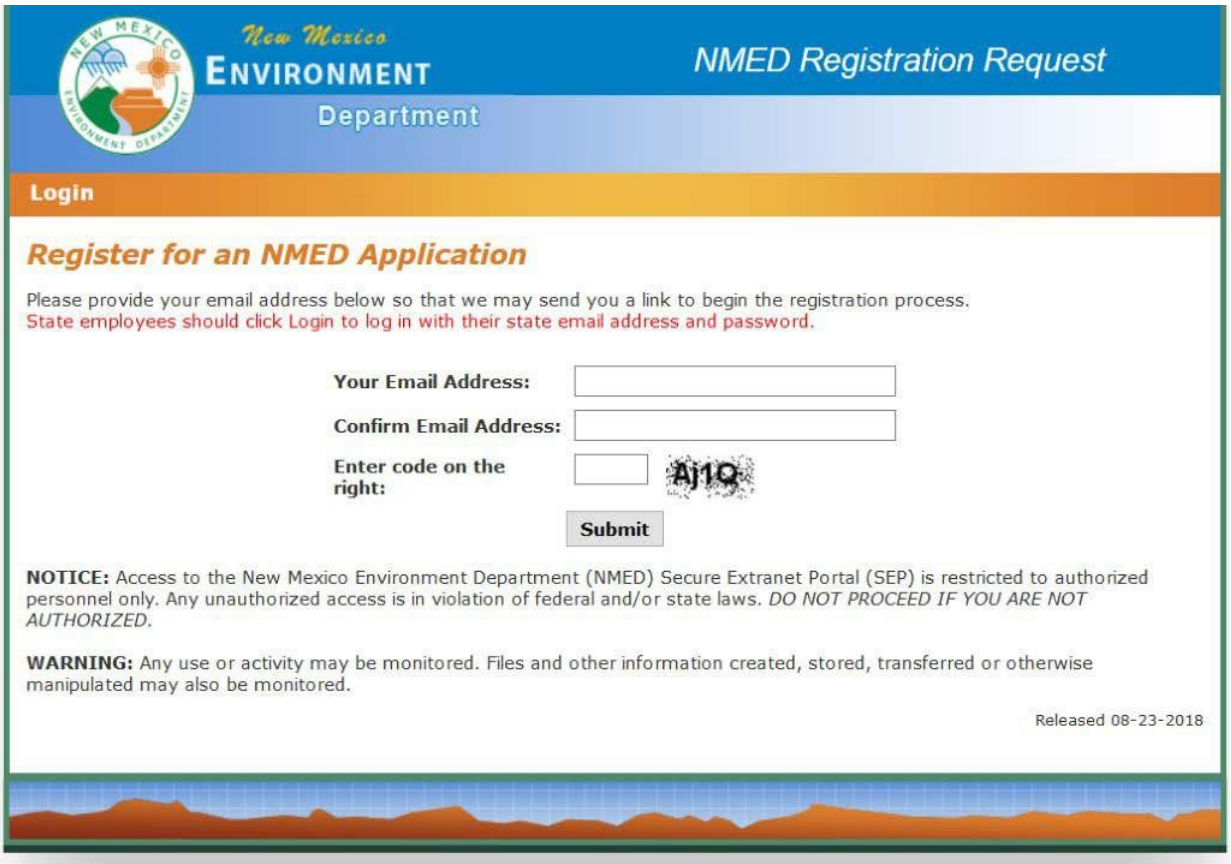
# Appendix F: Abbreviations

| | |
|---|---|
| ACFM | Actual cubic feet per minute |
| ACT | Activity |
| AECT | Air Emissions Calculation Tool |
| AEIR | Air Emissions Inventory Reporting |
| AI | Agency Interest Number |
| AQB | Air Quality Bureau |
| CAA | Clean Air Act |
| CAS | Chemical Abstract Service Registry number |
| CFR | Code of Federal Regulation |
| CHIEF | Clearinghouse for Inventories and Emission Factors |
| CO | Carbon Monoxide |
| EI | Emissions Inventory |
| EQPT | Equipment |
| gr/dscf | grains per dry standard cubic foot |
| HAP | Hazardous Air Pollutant |
| lbs/hr | pounds per hour |
| lbs/MMBtu | pounds per million British thermal units lbs/MMcf pounds |
| per million cubic ft | feet |
| MACT | Maximum Achievable Control Technology |
| NMAC | New Mexico Administrative Code |
| NMED | New Mexico Environment Department |
| MSEI | Minor Source Emission Inventory |
| NAAQS | National Ambient Air Quality Standards |
| NAICS | North American Industrial Classification System |
| NESHAP | National Emission Standards for Hazardous Air |
| Pollutants $NO_x$ | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| NSR | New Source Review |
| ˚F | degrees Fahrenheit |
| PM10 | Particulate Matter less than or equal to 10 micrometers in diameter PM2.5 Particulate Matter less than or equal to 2.5 micrometers in diameter Ppb parts per billion |
| Ppm | parts per million |
| ppmv | parts per million by volume |
| RPNT | Release Point |
| SCC | Source Classification Code |
| SCFM | Standard cubic feet per minute |
| SI | Subject Item |
| SIC | Standard Industrial Classification |
| $SO_2$ | Sulfur Dioxide |
| TPY | Tons per year |
| USEPA | United States Environmental Protection Agency |
| VOCs | Volatile Organic Compounds |

