STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Linde Advanced Material Technologies Inc. **York County** **Biddeford, Maine** **A-643-71-O-R/A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Renewal with Amendment**

FINDINGS OF FACT

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Linde Advanced Material Technologies Inc. (Linde) has applied to renew its Air Emission License for the operation of emission sources associated with their surface coatings applications facility.

The equipment addressed in this license is located at 24 Landry Street, Biddeford, Maine.

Linde has requested an amendment to their license in order to make the following changes:

1. Inclusion of a grieve dryer (Large Grieve Dryer) inadvertently left out of previous licenses;
2. Installation of three new humidifiers (Desert Aire Humidifiers #1 - #3);
3. Installation of two new spray booths in the SermeTel Process (Dry Steam Unit Booths #5 and #6);
4. Removal of the facility-wide fuel use limit;
5. Removal of Box Furnaces #5 and #7; and
6. Removal of the Thermal Spray Process including Plasma Booths #1 and #2.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Max. Capacity (MMBtu/hr)	Fuel Type	Date of Install.
Pit Furnace #0	1.98	natural gas	2006
Pit Furnace #1	2.00	natural gas	1990
Pit Furnace #2	1.40	natural gas	1990
Pit Furnace #3	2.00	natural gas	1997
Pit Furnace #4	2.00	natural gas	1997
Pit Furnace #5	1.98	natural gas	2008
Pit Furnace #6	1.98	natural gas	2008
Box Furnace #1	1.98	natural gas	2007
Box Furnace #2	1.98	natural gas	2007
Box Furnace #3	1.98	natural gas	2007
Box Furnace #4	1.98	natural gas	2008
Box Furnace #5 [a]	*2.00*	*natural gas*	*1992*
Box Furnace #6	2.60	natural gas	1992
Box Furnace #7 [a]	*1.40*	*natural gas*	*1992*
Box Furnace #8	1.98	natural gas	1995
Grieve Oven #1	1.00	natural gas	1998
Grieve Oven #3	1.00	natural gas	2000
Grieve Oven #5	1.00	natural gas	1998
Grieve Oven #6	1.00	natural gas	1996
Grieve Oven #9	1.00	natural gas	2000
Large Grieve Dryer [b]	1.20	natural gas	2011
Air Make-up Unit #3	6.6	natural gas	2021
Air Make-up Unit #4	6.6	natural gas	2021
Desert Aire Humidifier #1 [b]	1.05	natural gas	2002
Desert Aire Humidifier #2 [b]	1.05	natural gas	2002
Desert Aire Humidifier #3 [c]	1.05	natural gas	2024

[a] Equipment has been removed
[b] Inadvertently omitted from previous license
[c] New equipment

Process Equipment

Process Area	Type of Equipment	Pollution Control Equipment
Diffusion Area	Packed powder coating application	Dry filter media and high efficiency particulate absorption (HEPA) filters
SermeTel Area [c]	HVLP spray guns and spray booths	HVLP spray guns, spray booths w/poly filters
Masking Process and SermAlCote Process	VOC product usage	N/A
Thermal Spray Area [a]	*Plasma arc powder coating application*	*Dry filter media and HEPA filters*

[a] Equipment has been removed
[c] Includes new equipment (Dry Steam Unit Booths #5 and #6)

Linde operates a Platinum Plating Process consisting of several electroplating baths that utilize a platinum salt as an electrolyte for the platinum electroplating of turbine parts used in aerospace engines and industrial gas turbines. The plating operations generate a mist due to the evolution of hydrogen and oxygen gas. The gases are formed in the process tanks on the surface of the submerged part or on anodes or cathodes. The gas bubbles rise to the surface and escape into the air, potentially carrying considerable liquid with them in the form of a fine mist. None of the constituents of the mist are considered a HAP or VOC; therefore, this process is classified as an insignificant activity pursuant to 06-096 *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115, Appendix B, § A.40.

Linde operates a 3-gallon Nickel Plating Process located on a bench in one of the facility's laboratories. Potential emissions of HAP (nickel) from this equipment were determined to be less than 2.0 pounds per year conservatively assuming continuous operation for 8,760 hours/year. Because potential emissions have been determined to be less than 1.0 ton per year (tpy) for each regulated pollutant and less than 4.0 tpy for all regulated pollutants combined, this equipment was determined to be an insignificant activity in accordance with 06-096 C.M.R. ch. 115, Appendix B, §§ B.1 and B.2. Further, the significance level for nickel compounds in 06-096 C.M.R. ch. 115, Appendix B, § C.161 is 2,000 lb/yr. As such, this source does not trigger licensing requirements for this pollutant as an individual HAP. The applicability of *National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*, 40 C.F.R. Part 63, Subpart WWWWWW, to this equipment is addressed further in section II(I)(3) of this license.

