

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
CORPORATE ENVIRONMENTAL, HEALTH AND SAFETY
PROCEDURE
AIR RESOURCES

CEHSP E01.01 – Air Resources Program Overview

(CEP converted to CEHSP on 07/24/2008)

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CONTENTS

[SECTION 1.0 – PURPOSE](#)

[SECTION 2.0 – APPLICABILITY](#)

[SECTION 3.0 – INTRODUCTION](#)

[SECTION 4.0 – COMPLIANCE REQUIREMENTS](#)

[SECTION 5.0 – DEFINITIONS](#)

[SECTION 6.0 – REFERENCES](#)

1.0 PURPOSE

IT IS THE POLICY OF CON EDISON TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS PERTAINING TO AIR EMISSIONS AND RESOURCES. Compliance with environmental regulations will ensure that Con Edison conducts its operations in a manner that protects human health and the environment. These procedures have been prepared for Con Edison *facilities* and *field locations* to provide an overview of the regulatory requirements that govern:

- **Emissions** from air contaminant sources.
- Control of emission sources.
- Air emissions monitoring.

2.0 APPLICABILITY

These Corporate Environmental, Health and Safety Procedures (CEHSPs) apply to all Con Edison facilities or operations that have the potential to emit regulated air contaminants from any combustion unit or process.

3.0 INTRODUCTION

To ensure that air resources and contaminant emissions are properly managed, the United States Congress passed the Clean Air Act (CAA). The CAA established National Ambient Air Quality Standards (NAAQS) and requires state implementation plans (SIP), which are the framework for states to achieve and maintain compliance with the NAAQS by controlling sources of air emissions. The CAA established standards to limit motor vehicle emissions and National Emission Standards for Hazardous Air Pollutants (NESHAPs) to limit toxic emissions from stationary sources to the air. Certain new or modified stationary sources must meet federal technology-based New Source Performance Standards (NSPS) and/or comply with strict New Source Review (NSR) requirements.

In New York, many CAA regulations are administered by the New York State Department of Environmental Conservation (NYSDEC). In addition, NYSDEC has adopted numerous state regulations, some of which have been incorporated into New York's SIP and are therefore enforceable both by NYSDEC and by the United States Environmental Protection Agency (USEPA). Finally, New York City and Westchester and Rockland Counties have adopted their own air pollution control regulations. These regulations are administered by the New York City Department of Environmental Protection (NYCDEP) and the county Departments of Health, respectively.

4.0 COMPLIANCE REQUIREMENTS

CEHSPs are provided for 16 subject areas related to air resources. This program overview provides a summary of the information that is presented in each CEHSP.

CEHSP E01.02 – Air Permits

Prior to installation, **construction**, **modification**, or operation, potential **air contamination sources** at Con Edison facilities or field locations must be evaluated to determine whether they are required to obtain a permit from the state and/or a local agency. This CEHSP identifies the types of sources that require permits or are exempt, the different types of permits available, and any applicable renewal requirements.

CEHSP E01.03 – Requirements for New, Reconstructed, and Modified Emission Sources

The construction, reconstruction or modification of an emission source may trigger one or more federal, state or local programs specifically targeted at such changes. These programs may require facilities to install emission controls and comply with permitting, notification, monitoring, reporting, recordkeeping and/or other requirements.

Note: Assessing whether these programs apply requires considerable expertise. As a result, facilities contemplating physical or operational changes that could affect their air emissions must contact the Air Resources Section, Environment and Steam Operations during the initial planning stages of the project. Con Edison's New Source Review (NSR) Committee is a multi-departmental group responsible for development and implementation of the process for the review of work orders and capital projects for NSR applicability.

CEHSP E01.04 – Fuel Composition, Use and Sulfur Testing

The **fuel oil** purchased and used in **combustion installations** at Con Edison facilities must meet sulfur content limitations established by both NYSDEC and NYCDEP. For Title V facilities, records of fuel composition must be maintained to demonstrate compliance. Fuel oil, as defined in NYSDEC regulations, includes only virgin oils or re-refined oils. **Waste oil (waste fuel)** may not be burned in Con Edison facilities.

CEHSP E01.05 – Particulate Matter Emission Limits

NYSDEC restricts emissions of **particulates** from **process** emission sources and stationary combustion installations with a maximum heat input greater than 50 million Btu/hr at Con Edison facilities burning residual oil.. NYCDEP restricts emissions of particulates from all fuel-burning

equipment. Emissions that may result in serious adverse effects on receptors or the environment are required to be controlled. For equipment at Con Edison facilities, stack testing may be required to demonstrate compliance with particulate matter emissions limits.

