State of New Jersey Department of Environmental Protection Division of Air Quality

General Operating Permit (GOP-002A) Manufacturing and Materials Handling Equipment

This general operating permit allows for the construction, installation, modification and operation of:

- Single or multiple pieces of manufacturing and materials handling equipment each with uncontrolled potential to emit (PTE) emissions less than the reporting threshold for each air contaminant;
- Single or multiple pieces of manufacturing and materials handling equipment each with PTE emissions before a control device less than the reporting threshold for each air contaminant; or
- Single or multiple pieces of manufacturing and materials handling equipment each with TSP, PM-10, and PM-2.5 PTE emissions after a particulate control device (baghouse or cartridge filter) less than the reporting threshold. All other air contaminants PTE emissions per piece of equipment shall be less than the reporting threshold before the control device for each air contaminant.

For a modification, the manufacturing and materials handling equipment must be currently permitted in a facility's approved Title V Operating Permit.

This general operating permit may only be used at facilities with an approved Title V Operating Permit. Facilities may obtain more than one GOP-002A. Each GOP-002A may only permit equipment in one emission unit.

I. <u>DEFINITIONS</u>

The terms used in this general operating permit shall have the meanings given to them in N.J.A.C. 7:27 or as listed below:

"Area Source" means any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR 63.2.

"Control Apparatus" or "Control Device" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

"Department" means the New Jersey Department of Environmental Protection.

"Distillates of Air" means helium (He), nitrogen (N2), oxygen (O2), neon (Ne), argon (Ar), krypton (Kr), and xenon (Xe).

"Emission Unit" means a permitting method that describes one or more significant component operations. Stand-alone pieces of equipment will make up an emission unit. Pieces of equipment with physical commonalities (such as common exhaust systems) making collective data presentation easier to understand also may constitute an emission unit. An emission unit process is more likely to be a continuous operation, where raw materials enter production equipment as product is removed from it. A piece of equipment may only appear in one emission unit.

"Emission Point" means the location where air contaminants are physically released into the atmosphere. An emission point can be, but is not limited to, a stack, a wall vent, the general building ventilation exhaust, or a window.

"Fumigation" means the use of gaseous pesticide (fumigant) in order to control and/or eliminate pests. This includes all activities prior to application of fumigant(s), the application of fumigant(s), fumigation period, and post fumigation activities.

"Graphic Arts Operation" means the application of one or more surface coating formulations across a surface using one or more letterpress, lithographic, rotogravure or flexographic printers used to produce published material and packaging for commercial or industrial purposes, or any letterpress, lithographic, rotogravure or flexographic printers used to produce vinyl or urethane coated fabric or sheets, or any sheet-fed gravure, screen printing, or fabric printing operations together with any associated drying or curing areas. A single graphic arts operation ends after drying or curing and before other surface coating formulations are applied. For any web line, this term means an entire application system, including any associated drying ovens or areas between the supply roll and take-up roll or folder. This term does not include any surface coating operation.

"Hazardous Air Pollutants" or "HAP" means an air contaminant listed in or pursuant to 42 U.S.C. §7412(b).

"Incinerator" means any device, apparatus, equipment, or structure using combustion or pyrolysis for destroying, reducing or salvaging any material or substance, but does not include thermal or catalytic oxidizers used as control apparatus on manufacturing equipment.

"MACT" or "**Maximum Achievable Control Technology**" means a National Emission Standard for a Hazardous Air Pollutant (NESHAP) establishing an emission limitation for a specific category or subcategory of facilities which emit one or more hazardous air pollutants (HAPs), which NESHAP is:

- 1. Promulgated by EPA pursuant to 42 U.S.C. § 7412; or
- 2. Determined by the Department on a case-by-case basis pursuant to 42 U.S.C. § 7412(g) or (j).

"Major Hazardous Air Pollutant (HAP) facility" means a major facility, or part thereof, which emits or has the potential to emit:

- 1. Ten (10) tons or more per year of any HAP;
- 2. Twenty five (25) tons or more per year of any combination of HAPs; or
- 3. Such lesser quantity, or different criterion, as the EPA may establish by rule.

"Manufacturing and Materials Handling Equipment" means

- 1. Equipment using pneumatic, bucket or belt conveying systems from which emissions occur; OR
- 2. Equipment in which the combined weight of all raw materials used exceeds 50 pounds in any one hour, in accordance with N.J.A.C. 7:27-22.1 In determining the weight of the raw materials used, the weight of the following shall be excluded, in accordance with N.J.A.C. 7:27-22.1.
 - Air
 - Water;
 - Containers, provided that the container is not consumed as part of the operation of the equipment; and
 - Paper, metal or plastic that is twisted, bent or folded in the operation, provided that the twisting, bending, or folding does not cause visible emissions.