In 2024, Linde installed a wastewater evaporator to replace its hazardous waste treatment in tanks system. Hazardous waste is generated by the facility in the form of chromium-impacted wastewater. The 350-gallon ENCON evaporator allows the wastewater liquids to evaporate while the solids are managed as hazardous waste. Heat to the unit is provided by

a natural gas burner with a maximum heat input of 0.38 MMBtu/hr. Potential emissions from this equipment have been determined to be less than 1.0 tpy for each regulated pollutant and less than 4.0 tpy for all regulated pollutants combined. This equipment was determined to be an insignificant activity in accordance with 06-096 C.M.R. ch. 115, Appendix B, §§ B.1 and B.2.

Linde may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.
http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf

Additionally, Linde may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

C. Definitions

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

Records or *Logs* mean either hardcopy or electronic records.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the date this license was issued.

Linde has applied to renew currently licensed emission units as well as modify their license as addressed in Section I(A) above.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emissions" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (tpy)	Future License (tpy)	Net Change (tpy)	Significant Emissions Levels
PM	4.2	10.6	+6.4	100
PM_{10}	4.2	10.6	+6.4	100
$PM_{2.5}$	4.2	10.6	+6.4	100
SO_2	–	–	–	100
NO_x	8.3	20.6	+12.3	100
CO	7.0	17.3	+10.3	100
VOC	10.5	3.8	-6.7	50 *

* Linde is located in an area of the state included in the Ozone Transport Region. Therefore, the significant emission level for VOC is 50 tpy.

Therefore, this license is considered to be both a renewal and a minor modification and has been processed through 06-096 C.M.R. ch. 115.

E. Facility Classification

With the annual VOC and HAP limits associated with the facility's process equipment, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because Linde is subject to license restrictions that keep facility emissions below major source thresholds for VOC; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in

Definitions Regulation, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Facility Description

Linde produces and applies metallic and ceramic coatings that protect critical metal components from a variety of environmental conditions, including wear, corrosion, and high temperatures. Coatings are applied through a number of different processes as described below. Natural gas-fired furnaces, dryers, and humidifiers are used to support these operations.

C. Diffusion Process

The Diffusion Process is used to apply a packed aluminide and chromide powder coating through diffusion of the coating into the base alloy metal in high-temperature furnaces.

Powder coatings are formulated from raw and internally recycled materials and created either through a manual batch formulation process or through the automatic mixing of powder batches in the V-blenders. Metal parts to be coated are packed in a retort tray filled with the powder coating. The powder coating diffuses into the base alloy of the metal parts when heated in diffusion furnaces, i.e., the pit furnaces and box furnaces. After cooling, the coated parts are unpacked from the trays and the unused powder coating is reused.

The pit furnaces and box furnaces are indirect-fired, meaning furnace combustion gases do not contact the parts being coated. Emissions from fuel combustion for these units are addressed in section II(K) below.

The Diffusion Process includes the V-blenders, the 73 pack/unpack station (installed in 2012), the blending room pack/unpack station (installed in 2019), and downdraft tables where metal parts may be packed or unpacked from powder beds. Emissions from the Diffusion Process include particulate matter (PM) and particulate matter hazardous air pollutants (PM HAP), which consists primarily of chromium compounds.

1. Control Equipment

   PM HAP from the V-blenders and pack/unpack stations is vented to HEPA filters with a rated control efficiency of greater than 99.9%. Other process units, including the downdraft tables, are vented to HEPA filters which return the filtered air back into the building.

2. BPT

   BPT for control of PM and PM HAP emissions from the Diffusion Process is the continued use of the dust collection system which is routed to HEPA filters, compliance with the facility-wide VOC and HAP limits, and a visible emissions limit of 10% opacity on a six-minute block average basis.

   Linde shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on any HEPA filter that vents outside the building. The maintenance log shall include the dates of filter replacements.