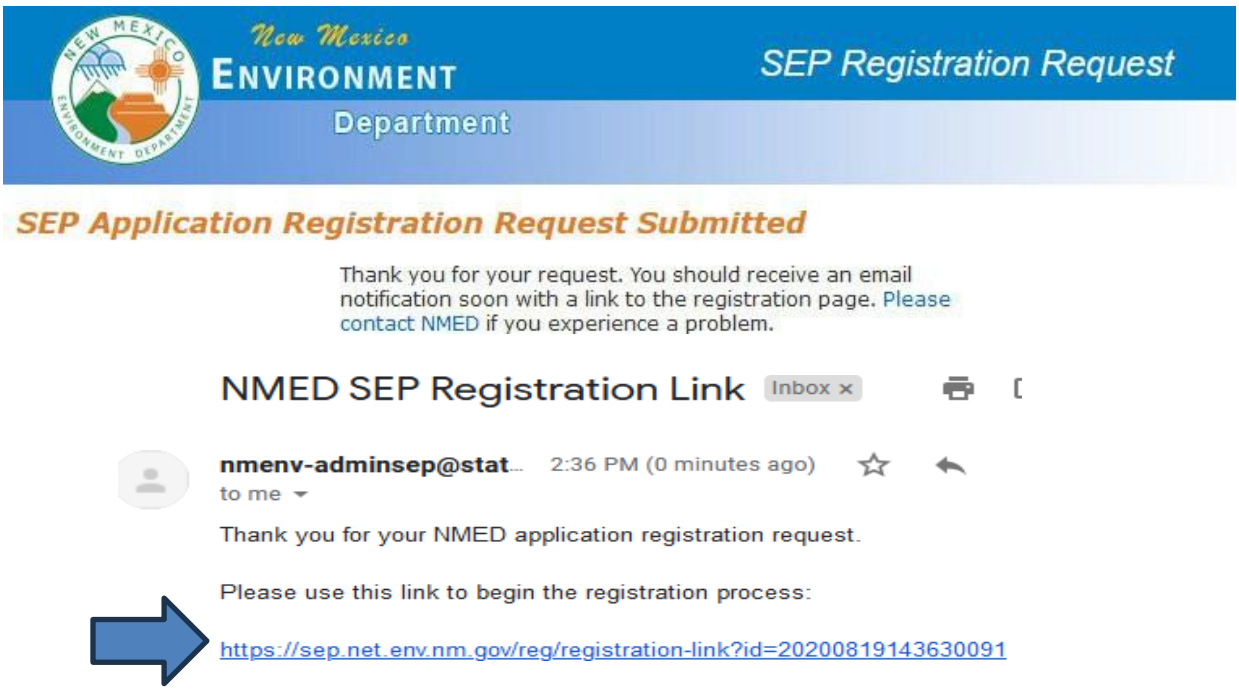
# Appendix G: Accessing Air Emissions Inventory Reporting (AEIR)

1) **Click link:** https://sep.net.env.nm.gov/sep/login-form and click on **Register.**