"NESHAP" means a National Emission Standard for a Hazardous Air Pollutant as promulgated under 40 CFR Part 61 or 40 CFR Part 63.

"NSPS" means Standards of Performance for New Stationary Sources as promulgated under 40 CFR 60, commonly referred to as New Source Performance Standards.

"Particulate Control Apparatus" means equipment designated to capture the particulates from manufacturing and materials handling equipment. This general operating permit is limited only to a particulate baghouse and/or cartridge filter.

"PM-10" means a class of air contaminants that includes all particulate matter having an aerodynamic diameter less than or equal to a nominal 10 microns.

"PM-2.5" means a class of air contaminants that includes all particulate matter having an aerodynamic diameter less than or equal to a nominal 2.5 microns.

"Potential to Emit" or **"PTE"** means the same as that term is defined by the EPA at 40 CFR § 70.2 or any subsequent amendments thereto. In general, the potential to emit is the maximum aggregate capacity of a source operation or of a facility to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of a source operation or a facility to emit an air contaminant, including any limitation on fugitive emissions as a result of any applicable requirement, control apparatus, and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design, if the limitation is Federally enforceable. Unless otherwise indicated, fugitive emissions shall be included in the determination of potential to emit. However, the determination shall not include the holding by the owner or operator of either emission reductions that are banked pursuant to N.J.A.C. 7:27-18.8 or NOx budget allowances allocated pursuant to N.J.A.C. 7:27-31.7.

"Reporting Threshold" means the threshold for reporting emissions of air contaminants in accordance with N.J.A.C. 7:27-22 Appendix Table A and B, and/or N.J.A.C. 7:27-17, as applicable.

"Source Operation" means any process, or any identifiable part thereof, that emits or can reasonably be anticipated to emit any air contaminant either directly or indirectly into the outdoor atmosphere. A source operation may include one or more pieces of equipment or control apparatus.

"Storage tank" means any tank, reservoir, or vessel, which is a container for liquids or gases, wherein:

- 1. No manufacturing process, or part thereof, other than filling or emptying takes place; and
- 2. The only treatment carried out is that necessary to prevent change from occurring in the physical condition or the chemical properties of the liquids or gases deposited into the container. Such treatment may include recirculating, agitating, maintaining the temperature of the stored liquids or gases, or replacing air in the vapor space above the stored liquids or gases with an inert gas in order to inhibit the occurrence of chemical reaction.

"Surface Cleaner" means a device to remove unwanted foreign matter from the surfaces of materials by using VOC or HAP solvents in liquid or vapor state.

"Surface Coating Operation" means the application of one or more surface coating formulations across an entire surface, using one or more coating applicators, together with any associated drying or curing areas. A single surface coating operation ends after drying or curing and before other surface coating formulations are applied. For any web coating line, this term means an entire coating application system, including any associated drying ovens or areas between the supply roll and take-up roll, that is used to apply surface

coating formulations onto a continuous strip or web. This term does not include any graphic arts operation.

"Total suspended particulate matter" or "TSP" means any air contaminant dispersed in the outdoor atmosphere which exists as solid particles or liquid particles at standard conditions and is measured in accordance with N.J.A.C. 7:27B-1; 40 CFR 60, Appendix A, Methods 5 through 5H; or another method approved by the Department and EPA.

"Toxic Substance" or "TXS" means a substance regulated by N.J.A.C. 7:27-17.

"USEPA AP-42 Emission Factors" means a compilation of air pollutant emissions factors by source category as the primary compilation of EPA's emission factors information. <u>https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors</u>

II. <u>AUTHORITY AND STATEMENT OF BASIS</u>

A. Applicability

- 1. This general operating permit is issued under the authority granted to Air Quality Permitting pursuant to N.J.S.A. 26:2C-9.2. This general operating permit shall allow for inspections and evaluations to assure compliance with all applicable provisions of N.J.A.C. 7:27.
- 2. This general operating permit consists of Sections I through VII and the completed Online Application. Each section of this general operating permit and completed Online Application are enforceable.
- 3. This general operating permit allows for the construction, installation, modification and operation of:
 - Single or multiple pieces of manufacturing and materials handling equipment each with uncontrolled potential to emit (PTE) emissions less than the reporting threshold for each air contaminant;
 - Single or multiple pieces of manufacturing and materials handling equipment each with PTE emissions before a control device less than the reporting threshold for each air contaminant; or
 - Single or multiple pieces of manufacturing and materials handling equipment each with TSP, PM-10, and PM-2.5 PTE emissions after a particulate control device (baghouse or cartridge filter) less than the reporting threshold. All other air contaminants PTE emissions per piece of equipment shall be less than the reporting threshold before the control device for each air contaminant.
- 4. For a modification, the manufacturing and materials handling equipment must be currently permitted in a facility's approved Title V Operating Permit.