D. SermeTel Process

The SermeTel Process bonds inorganic coatings with metal substrates to form a ceramic-metallic composite layer that provides protection from corrosion, heat scaling, abrasion, and wear. Coatings are applied to metal components using high volume, low pressure (HVLP) spray guns in spray booths. Linde operates six spray booths (Dry Steam Unit Booths #1 - #6). Dry Steam Unit Booths #1-4 are part of the Big Booth and were installed in 2001. Dry Steam Unit Booths #5 and #6 were installed in 2024. Emissions from the SermeTel Process include PM HAP, non-particulate matter HAP (non-PM HAP), and volatile organic compounds (VOC).

1. Control Equipment

   The spray booths are equipped with filters to control emissions of PM and PM HAP. Linde also uses HVLP spray guns which have a higher transfer efficiency than conventional spray guns. Use of HVLP guns significantly reduces the amount of coating used and thereby reduces emissions of VOC and HAP from the coating process.

2. BPT

   BPT for control of PM and PM HAP emissions from the SermeTel Process is the use of complete enclosures for all spray booths with filters on all vents, compliance with the facility-wide VOC and HAP limits, and a visible emissions limit of 10% on a six-minute block average basis.

BPT for control of VOC and non-PM HAP emissions from the SermeTel Process is the use of HVLP spray guns and compliance with the facility-wide VOC and HAP limits.

Linde shall maintain a log of the dates the filters on each spray booth are replaced.

E. Masking Process

The Masking Process prepares parts for coating through the application of maskants, which are materials that shield the protect the surface area of parts from the coating operation. Maskants are prepared using a variety of materials including adhesives, diluents, chromium, and nickel.

The Masking Process does not vent outside of the building. Therefore, the Department expects there to be no emissions of PM or PM HAP from this process. Emissions of VOC and non-PM HAP from the Masking Process shall be included when demonstrating compliance with the facility-wide emission limits for VOC and HAP.

F. SermAlCote Process

The SermAlCote Process applies a slurry coating to metal parts by manually dipping the part into the coating and was installed at the facility in 2001. The slurry coatings primarily consist of chromium and aluminum with a diluent.

The SermAlCote Process does not vent outside of the building. Therefore, the Department expects there to be no emissions of PM or PM HAP from this process. Emissions of VOC and non-PM HAP from the SermAlCote Process shall be included when demonstrating compliance with the facility-wide emission limits for VOC and HAP.

G. Facility-Wide Emission Limits

Linde shall be limited to emissions of 2.7 tpy of VOC on a 12-month rolling total basis from all coating units, lines, or operations combined. This limit excludes emissions from combustion of natural gas.

Linde shall be limited to facility-wide emissions of 7.9 tpy of any single HAP and 14.0 tpy for all HAP combined. Each HAP limit is on a 12-month rolling total basis. These limits include emissions from combustion of natural gas.

Compliance with the VOC and HAP emission limits shall be demonstrated by recordkeeping including the following, as applicable: fuel usage, hours of operation, material usage, and site-specific test data.

Emissions of PM HAP from the Diffusion Process shall be calculated assuming 5% of the PM HAP used is entrained in the air stream and a control efficiency of the HEPA filter of 99.9%.

Emissions of PM HAP from the SermeTel paint booths shall be calculated assuming 5% of the PM HAP used is entrained in the air stream and a control efficiency of the paint booth filters of 99.0%.

Calculations of annual VOC and HAP emissions shall be performed monthly.

H. 06-096 C.M.R. ch. 129

Linde is subject to *Surface Coating Facilities,* 06-096 C.M.R. ch. 129, under the category of "surface coating of miscellaneous metal and plastic parts and products." [06-096 C.M.R. ch. 129, § 1(A)] Linde does not qualify for the exemption in § 1(E)(2) of the rule because the facility does not exclusively use powder coatings or other non-VOC methods of coating.

Emissions from all coating units, lines, or operations at Linde are limited to no more than 2.7 tpy of VOC on a 12-month rolling total basis. Therefore, the facility is exempt from the emission limitations in 06-096 C.M.R. ch. 129, § 4 pursuant to § 1(C)(2) of the rule.

Linde shall comply with all applicable requirements of 06-096 C.M.R. ch. 129 including, but not limited to, the following:

1. Handling, Storage, and Disposal of Materials Containing VOC

    a. Linde shall use vapor-tight containers for the storage of spent or fresh VOC and for the storage or disposal of cloth or paper impregnated with VOC that are used for surface preparation, clean up, or coating removal.
    b. The use of VOC is prohibited for cleanup operations unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.
    c. Linde shall collect all organic solvent used to clean spray guns into a container that is kept closed when material is not being added or removed.
    d. Linde shall pump or drain all organic solvent used for line cleaning into a container that is kept closed when material is not being added or removed.
    e. Linde shall control emissions from wash-off operations by using tanks that are kept closed when material is not being added or removed for wash-off, and minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.