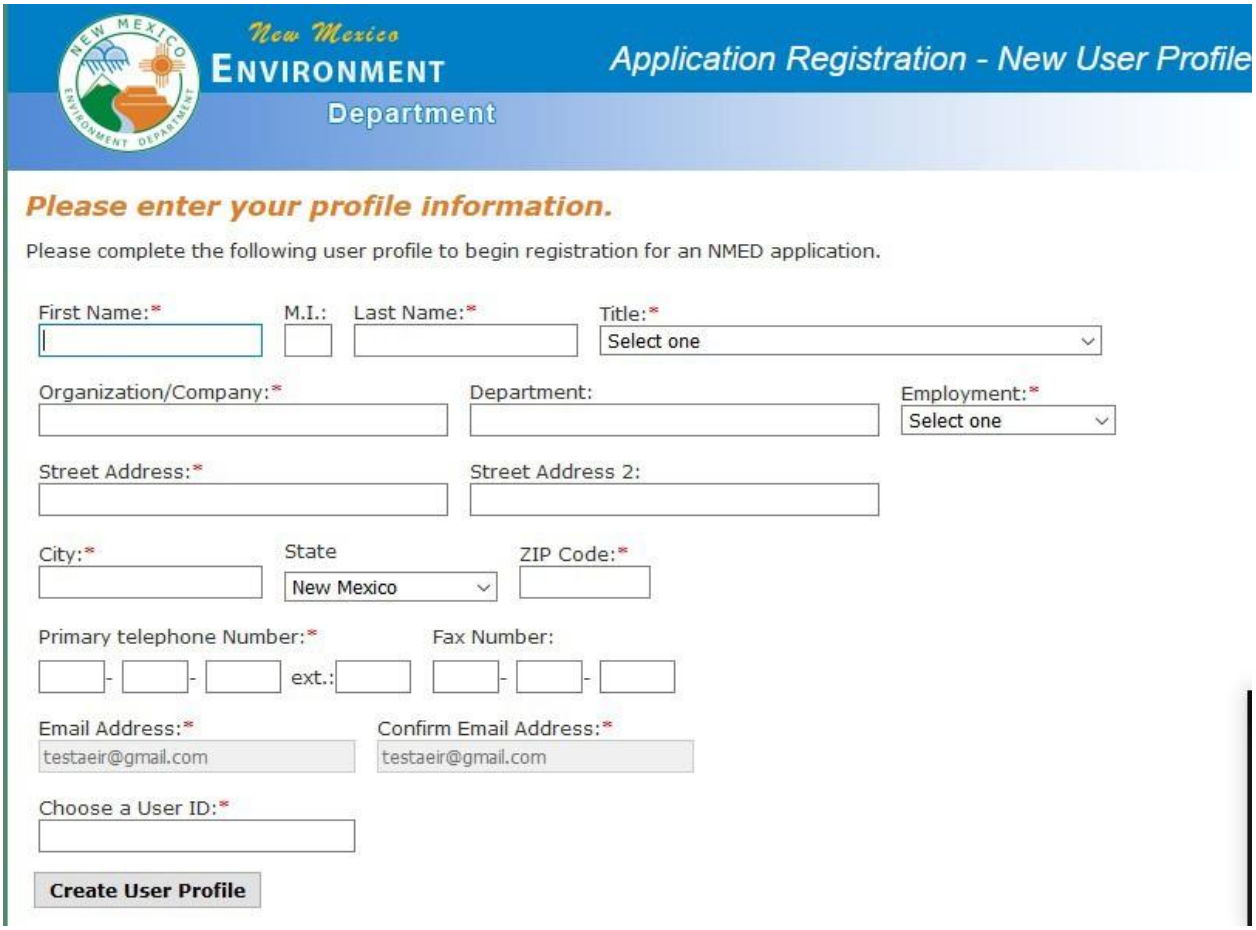





2) **You will receive an email notification with a unique link to the registration page (example email is also below). Click on the hyperlink in the email.**



3) **Fill out your profile information, then click "Create User Profile" button and you will be emailed a temporary password.**




**Click Here**

4) Register for “Air Emissions Inventory Reporting” by clicking “register”.