- 5. This general operating permit may only be used at facilities with an approved Title V Operating Permit. Facilities may obtain more than one GOP-002A. Each GOP-002A may only permit equipment in one emission unit.
- 6. The Permittee shall comply with the General Procedures for General Operating Permits posted at the Department's website: <u>http://www.state.nj.us/dep/aqpp</u>.
- 7. The conditions of approval for this permit are based on applicability requirements in State and Federal air pollution control rules. Each condition in the permit includes the citation of the applicable requirement on which the condition is based.

B. Monitoring, Recordkeeping and Reporting

- 1. The general operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's compliance with the applicable requirements.
- 2. The owner or operator is required to maintain documentation onsite for the determination of a net emission increase or a significant net emission increase pursuant to N.J.A.C. 7:27-18.7 showing increases for each Manufacturing and Materials Handling Equipment GOP that have been permitted in support of the provision in Section IV(6).
- 3. The owner or operator shall maintain emission calculations records showing PTE emissions below reporting threshold for each air contaminant.
- 4. The owner or operator shall maintain records showing the maximum equipment capacity.
- 5. For a particulate baghouse or cartridge filter, a pressure drop instrument is required to monitor and record the pressure drop across the baghouse or cartridge filter. The particulate baghouse or cartridge filter shall be operated and maintained in accordance with the manufacturer's recommendations.
- 6. See Compliance Plan for specific requirements on monitoring, recordkeeping and reporting.

III. <u>EXCLUSIONS</u>

This General Operating Permit shall not be used for the following equipment:

- 1. Any equipment for which another specific General Operating Permit has been established pursuant to N.J.A.C. 7:27-22.14;
- 2. Any equipment subject to NSPS, MACT, NESHAPS or 40 CFR 64 Compliance Assurance Monitoring (CAM) requirements;

- 3. Any combustion source burning any commercial or non-commercial fuel;
- 4. Any surface cleaner;
- 5. Any equipment that meets the definition of a graphic arts operation;
- 6. Any tank or vessel used in etching, pickling, plating, electroplating or anodizing;
- 7. Any transfer operation involving gasoline or other VOCs;
- 8. Any tanks, reservoirs, containers and bins which have a capacity in excess of 2,000 cubic feet and which are used for the storage of solid particles;
- 9. Any equipment that meets the definition of a surface coating operation;
- 10. Any incinerator;
- 11. Any equipment used for the purpose of venting a closed or operating dump, sanitary landfill, hazardous waste landfill, or other solid waste facility including waste transfer stations;
- 12. Any welding equipment;
- 13. Any site remediation activity;
- 14. Any storage tank which have a capacity in excess of 10,000 gallons and which are used for the storage of liquids, except water or distillates of air;
- 15. Any storage tank which have a capacity of 2,000 gallons or greater and which are used for the storage of a VOC or mixture of VOCs having a vapor pressure or sum of partial pressure of 0.02 pounds per square inch absolute (1.0 millimeters of mercury) or greater at standard conditions;
- 16. Any waste or water treatment equipment in accordance with the significant source operation definition in N.J.A.C. 7:27-22.1; and
- 17. Any fumigation activity.