    [06-096 C.M.R. ch. 129, § 5]

2. Initial Compliance

Upon startup of any new coating units, lines, or operations, Linde shall submit certification to the Department that the new coating unit, line or operation is exempt from the emissions limitations. The documentation shall include:

a. Name and location of surface coating facility;
b. Name, address, and telephone number of the person responsible for the surface coating facility; and
c. A declaration that the surface coating unit, line or operation is exempt, because combined VOC emissions from all coating units, lines and operations under the same surface coating category at Linde are below 2.7 tpy of VOC on a 12-month rolling total basis.

[06-096 C.M.R. ch. 129, § 7(A)(1)]

3. Recordkeeping and Reporting

a. Linde shall maintain all records necessary for demonstrating compliance with the applicable emission limitations in 06-096 C.M.R. ch. 129 for a period of six years. The records shall be made available to the Department for inspection during normal business hours, and Linde shall provide copies to the Department or the Environmental Protection Agency (EPA) upon request. [06-096 C.M.R. ch. 129, § 7]

b. Linde shall maintain monthly records on premises to document the name and identification of each coating used and the mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, and the total emissions from the surface coating facility. [06-096 C.M.R. ch. 129, § 7(B)(1)]

c. Linde shall notify the Department if VOC emissions generated at their surface coating facility were in excess of 2.7 tpy on a 12-month rolling total basis. The notification shall be in writing and shall be submitted within 30 days of the date of the occurrence. [06-096 C.M.R. ch. 129, § 8(B)]

I. <u>National Emission Standards for Hazardous Air Pollutants</u>

1. 40 C.F.R. Part 63, Subpart MMMM

Linde is not subject to the requirements of *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*, 40 C.F.R. Part 63, Subpart MMMM. This regulation only applies to facilities that are

classified as a major source of HAP. Linde is considered an area source of HAP. [40 C.F.R. § 63.3881(b)]

2. 40 C.F.R. Part 63, Subpart HHHHHH

Linde is subject to applicable requirements in *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*, 40 C.F.R. Part 63, Subpart HHHHHH. This facility is an area source of HAP which performs spray application of coatings that contain a target HAP (e.g., chromium) to plastic and/or metal substrates. Although the definition of "spray-applied coating operations" excludes the powder diffusion process and dip coating, the SermeTel Process is included in this activity.

Linde shall comply with the applicable requirements of 40 C.F.R. Part 63, Subpart HHHHHH, including but not limited to the following:

a. General Requirements

(1) All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. These requirements do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the requirements of this paragraph. [40 C.F.R. § 63.11173(e)(1)]

(2) The certification training program must include, at a minimum:

(i) A list of all current personnel by name and job description who are required to be trained;

(ii) Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the following topics:

1. Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate;
2. Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke;
3. Routine spray booth and filter maintenance, including filter selection and installation; and

4. Environmental compliance with the requirements of 40 C.F.R. Part 63, Subpart HHHHHH.

(iii) A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. If Linde can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required above, they are not required to provide the initial training to the painter:

[40 C.F.R. §§ 63.11173(e)(1) and (f)]

(3) All personnel who perform spray application of coatings must be trained and certified no later than 180 days after hiring. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified above satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.
[40 C.F.R. § 63.11173(g)]

(4) All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the following requirements:

(i) All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98% capture of paint overspray. Linde may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement.

(ii) Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through the booth during the coating process.

(iii)Mobile ventilated enclosures that are used to perform spot repairs must enclose and, if necessary, seal against the surface around the area being coated such that paint overspray is retained within the enclosure and directed to a filter to capture paint overspray.