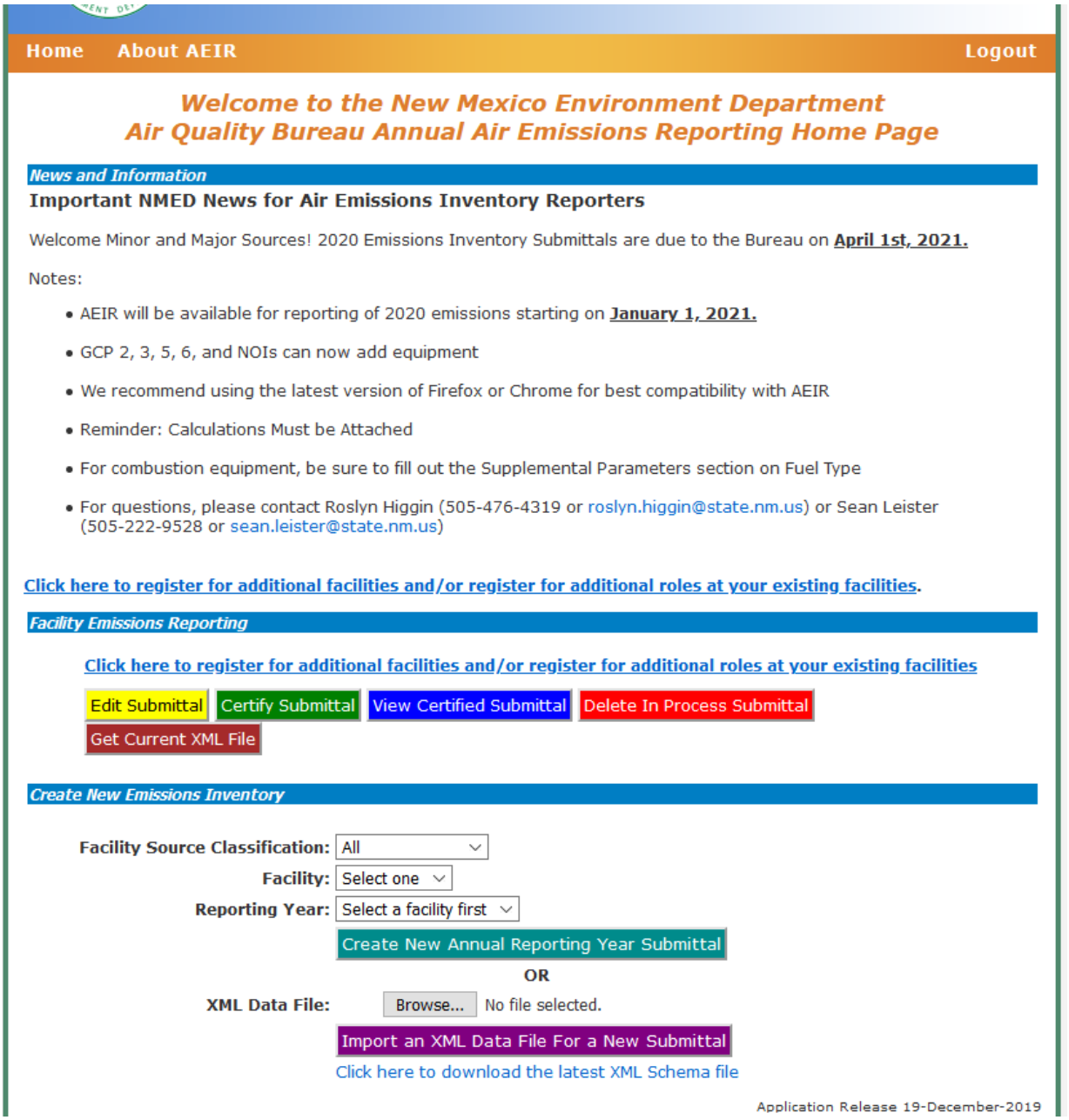
**Select an NMED Application for Registration**

| Application | Description | Access |
|---|---|---|
| API Security | API Security Portal for NMED applications. | register |
| AQB Compliance Reporting | The Air Quality Bureau Compliance Reporting System | register |
| AQB Regulatory Archives | AQB Regulatory Archives | register |
| Air Cloud ResourceSpace | Air Cloud ResourceSpace for SEP | register |
| Air Emissions Inventory Reporting | Air Quality Bureau Air Emissions Inventory Reporting (AEIR) application to allow facilities to electronically submit an annual emissions inventory report to NMED. | register |
| Corrective Action Fund | PSTB's financial application for managing and tracking of release site cleanup funds. **(PSTB STAFF ONLY)** | register |
| Drinking Water Bureau Board Training Database | Drinking Water Bureau Board Training Database | register |
| Drinking Water Sample Collection | DWSC supports the capture of drinking Water sample data and the submission of lab results. | register |
| GetBytes | RESTful Services Aggregator Application | register |
| LabTo State (Error Reporting App) | A tool to assist laboratories and other entities with formatting, validating, and submitting water sample data to their primary agency. | register |
| OIT Cloud ResourceSpace | OIT Cloud ResourceSpace For SEP | register |
| OIT Wiki | Office of Information Technology Wiki. | register |
| OSHA Consult | OHSB Request A Free Safety And Health Consultation Report with update/delete option | register |
| OSHA Mail | List of email addresses that will receive an email from consult form | register |