IV. LIMITATIONS AND REOUIREMENTS

- 1. Pursuant to N.J.A.C. 7:27-22, any person who wishes to construct, install and operate equipment under the authority of the General Operating Permit may register for the General Operating Permit only if the piece of equipment meets the APPLICABILITY requirements listed in the General Operating Permit.
- 2. The conditions of a General Operating Permit cannot be changed. If a change to a source operation with a General Operating Permit is needed, then the Permittee must request the change through the Title V Operating Permit modification procedures in N.J.A.C. 7:27-22.
- 3. A facility with an expired Title V Operating Permit without an Application Shield pursuant to N.J.A.C. 7:27-22.7 may not register for the use of a General Operating Permit.
- 4. This General Operating Permit may only be used at facilities with an approved Title V Operating Permit and only if the equipment is not currently listed in an approved Title V Operating Permit, or for a modification as specified in this General Operating Permit. Facilities that will be getting a Title V Operating Permit in the future, or those that are in the process of getting a Title V Operating Permit, may use General Permits if applicable from N.J.A.C. 7:27-8 (Subchapter 8) until they obtain an approved Title V Operating Permit.
- 5. General Operating Permits may not be used where annual emissions of any air contaminant from the facility would increase by such amounts that would make the facility subject to the requirements of N.J.A.C. 7:27-18 (Emission Offset Rule), 40 CFR 51 Appendix S (Emission Offset Interpretative Ruling), 40 CFR 52.21 (PSD) or make the facility a major source for HAPs as defined in 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories).
- 6. Any facility with an approved Title V Operating Permit that obtains General Operating Permit(s) must determine based on its own evaluation that none of the General Operating Permit(s) it obtained individually or collectively would cause the facility to be subject to N.J.A.C. 7:27-18 (Emission Offset Rule), 40 CFR 51 Appendix S (Emission Offset Interpretative Ruling), 40 CFR 52.21 (PSD) or make the facility a major source for HAPs as defined in 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories). The basis for this determination must be kept on site and submitted with the next Title V Operating Permit modification application that increases actual emissions or Renewal Application, whichever occurs first. If found that the General Operating Permit has caused the facility to be subject to the above regulations, the authorization contained in the General Operating Permit is null and void and installation of equipment under this General Operating Permit will subject the facility to appropriate enforcement action.

- 7. The general requirements in the facility's Title V Operating Permit, such as those in the General Provisions and Authorities Section and Subject Item FC of the Compliance Plan, also apply to the source operation covered by this General Operating Permit. This includes, but is not limited to, the six month deviation report and annual compliance certification.
- 8. The expiration date of the General Operating Permit will be the expiration date of the facility's approved Title V Operating Permit. If the Title V Operating Permit has expired and has an application shield pursuant to N.J.A.C. 7:27-22.7, the conditions of the General Operating Permit remain enforceable until the Title V Operating Permit is renewed at which time this General Operating Permit will be incorporated into the renewal permit.
- 9. The General Operating Permit will be incorporated into the facility's Title V Operating Permit when the Title V Operating Permit is modified or renewed.

V. EOUIPMENT AND CONTROL DEVICE SPECIFICATIONS

- 1. The owner or operator shall maintain records showing the maximum equipment capacity.
- 2. For a Particulate Baghouse or Cartridge Filter, the Permittee shall maintain records showing the particulate control efficiency (%) and the inspection, operation and maintenance procedures.

VI. <u>POTENTIAL TO EMIT</u>

- 1. The Permittee shall select the Manufacturing and Materials Handling Equipment option that is being permitted with this GOP in the Online Application. Only one general operating permit option can be selected per piece of equipment.
- 2. For each piece of equipment with uncontrolled PTE emissions less than the reporting threshold for each air contaminant or PTE emissions less than the reporting threshold before a control device for each air contaminant, the Permittee shall enter the maximum equipment capacity in the online application. The Permittee shall maintain emission calculation records showing that the PTE for each air contaminant from each piece of equipment is below the reporting threshold based on the maximum equipment capacity. The completed online application is enforceable and is made a part of this general operating permit.
- 3. For each piece of equipment with TSP, PM-10, and PM-2.5 PTE emissions less than the reporting threshold after a particulate baghouse or cartridge filter, the Permittee shall enter the maximum equipment capacity and the particulate control efficiency in the online application. The Permittee shall maintain emission calculation records showing that the PTE for TSP, PM-10, and PM-2.5 after control are below the reporting threshold based on the maximum equipment capacity and particulate control efficiency. The Permittee shall maintain emission calculation records showing that the PTE for all other air contaminants from each piece of equipment are below the reporting threshold before the control device based on the

maximum equipment capacity. The completed online application is enforceable and is made a part of this general operating permit.

4. The PTE for equipment permitted under this General Operating Permit shall be less than the reporting thresholds in accordance with N.J.A.C. 7:27-22 and/or N.J.A.C. 7:27-17, as applicable.

VII. <u>COMPLIANCE PLAN</u>

The Manufacturing and Materials Handling Equipment covered by this general operating permit is subject to the applicable requirements listed on the following pages.