[40 C.F.R. § 63.11173(e)(2)]

(5) All spray-applied coatings must be applied with a HVLP spray gun.
[40 C.F.R. § 63.11173(e)(3)]

(6) All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. As examples, spray gun cleaning may be done by hand-cleaning parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used. [40 C.F.R. § 63.11173(e)(4)]

b. Reports

(1) Linde shall submit an Annual Notification of Changes Report to the Department and EPA in each calendar year in which information previously submitted in either the initial notification required by § 63.11175(a), Notification of Compliance Status, or a previous Annual Notification of Changes Report submitted under this paragraph, has changed. Deviations from the requirements listed above on the date of the report will be deemed a change. This Annual Notification of Changes Report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the following information:

(i) The company's name and street address (physical location) of the affected source and the street address where compliance records are maintained, if different; and

(ii) The name, title, address, telephone, e-mail address, and signature of the owner or operator or their certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all relevant standards and other requirements of Subpart HHHHHH or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

[40 C.F.R. § 63.11176(a)]

(2) Annual Notification of Changes Reports shall be submitted to EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) as described in 40 C.F.R. § 63.11176(c), (d), and (e).

c. Recordkeeping

(1) Linde shall keep the following records.

(i) Certification that each painter has completed the required training with the date the initial training and the most recent refresher training was completed;
(ii) Documentation of the filter efficiency of any spray booth exhaust filter material;
(iii) Copies of any notifications or reports submitted; and
(iv) Records of any deviation from the general requirements described above. These records shall include the date and time period of the deviation and a description of the nature of the deviation and the actions taken to correct the deviation.
[40 C.F.R. § 63.11177]

(2) Copies of records shall be kept on site and in a printed or electronic form that is readily accessible for inspection for at least two years after their date and may be kept off-site after that two-year period. [40 C.F.R. § 63.11178(a)]

3. 40 C.F.R. Part 63, Subpart WWWWWW

The Nickel Plating Process is not subject to *National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*, 40 C.F.R. Part 63, Subpart WWWWWW. Bench-scale plating and polishing operations are specifically excluded from a "plating and polishing facility" as defined in the regulation. Bench-scale is defined as "any operation that is small enough to be performed on a bench, table, or similar structure so that the equipment is not directly contacting the floor." Linde's Nickel Plating Process meets this definition.

With the removal of the Thermal Spray Process including Plasma Booths #1 and #2, Linde is no longer subject to applicable requirements in 40 C.F.R. Part 63, Subpart WWWWWW. Linde does not meet any of the other applicability criteria for this regulation.

4. 40 C.F.R. Part 63, Subpart XXXXXX

Linde is not subject to *National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and finishing Source Categories*, 40 C.F.R. Part 63, Subpart XXXXXX. This regulation applies to facilities that are primarily engaged in one of the nine source categories listed in 40 C.F.R. § 63.11514(a).

The most likely potentially applicable category would be "Fabricated Metal Products." Based on information in the regulation and its preamble, the Department finds that Subpart XXXXXX is not applicable to Linde because the facility does not manufacture metal products but instead applies protective barriers to existing metal products.

J. Natural Gas-Fired Units

Linde operates numerous natural gas-fired furnaces, ovens, dryers, air make-up units, and humidifiers as listed in section I(B) of this license. This equipment is referred to collectively as the natural gas-fired units.

1. BPT/BACT Findings

The Large Grieve Dryer and Desert Aire Humidifiers #1 - #3 are new to this license, and emissions are addressed through BACT. Emissions for all other units are addressed through BPT.

The BPT/BACT emission limits for the natural gas-fired units were based on the following:

$PM/PM_{10}/PM_{2.5}$	–	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT/BACT
SO_2	–	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO_x	–	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	–	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	–	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	–	06-096 C.M.R. ch. 101, § 4(A)(3)

The BPT/BACT emission limits for the natural gas-fired units are the following:

Unit	Pollutant	lb/MMBtu
Air Make-up Unit #3	PM	0.05
Air Make-up Unit #4	PM	0.05

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Pit Furnace #0	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #1	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #2	0.07	0.07	0.07	0.14	0.11	0.01
Pit Furnace #3	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #4	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #5	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #6	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #1	0.10	0.10	0.10	0.19	0.16	0.01

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Box Furnace #2	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #3	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #4	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #6	0.13	0.13	0.13	0.25	0.21	0.01
Box Furnace #8	0.10	0.10	0.10	0.19	0.16	0.01
Grieve Oven #1	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #3	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #5	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #6	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #9	0.05	0.05	0.05	0.10	0.08	0.01
Large Grieve Dryer	0.06	0.06	0.06	0.12	0.10	0.01
Air Make-up Unit #3	0.33	0.33	0.33	0.64	0.54	0.04
Air Make-up Unit #4	0.33	0.33	0.33	0.64	0.54	0.04
Desert Aire Humidifier #1	0.23	0.23	0.23	0.10	0.09	0.01
Desert Aire Humidifier #2	0.23	0.23	0.23	0.10	0.09	0.01
Desert Aire Humidifier #3	0.23	0.23	0.23	0.10	0.09	0.01

Emissions of SO_2 from all of the natural gas-fired units are considered negligible.