CEHSP E01.06 – Stack Opacity Limits

Opacity or smoke from process emission sources and stationary combustion installations at Con Edison facilities is restricted by NYSDEC. Various local government agencies, including NYCDEP and the Westchester and Rockland County Departments of Health also limit opacity. Certain larger stationary combustion installations (primarily boilers with a maximum total heat input greater than 250 million Btu/hr) must be equipped with **continuous emission monitoring systems (CEMS)** that monitor and record opacity. In many cases, air permits issued to facilities also may require regular visual checks of opacity.

CEHSP E01.07 – Reasonably Available Control Technology (RACT) Requirements for Nitrogen Oxide Emissions

Certain combustion installations located at **major stationary sources** are subject to limits on emissions of nitrogen oxide (NO_x) based on the use of **reasonably available control technology (RACT)**. For these sources, Con Edison must: (1) perform testing to demonstrate that the combustion installations are in compliance; (2) install continuous NO_x emission monitors for **large** and **very large boilers** and some combustion turbines (East River 10/20) (refer to [CEHSP E01.08, Continuous Emission Monitoring Systems \[CEMS\]](#) for a detailed discussion of CEMS); and (3) submit an operating plan and a plan for the testing, monitoring, and reporting of NO_x emissions. Certain **small boilers** are subject to annual tune-up requirements.

CEHSP E01.08 – Continuous Emission Monitoring Systems (CEMS)

Con Edison has installed CEMS for its fossil-fueled electric and steam boilers units, as well as electric generating combustion turbines, regulated under the Federal Acid Rain Program; Cross State Air Pollution Rule for NO_x and SO₂; the RACT program for NO_x; the ICI MACT and EGU MATS programs as applicable and the Regional Greenhouse Gas Initiative (RGGI). Specific operating, monitoring, recordkeeping, and reporting requirements for CEMS are presented in this procedure.

CEHSP E01.09 – Control Measures for an Air Pollution Episode

Con Edison has submitted the required episode action plan to NYSDEC for significant air contamination sources and must take whatever actions are prescribed by the Con Edison episode action plan when an air pollution episode has been declared by NYSDEC and/or NYCDEP. Episodes have not been declared since 1974.

CEHSP E01.10 – Architectural Coatings

Any **architectural coating** (e.g., paint) used at Con Edison facilities and field locations and manufactured after January 1, 2005, must meet NYSDEC **volatile organic compound (VOC)** content limitations. Containers of architectural coating and thinner must be closed when not in use. NYCDEP limits the sale or use of architectural coatings that contain **photo-chemically reactive solvent**. However, NYCDEP has deferred enforcement of these limits and is honoring the NYSDEC limits instead.

CEHSP E01.11 – [Reserved]

CEHSP E01.12 – Gasoline Dispensing

Stationary storage tanks at **gasoline dispensing sites** must be registered (refer to [CEHSP E01.02, Air Permits](#)) and must be equipped with the appropriate combination of a **Stage I vapor collection system**, a **Stage II vapor collection system**, and/or a **submerged fill pipe**. The specific stationary storage tank control requirements are based on the storage tank's age and size and on the Con Edison dispensing site's location and annual throughput. Con Edison must maintain records of the quantity of all **gasoline** delivered and the results of any required Stage II system tests and must submit a test report to the NYSDEC.

CEHSP E01.13 – Surface Coating Operations

Surface coating operations at Con Edison facilities which use **coating lines** for auto body repair and miscellaneous metal parts and products are required to obtain a permit from NYSDEC, NYCDEP and/or the Westchester County Department of Health, as applicable. See [CEHSP E01.02, Air Permits](#). They also must comply with VOC emission control requirements, opacity limitations, recordkeeping requirements, reporting requirements, and sampling and analysis requirements as well as requirements for the handling, storage, and disposal of VOCs. These requirements do not apply to coatings that are applied manually with a brush, roller, or aerosol spray can. These requirements also do not apply to architectural coatings (i.e., coatings applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs). These coatings are addressed in CEHSP 01.10, Architectural Coatings.

The NYSDEC, NYCDEP and the Rockland County Department of Health prohibit the application of asbestos and asbestos-containing surface coating materials.