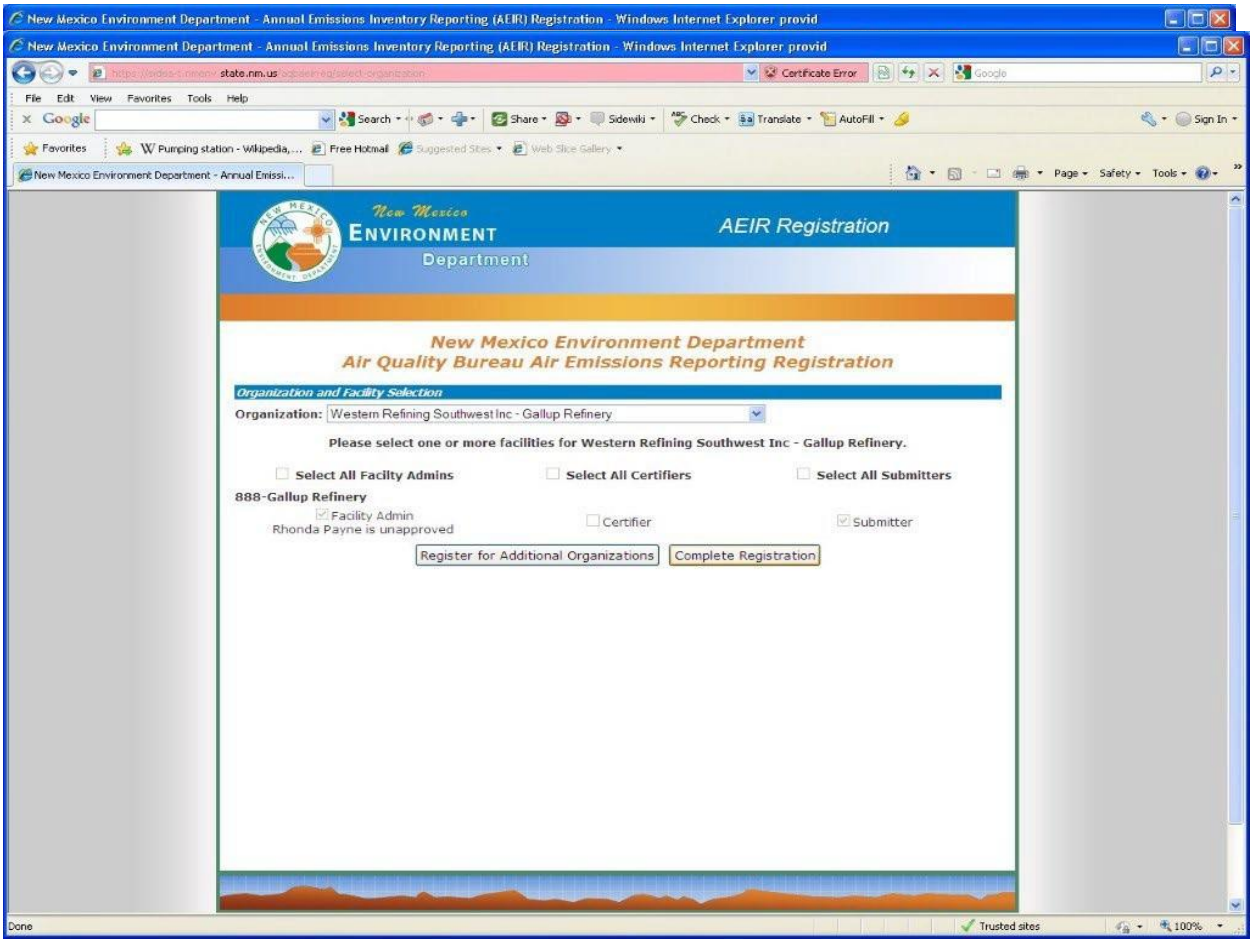
You will receive the confirmation below that your NMED Application Registration is Complete.


You will receive an email with a temporary password for AEIR. Use this password to log into AEIR: https://sep.net.env.nm.gov/sep/login-form.


5) On the AEIR home page, select the link to register for additional facilities/roles (red arrow below). The page shown below will appear.




6) Select your organization from the drop-down menu and associated facilities will appear. Roles can be checked through the "Select All" button or chosen individually. Select the "Register for Selected Facilities" button when finished.




*NOTE: The Emissions Inventory Section will approve the Facility Administrator for facilities, and Submitter/Preparer and Certifier roles requests will be approved by the Facility Administrator for that facility.*