2. Visible Emissions

   Visible emissions from each of the natural gas-fired units shall not exceed 10% opacity on a six-minute block average basis.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

   Due to their size, the natural gas-fired units are not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

   The natural gas-fired units are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area*

Sources, 40 C.F.R. Part 63, Subpart JJJJJJ. Natural gas-fired units are exempt from the requirements of this regulation. [40 C.F.R. §§ 63.11195(e)] In addition, the majority of this equipment does not heat water, and, thus, is also exempt because equipment does not meet the definition of "boiler."

K. General Process Emissions

Visible emissions from any general process source not otherwise addressed in this license shall not exceed 20% opacity on a six-minute block average basis.

L. Fugitive Emissions

Linde shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

Linde shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

M. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Operating the natural gas-fired unites for 8,760 hours/year, each;
- A limit of 2.7 tpy of VOC for all coating units, lines, or operations combined;
- A facility-wide limit of 7.9 tpy for any single HAP; and
- A facility-wide limit of 14.0 tpy for all HAP combined.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Natural Gas-Fired Units	10.6	10.6	10.6	–	20.6	17.3	1.1
Coating Operations	–	–	–	–	–	–	2.7
Total TPY	**10.6**	**10.6**	**10.6**	**–**	**20.6**	**17.3**	**3.8**

Pollutant	Tons/year
Single HAP	7.9
Total HAP	14.0

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by-case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM_{10}	25
$PM_{2.5}$	15
SO_2	50
NO_x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Linde to submit additional information and may require an ambient air quality impact analysis at that time.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-643-71-O-R/A subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).

(2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115] Payment of the annual air emission license fee for Linde is due by the end of May of each year.
[38 M.R.S. § 353-A(3)]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
[06-096 C.M.R. ch. 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
[06-096 C.M.R. ch. 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
   1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
   2. Pursuant to any other requirement of this license to perform stack testing.

B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. Within thirty (30) days following receipt of the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 C.M.R. ch. 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]

(16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Diffusion Process**

A. Emissions from any particulate matter collection system that vents outside of an enclosed building shall be controlled through use of a HEPA filter designed to control emissions to greater than 99.9%. The HEPA filter shall be maintained in good working order. [06-096 C.M.R. ch. 115, BPT]

B. Linde shall maintain a log of the date and details of any repairs or maintenance (planned or unplanned) performed on any HEPA filter that vents outside the building including filter replacements. [06-096 C.M.R. ch. 115, BPT]

C. Visible emissions from the Diffusion Process that vents outside of an enclosed building shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(18) **SermeTel Process**

A. Linde shall use complete enclosures for the Dry Steam Unit Booths #1 - #6 with filters on all vents. [06-096 C.M.R. ch. 115, BTP]

B. Linde shall maintain a log of the dates the filters on each spray booth are replaced. [06-096 C.M.R. ch. 115, BPT]

C. Linde shall only use HVLP spray guns in the Dry Steam Unit Booths #1 - #6. [06-096 C.M.R. ch. 115, BPT]

D. Visible emissions from the Dry Steam Unit Booths #1 - #6 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(19) **Facility-Wide Emission Limits**

A. Linde shall not exceed an emission limit of 2.7 tpy of VOC on a 12-month rolling total basis from all coating units, lines, or operations combined. This limit excludes emissions from combustion of natural gas. [06-096 C.M.R. ch. 115, BPT]

B. Linde shall not exceed a facility-wide emission limit of 7.9 tpy of any single HAP on a 12-month rolling total basis. Emissions from all equipment and processes at the facility and addressed in the air emission license shall be included in calculations used to determine compliance with this limit, including HAP emissions from fuel burning equipment and all other HAP emission sources. HAPs are as identified in 06-096 C.M.R. ch. 115, Appendix B and in Section 112(b) of the CAA. [06-096 C.M.R. ch. 115, BPT]

C. Linde shall not exceed a facility-wide emission limit of 14.0 tpy of all HAP combined on a 12-month rolling total basis. Emissions from all equipment and processes at the facility and addressed in the air emission license shall be included in calculations used to determine compliance with this limit, including HAP emissions from fuel burning equipment and all other HAP emission sources. HAPs are as identified in 06-096 C.M.R. ch. 115, Appendix B and in Section 112(b) of the CAA. [06-096 C.M.R. ch. 115, BPT]

D. Compliance with the VOC and HAP emission limits shall be demonstrated by recordkeeping including the following, as applicable: fuel usage, hours of operation, material usage, and site-specific test data.