CEHSP E01.14 – Refrigerant Use, Recycling, and Disposal

Con Edison must comply with regulations the USEPA has established under Title VI of the CAA, which requires the phase out of manufacture and use of CFCs and HCFCs. Title VI also requires the use of warning labels on CFC and HCFC containers shipped through interstate transport, the minimization of emissions of CFCs and HCFCs to the environment, the conservation and recycling of existing supplies of CFCs and HCFCs, and whenever possible, the replacement of CFCs and HCFCs with substitute products that reduce overall risk to health and the environment.

In particular, federal law:

- Requires **certified technicians** to service **appliances**, or prepare appliances for disposal, if such work may cause the release of a **Class I refrigerant** or **Class II refrigerant**;
- Prohibits the knowing venting of any Class I or Class II refrigerant or certain substitutes;
- Requires service procedures that minimize release and maximize recycling of Class I and Class II refrigerants;

- Sets certification requirements for equipment used to recycle and **recover** Class I and Class II refrigerants;
- Restricts the sale of Class I and Class II refrigerants to certified technicians;
- Establishes safe disposal requirements to ensure proper removal of Class I and Class II refrigerants from appliances that are disposed of with their charge intact (e.g., home-sized refrigerators and room air conditioners); and
- Requires the repair of **substantial leaks** in appliances holding a charge of greater than 50 pounds of a Class I or Class II refrigerant. In addition, Con Edison policy requires repair of continuous leaks in any sized appliance.

CEHSP E01.15 – Recordkeeping and Reporting

Con Edison must maintain records to demonstrate compliance with various NYSDEC, NYCDEP, and other local agencies' requirements related to air contaminant emissions and sources. Additionally, certain reports relating to air emissions must be submitted to NYSDEC, NYCDEP, and/or other agencies. The EH&S Air Resources Section is responsible for preparing and transmitting these reports to the appropriate agency.

CEHSP E01.16 – Annual Emission Statements

Con Edison must submit an annual emission statement to NYSDEC for facilities with **potential annual emissions** exceeding the applicable thresholds. This emission statement summarizes actual annual emissions of pollutants from these facilities and must be prepared according to specific methods.

CEHSP E01.17 – Emissions from Motor Vehicles

Con Edison's gasoline- and diesel-powered vehicles are subject to exhaust emission standards established by NYSDEC. Compliance with these standards is determined by conducting regular inspections and tests of the vehicles' emission exhaust and emission-related equipment. Also, vehicles must comply with limits on vehicle idling established by New York State and various local governments.

CEHSP E01.18 – Greenhouse Gas Emissions Reporting

Reporting greenhouse gas emissions requires the identification of emissions sources, collection of applicable indicators (raw data), and calculation of emissions based on current emission factors. A wide range of emission sources, calculation methodologies, and emission factors across a variety of locations makes this a challenging undertaking. This CEHSP identifies emissions sources, and the steps that must be taken to account for them, collect their emissions, and prepare reports for the internal and external verification process.

5.0 DEFINITIONS

Air Contamination Source or Emission Source: Any apparatus, contrivance, or machine capable of causing emission to the outdoor atmosphere, including any appurtenant exhaust

system or air cleaning device. Examples of emission sources at Con Edison facilities include boilers, gas turbines, diesel engines, paint spray booths, soldering ovens, and storage tanks.

Architectural Coating: Any coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.

Asbestos: Any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cumingtomite-grunerite), crocidolite (riebeckite), tremolite, anthrophyllite, and actinolite.

Asbestos-Containing Surface Coating Material: Asbestos surface coating or any surface coating material containing more than 1% asbestos by weight.

Coating Line: The process of applying one or more surface coatings, such as paints, varnishes, primers, sealants, adhesives, inks, or maskants, using one or more applicators, together with any drying or curing areas. It is not necessary to have an oven or flash area to be included in this definition.

Continuous Emission Monitoring Systems (CEMS): Stack emission monitors with automated data recorders that operate continuously during the time the combustion unit is combusting any fuel.

Combustion Installation: An installation, consisting of one or more furnaces, devices, engines, or turbines, burning fossil fuel with air or oxygen and air contaminant emissions resulting from:

- Combustion of the fuel.
- Additives or impurities in the fuel.
- Material introduced to alter the air contaminant emissions.

Construction: The initiation of physical on-site construction activities which are of a permanent nature excluding site clearing and construction. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipe work, and construction of permanent storage structures.

Emission: The release of any air contaminant into the outdoor atmosphere.

Facility: Any piece of property owned or leased by Con Edison.

Field Location: Any location where Con Edison personnel are working.