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: Manufacturing and Materials Handling Equipment

Uncontrolled Equipment or Equipment with a Particulate Baghouse/Cartridge Filter

Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	The owner or operator shall comply with all conditions contained in the document "General Procedures for General Operating Permits," posted at http://www.nj.gov/dep/aqpp. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Opacity <= 20 %, exclusive of condensed water vapor, except for 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)] and [N.J.A.C. 7:27- 6.2(e)]	None.	None.	None.
3	No Visible Emissions, exclusive of condensed water vapor, except for no more than 3 minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Each Uncontrolled Piece of Equipment: The maximum emission rate for each air contaminant shall be below the reporting threshold in accordance with N.J.A.C. 7:27-22 and/or N.J.A.C. 7:27-17, as applicable. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. The permittee may use emission factors, engineering principles, vendor guarantees or mass balance to calculate the PTE for each air contaminant. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain emission calculation records based on the maximum equipment capacity showing that the PTE for each air contaminant is below the reporting threshold in accordance with N.J.A.C. 7:27-22 and/or N.J.A.C. 7:27-17, as applicable. [N.J.A.C. 7:27-22.16(o)]	None.
5	Each piece of Equipment with a Control Device, other than a Particulate Baghouse/Cartridge Filter: The maximum emission rate for each air contaminant before the control device shall be below reporting threshold in accordance with N.J.A.C. 7:27-22 and/or N.J.A.C. 7:27-17, as applicable. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. The permittee may use emission factors, engineering principles, vendor guarantees or mass balance to calculate the PTE for each air contaminant. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain emission calculation records based on the maximum equipment capacity showing that the PTE for each air contaminant is below the reporting threshold in accordance with N.J.A.C. 7:27-22 and/or N.J.A.C. 7:27-17, as applicable. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Each piece of Equipment with a Particulate Baghouse/Cartridge Filter: The maximum TSP, PM-10 and PM-2.5 emission rate after the control device shall be below reporting thresholds in N.J.A.C. 7:27-22, Appendix, Table A. The maximum emission rate before the control device of each air contaminant other than TSP, PM-10 and PM-2.5 shall be below the reporting threshold in accordance with N.J.A.C. 7:27-22 and/or N.J.A.C. 7:27-17, as applicable. [N.J.A.C. 7:27-22.16(a)]	Monitored by calculations once initially. The permittee may use emission factors, engineering principles, vendor guarantees or mass balance to calculate the PTE for each air contaminant. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. Maintain emission calculation records based on the maximum equipment capacity, and particulate control efficiency for TSP, PM-10 and PM-2.5, showing that the PTE for each air contaminant is below the reporting threshold in accordance with N.J.A.C. 7:27-22 and/or N.J.A.C. 7:27-17, as applicable. [N.J.A.C. 7:27-22.16(o)]	None.
7	Raw materials limited to those listed in general operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Keep records showing raw materials used.[N.J.A.C. 7:27-22.16(0)].	None.
8	Total Material Transferred: maximum lb/hr throughput rate based on maximum equipment capacity from general operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain records showing maximum equipment capacity.[N.J.A.C. 7:27-22.16(0)].	None.
9	Total Material Transferred: maximum tons/yr throughput limit from general operating permit application. [N.J.A.C. 7:27-22.16(a)]	None.	Other: Maintain records showing the annual tons/yr throughput.[N.J.A.C. 7:27-22.16(o)].	None.
10	Equipment with a Particulate Baghouse/Cartridge Filter: The Permittee shall maintain the Minimum and Maximum Operating Pressure Drop across the baghouse or cartridge filter, inches w.c. from general operating permit application. [N.J.A.C. 7:27-22.16(a)]	Monitored by pressure drop instrument continuously. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the device. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system daily showing the pressure drop across the baghouse or cartridge filter. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Equipment with a Particulate Baghouse or Cartridge Filter: The owner or operator shall inspect and maintain the particulate control device on a schedule that maintains the designed particulate control efficiency as specified by the manufacturer. The particulate control device shall be operated and maintained in accordance with the manufacturer's recommendations. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. Record each inspection and maintenance event. [N.J.A.C. 7:27-22.16(o)]	None.
12	Compliance Certification: Submit annual compliance certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f), within 60 days after the end of each calendar year during which this permit was in effect. [N.J.A.C. 7:27-22]	None.	None.	Submit an Annual Compliance Certification: Annually to the Department and EPA within 60 days after the end of each calendar year during which this permit was in effect. The annual compliance certification reporting period will cover the calendar year ending December 31. The certification shall be submitted electronically through the NJDEP online web portal - Periodic Compliance Certification service, and shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official. Access to the NJDEP online web portal shall be obtained by following the instructions at: http://www.state.nj.us/dep/online/. The certification shall be submitted to EPA electronically through the EPA's Central Data Exchange (CDX) at https://cdx.epa.gov/ [N.J.A.C. 7:27-22]