E. Emissions of PM HAP from the Diffusion Process shall be calculated assuming 5% of the PM HAP used is entrained in the air stream and a control efficiency of the HEPA filter of 99.9%. [06-096 C.M.R. ch. 115, BPT]

F. Emissions of PM HAP from the SermeTel paint booths shall be calculated assuming 5% of the PM HAP used is entrained in the air stream and a control efficiency of the paint booth filters of 99.0%. [06-096 C.M.R. ch. 115, BPT]

G. Calculations of annual VOC and HAP emissions shall be performed monthly. [06-096 C.M.R. ch. 115, BPT]

(20) **06-096 C.M.R. ch. 129**

Linde shall comply with all applicable requirements of 06-096 C.M.R. ch. 129 including, but not limited to, the following:

A. Handling, Storage, and Disposal of Materials Containing VOC

1. Linde shall use vapor-tight containers for the storage of spent or fresh VOC and for the storage or disposal of cloth or paper impregnated with VOC that are used for surface preparation, clean up, or coating removal.

2. The use of VOC is prohibited for cleanup operations unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere.

3. Linde shall collect all organic solvent used to clean spray guns into a container that is kept closed when material is not being added or removed.

4. Linde shall pump or drain all organic solvent used for line cleaning into a container that is kept closed when material is not being added or removed.

5. Linde shall control emissions from wash-off operations by using tanks that are kept closed when material is not being added or removed for wash-off, and minimizing dripping by tilting or rotating the part to drain as much organic solvent as possible.

[06-096 C.M.R. ch. 129, § 5]

B. Initial Compliance

Upon startup of any new coating units, lines, or operations, Linde shall submit certification to the Department that the new coating unit, line or operation is exempt from the emissions limitations. The documentation shall include:

1. Name and location of surface coating facility;
2. Name, address, and telephone number of the person responsible for the surface coating facility; and
3. A declaration that the surface coating unit, line or operation is exempt, because combined VOC emissions from all coating units, lines and operations under the same surface coating category at Linde are below 2.7 tpy of VOC on a 12-month rolling total basis.

[06-096 C.M.R. ch. 129, § 7(A)(1)]

C. Recordkeeping and Reporting

1. Linde shall maintain all records necessary for demonstrating compliance with the applicable emission limitations in 06-096 C.M.R. ch. 129 for a period of six years. The records shall be made available to the Department for inspection during normal business hours, and Linde shall provide copies to the Department or the Environmental Protection Agency (EPA) upon request. [06-096 C.M.R. ch. 129, § 7]

2. Linde shall maintain monthly records on premises to document the name and identification of each coating used and the mass of VOC per volume of each coating, excluding water and exempt compounds, as applied, and the total emissions from the surface coating facility. [06-096 C.M.R. ch. 129, § 7(B)(1)]

3. Linde shall notify the Department if VOC emissions generated at their surface coating facility were in excess of 2.7 tpy on a 12-month rolling total basis. The notification shall be in writing and shall be submitted within 30 days of the date of the occurrence. [06-096 C.M.R. ch. 129, § 8(B)]

(21) **40 C.F.R. Part 63, Subpart HHHHHH**

Linde shall comply with the applicable requirements of 40 C.F.R. Part 63, Subpart HHHHHH, including but not limited to the following:

A. General Requirements

1. All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. These requirements do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the requirements of this paragraph. [40 C.F.R. § 63.11173(e)(1)]

2. The certification training program must include, at a minimum:

   a. A list of all current personnel by name and job description who are required to be trained;

   b. Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the following topics:

      (1) Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate;

(2) Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke;
(3) Routine spray booth and filter maintenance, including filter selection and installation; and
(4) Environmental compliance with the requirements of 40 C.F.R. Part 63, Subpart HHHHHH.

c. A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. If Linde can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required above, they are not required to provide the initial training to the painter:

[40 C.F.R. §§ 63.11173(e)(1) and (f)]

3. All personnel who perform spray application of coatings must be trained and certified no later than 180 days after hiring. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified above satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.
[40 C.F.R. § 63.11173(g)]

4. All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the following requirements:

a. All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98% capture of paint overspray. Linde may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement.

b. Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through the booth during the coating process.

c. Mobile ventilated enclosures that are used to perform spot repairs must enclose and, if necessary, seal against the surface around the area being coated such that

paint overspray is retained within the enclosure and directed to a filter to capture paint overspray.