Fuel Oil: Any virgin distillate oil, virgin residual oil, re-refined oil, or a blend of these.

Gasoline: A volatile liquid mixture containing hydrocarbons or a blend of this mixture with one or more oxygen-containing ashless organic compounds, such as alcohols or ethers, which is suitable for use in motor vehicles with spark-ignition, and internal combustion engines, and which is commonly or commercially known or sold as gasoline.

Gasoline Dispensing Site: Any site where gasoline is dispensed into vehicle fuel tanks or into portable containers used to fuel any motor from any stationary storage container(s) larger than 250 gallons.

Hazardous Air Pollutant (HAP): One of 189 chemicals listed in 6 NYCRR 200.1(ag).

Large Boiler: A device with a maximum heat input capacity greater than 100 million Btu/hr and equal to or less than 250 million Btu/hr, that combusts any fuel and produces steam or heats water or any other heat transfer medium.

Major Source or Major Stationary Source: Any stationary source, or any group of stationary sources located on one or more contiguous or adjacent properties under common control with the same two-digit Standard Industrial Classification (SIC) code with emissions above the major thresholds listed below. These thresholds apply to Con Edison facilities.

<u>Pollutants</u>	<u>Emits or has the Potential to Emit Tons Per Year (tpy)</u>
Nitrogen oxides	>25
Volatile organic compounds	>25
Carbon monoxide	>100
Particulate matter 10 microns or less	>100
Any one Hazardous Air Pollutants (HAP)	>10
HAPs in aggregate	>25
Any other Regulated Air Pollutant	>100

Note: Fugitive emissions must not be considered in determining whether a stationary source is “major” except for HAP sources or unless the facility belongs to one of the following categories:

- Fossil-fuel boilers (or combination thereof) and fossil-fuel-fired steam electric plants totaling more than 250 million Btu/hr heat input.
- Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

Modification: Any physical change or change in the method of operation of an incinerator, stationary combustion installation, or process which (1) increases the hourly emission rate, emission concentration, or emission opacity of any air contaminant, (2) involves the installation or alteration of any air-cleaning installation, air-cleaning device, or control equipment, (3) involves conversion of fuel used in any emission source to a fuel with a higher ash content than the fuel used prior to the change, (4) involves the alteration of any furnace or other physical changes or allows burning of refuse or refuse-derived fuel with fossil fuel, or (5) results in the emission of any air pollutant not previously emitted. Routine maintenance, repair, and replacement of original equipment or parts thereof are not considered physical changes. An increase or decrease in the hours of operation is not considered a change in the method of operation if the total emissions do not cause air pollution or contravention of any applicable ambient air quality standard, and the hours of operation are not restricted through a condition of a permit or certificate issued for the air contamination source.

Opacity: The degree to which emissions other than water reduce the transmission of light and block the view of an object in the background.

Particulates: Any airborne or gas-borne material, except water, which exists as a liquid or solid.

Photo-chemically Reactive Solvent: See definition in [CEHSP E01.10, Architectural Coatings](#).

Potential Annual Emissions: The maximum capacity of an air contamination source to emit any regulated air pollutant annually under its physical and operational design. Any physical or operational limitation on the capacity of the emissions source to emit a regulated air pollutant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount of material combusted, stored, or processed, must be treated as a part of the design if the limitation is enforceable by NYSDEC and USEPA. Fugitive emissions, to the extent that they are quantifiable, are included in determining the potential to emit where required by an applicable requirement.

Process: Any industrial, commercial, agricultural, or other activity, operation, manufacture, or treatment in which chemical, biological, and/or physical properties of the material or materials are changed, or in which the material(s) is conveyed or stored without changing the material(s) (where such conveyance or storage system is equipped with a vent(s) and is non-mobile), and which emits air contaminants to the outdoor atmosphere. Processes do not include open fires, operation of combustion installations, and incineration of refuse other than by-products or wastes from processes.

Reasonably Available Control Technology (RACT): Lowest emissions limit that a particular source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility.

Small Boiler: A device with a maximum heat input capacity greater than 20 million Btu/hr (10 million Btu/hr for coal and residual oil-fired units in the severe ozone non-attainment area) and equal to or less than 50 million Btu/hr that combusts any fuel, and produces steam or heats water or any other heat transfer medium.

Stage I Vapor Collection System: A system where gasoline vapors are forced from a gasoline storage tank into a vapor-tight gasoline transport vehicle or vapor control system through direct displacement by the gasoline being loaded.