[40 C.F.R. § 63.11173(e)(2)]

5. All spray-applied coatings must be applied with a HVLP spray gun. [40 C.F.R. § 63.11173(e)(3)]

6. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used. [40 C.F.R. § 63.11173(e)(4)]

B. Reports

1. Linde shall submit an Annual Notification of Changes Report to the Department and EPA in each calendar year in which information previously submitted in either the initial notification required by § 63.11175(a), Notification of Compliance Status, or a previous Annual Notification of Changes Report submitted under this paragraph, has changed. Deviations from the requirements listed above on the date of the report will be deemed a change. This Annual Notification of Changes Report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the following information:

   a. The company's name and street address (physical location) of the affected source and the street address where compliance records are maintained, if different; and

   b. The name, title, address, telephone, e-mail address, and signature of the owner or operator or their certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all relevant standards and other requirements of Subpart HHHHHH or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.

   [40 C.F.R. § 63.11176(a)]

2. Annual Notification of Changes Reports shall be submitted to EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) as described in 40 C.F.R. § 63.11176(c), (d), and (e).

C. Recordkeeping

1. Linde shall keep the following records.

a. Certification that each painter has completed the required training with the date the initial training and the most recent refresher training was completed;

b. Documentation of the filter efficiency of any spray booth exhaust filter material;

c. Copies of any notifications or reports submitted; and

d. Records of any deviation from the general requirements described above. These records shall include the date and time period of the deviation and a description of the nature of the deviation and the actions taken to correct the deviation.

[40 C.F.R. § 63.11177]

2. Copies of records shall be kept on site and in a printed or electronic form that is readily accessible for inspection for at least two years after their date, and may be kept off-site after that two-year period. [40 C.F.R. § 63.11178(a)]

(22) **Natural Gas-Fired Units**

A. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Air Make-up Unit #3	PM	0.05	06-096 C.M.R. ch. 115, BPT
Air Make-up Unit #4	PM	0.05	06-096 C.M.R. ch. 115, BPT

B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT/BACT]:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Pit Furnace #0	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #1	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #2	0.07	0.07	0.07	0.14	0.11	0.01
Pit Furnace #3	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #4	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #5	0.10	0.10	0.10	0.19	0.16	0.01
Pit Furnace #6	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #1	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #2	0.10	0.10	0.10	0.19	0.16	0.01

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Box Furnace #3	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #4	0.10	0.10	0.10	0.19	0.16	0.01
Box Furnace #6	0.13	0.13	0.13	0.25	0.21	0.01
Box Furnace #8	0.10	0.10	0.10	0.19	0.16	0.01
Grieve Oven #1	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #3	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #5	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #6	0.05	0.05	0.05	0.10	0.08	0.01
Grieve Oven #9	0.05	0.05	0.05	0.10	0.08	0.01
Large Grieve Dryer	0.06	0.06	0.06	0.12	0.10	0.01
Air Make-up Unit #3	0.33	0.33	0.33	0.64	0.54	0.04
Air Make-up Unit #4	0.33	0.33	0.33	0.64	0.54	0.04
Desert Aire Humidifier #1	0.23	0.23	0.23	0.10	0.09	0.01
Desert Aire Humidifier #2	0.23	0.23	0.23	0.10	0.09	0.01
Desert Aire Humidifier #3	0.23	0.23	0.23	0.10	0.09	0.01

C. Visible emissions from the natural gas-fired units shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

(23) **General Process Sources**

Visible emissions from any general process source not otherwise described shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

(24) **Fugitive Emissions**

A. Linde shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

B. Linde shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal

boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

(25) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Linde may be required to submit additional information. Upon written request from the Department, Linde shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 30th DAY OF JUNE, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____ for ____
MELANIE LOYZIM, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/1/2024
Date of application acceptance: 7/8/2024

This Order prepared by Lynn Muzzey, Bureau of Air Quality.