Stage II Vapor Collection System: A system where at least 90%, by weight, of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling are captured and either retained in the storage tanks or destroyed in an emission control device.

Submerged Fill Pipe: A fill pipe or drop tube whose discharge opening is entirely submerged when the liquid is 6 inches above the bottom of the container. For containers loaded from the side, submerged filling is defined as the use of a fill pipe whose discharge is entirely submerged when the liquid level is 18 inches, or twice the diameter of the fill pipe, whichever is greater, above the bottom of the container.

Surface Coating: A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include but are not limited to paints, varnishes, primers, sealants, adhesives, inks, and maskants.

Very Large Boiler: A device with a maximum heat input capacity greater than 250 million Btu/hr that combusts any fuel, and produces steam or heats water or any other heat transfer medium.

Volatile Organic Compound (VOC): An organic compound that contributes to atmospheric photochemical reactions. See 6 NYCRR 200.1(cg) for list of compounds excluded from regulation as VOCs.

Waste Oil: Used and/or reprocessed engine lubricating oil and/or any other used oil, including but not limited to, fuel oil, engine oil, gear oil, cutting oil, transmission fluid, hydraulic fluid, dielectric fluid, oil storage tank residue, animal oil, and vegetable oil, which has not subsequently been re-refined.

6.0 REFERENCES

Federal:

Clean Air Act 42, U.S.C. § 7401 *et seq.*

40 CFR 52.21 - Prevention of Significant Deterioration.

40 CFR Part 60 - Standards of Performance for New Stationary Sources.

40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants.

40 CFR Parts 72-78 - Title IV Acid Rain Program.

40 CFR Part 82 - Protection of Stratospheric Ozone (regulation of refrigerants).

New York State:

N.Y. Environmental Conservation Law, Articles 3, 19, 70, 71, 72.

6 NYCRR Part 201 - Permits and Registrations.

6 NYCRR Subpart 202-1 - Emissions Testing, Sampling and Analytical Determinations.

6 NYCRR Subpart 202-2 - Emission Statements.

6 NYCRR Part 204 - NO_x Budget Trading Program.

6 NYCRR Part 205 - Architectural Surface Coatings.

6 NYCRR Part 207 – Control Measures for an Air Pollution Episode.

6 NYCRR Part 212 - General Process Emission Sources.

6 NYCRR Part 217 - Motor Vehicle Emissions (including vehicle inspection and idling provisions).

6 NYCRR Part 218 - Emission Standards for Motor Vehicles and Motor Vehicle Engines.

6 NYCRR Part 221 - Asbestos-Containing Surface Coating Material.

6 NYCRR Part 225 - Fuel Composition and Use.

6 NYCRR Subpart 227-1 – Stationary Combustion Installations.

6 NYCRR Subpart 227-2 - Reasonably Available Control Technology (RACT) for Oxides of Nitrogen (NO_x).

6 NYCRR Part 228 - Surface Coating Processes.

6 NYCRR Part 230 - Gasoline Dispensing Sites and Transport Vehicles.

6 NYCRR Part 231 - New Source Review in Nonattainment Areas and the Ozone Transport Region.

6 NYCRR Part 237 - Acid Deposition Reduction NO_x Budget Trading Program.

6 NYCRR Part 238 - Acid Deposition Reduction SO₂ Budget Trading Program.

New York City:

NYC Admin. Code, Tit. 24, Chap. 1, Subchap. 2 - General Provisions and Subchap. 4 - Permits and Certificates.

NYC Admin. Code, Tit. 24, Chap. 1, Subchap. 6 - Emission Standards.

NYC Admin. Code, Tit. 24, Chap. 1, Subchap. 7 - Equipment and Apparatus: Use and Maintenance (vehicle idling prohibition).

NYC Admin. Code, Tit. 24, Chap. 1, Subchap. 8 - Fuel Standards.

Rockland County:

Rockland County Sanitary Code, Art. XII - Air Pollution Control.

Westchester County:

Westchester County Sanitary Code, Chap. 873, Art. XIII - Air Quality.

REVISION HISTORY

<u>REVISION DATE</u>	<u>REVISION #</u>	<u>SUMMARY OF CHANGE</u>	<u>AUTHOR</u>
SEPTEMBER 23, 2015	6	REVISED MULTIPLE SECTIONS TO INCORPORATE NEW REGULATIONS/REGULATORY CHANGES AND MADE DOCUMENT CONSISTENT WITH EH&S CONSOLIDATION	M. Blute