

3745-31-03 **Exemptions and permits-by-rule.**

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see the "Incorporation by Reference" section at the end of rule 3745-31-01 of the Administrative Code.]

- (A) A permit-to-install or PTIO as required by rule 3745-31-02 of the Administrative Code must be obtained for the installation or modification, and operation of an air contaminant source unless exempted from the requirements as follows:

[Comment: The following exemptions relieve permittees from the obligation to apply for and obtain a permit-to-install or PTIO. They do not, however, exempt any air contaminant source from requirements of the Clean Air Act, including being considered for purposes of determining whether a facility constitutes a major source or is otherwise regulated under Chapter 3745-77 of the Administrative Code or any requirement to identify insignificant activities and emission levels in a Title V permit application. In addition, this rule does not relieve the owner or operator from the requirement of including the emissions associated with the exempt sources into any major NSR permitting action.]

(1) Permanent exemptions

The following exemptions do not apply to emissions units subject to 40 CFR Part 61, the national emission standards for hazardous air pollutants (NESHAPs), with the exception of 40 CFR Part 61, Subpart M, asbestos removal activities; or emissions units subject to 40 CFR Part 63, the NESHAPs for source categories, MACT standards, unless such standard either only requires submission of a notification, and written notification satisfying the MACT notification requirements has been or will be submitted to the Ohio environmental protection agency prior to the notification deadline imposed by the MACT, or such standard does not impose any requirements (i.e., notifications, emissions limits, record keeping, etc.) to the particular emissions unit; or emissions units subject to the new source performance standards (NSPS) with the exception of 40 CFR Part 60, Subpart AAA, residential wood heaters, 40 CFR Part 60, Subpart OOO, nonmetallic mineral processing plants, and 40 CFR Part 60, Subpart I, hotmix asphalt facilities.

- (a) Fossil fuel-fired boilers, preheaters, air heaters, water heaters, or heaters used for other heat exchange media less than ten million British thermal units per hour burning only natural gas, distillate oil (with less than or equal to 0.5 per cent by weight sulfur), or liquid petroleum gas.

- (b) Fossil fuel or wood fuel-fired boilers, preheaters, air heaters, or water heaters less than one million British thermal units per hour except units burning waste fuels or waste oil.
- (c) Fossil fuel-fired furnaces or dryers less than ten million British thermal units per hour and burning only natural gas, distillate oil (with less than or equal to 0.5 per cent by weight sulfur), or liquid petroleum gas and the only emissions are from the products of combustion from fuel and water vapor and where no melting or refining occurs nor where any burning of any material occurs.
- (d) Tumblers used for the cleaning or deburring of metal products without abrasive blasting.
- (e) Equipment used exclusively for the packaging of lubricants or greases, and water-borne adhesives, coatings or binders.
- (f) Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-borne adhesives, coatings or binders.
- (g) Bakery ovens that bake:
 - (i) Chemically leavened products; or
 - (ii) Yeast dough products and that are not located at a commercial bakery; or
 - (iii) Biscuits, crackers, cookies and other similar nonleavened projects; or
 - (iv) Yeast dough, bread, buns and rolls at a bakery having a total maximum yeast dough, bread, buns and rolls production rate of less than or equal to one thousand pounds per hour.
- (h) Mixers and blenders and deep fat fryers (except deep fat fryers used for large scale production of products) where the products are edible and intended for human consumption.
- (i) Laboratory equipment
 - (i) Laboratory equipment and laboratory fume hoods used exclusively for chemical or physical analyses and bench scale laboratory equipment.
 - (ii) Laboratory paint booths used to prepare samples for chemical or physical analysis where the actual emissions of each laboratory paint booth is less than 3.0 tons of VOC per year and where:

- (a) The owner or operator maintains records, available to the director upon request, detailing that the VOC emissions are less than 3.0 tons of VOC per year, and
 - (b) Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.
- (j) Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy.
- (k) Equipment used for injection molding of resins where no more than one million pounds of resins (thermoplastic or thermosetting) per rolling twelve-month period are used in injection machines at the facility.
- (l) Storage tanks for:
 - (i) Inorganic liquids including water (at standard temperature and pressure) except as described in paragraph (A)(1)(l)(vii) of this rule; or
 - (ii) Pressurized storage for inorganic compounds or propane, butane, isobutane, and liquid petroleum gases; or
 - (iii) Liquids with a capacity of less than seven hundred gallons; or
 - (iv) Organic liquids with a capacity of less than seventy-five cubic meters (nineteen thousand eight hundred fifteen gallons) and equipped with submerged fill, except gasoline storage tanks located at bulk gasoline plants which are subject to the requirements of paragraph (P) of rule 3745-21-09 of the Administrative Code; or
 - (v) Organic liquids with a capacity greater than or equal to seventy-five cubic meters (nineteen thousand eight hundred fifteen gallons) but less than one hundred fifty-one cubic meters (thirty-nine thousand eight hundred ninety-four gallons) storing a liquid with a maximum true vapor pressure, as defined in 40 CFR 60.111b, of less than 15.0 kilopascals (2.176 pounds per square inch absolute) and equipped with submerged fill; or
 - (vi) Organic liquids with a capacity greater than or equal to one hundred fifty-one cubic meters (thirty-nine thousand eight hundred ninety-four gallons) storing a liquid with a maximum true vapor pressure, as defined in 40 CFR 60.111b, of less than 3.5 kilopascals (0.508 pounds per square inch absolute); or

- (vii) Acids (as defined in the "Chemical Rubber Company (CRC) Handbook of Chemistry and Physics") stored in tanks less than or equal to seven thousand five hundred gallons capacity.
- (m) Compression molding presses used for the curing of plastic products that qualify for the de minimis exemption under rule 3745-15-05 of the Administrative Code. This type of press uses a thermosetting resin and involves a chemical reaction, usually involving heat, that converts the material (e.g., polyesters, polyurethanes, epoxy resins, etc.) to a solid, insoluble state using a hardening or curing operation.
- (n) Presses used exclusively for extruding clay.
- (o) Storage tanks, storage silos, and other farm equipment located on a farm and utilized exclusively for the production of food or grain on the premises.
- (p) The relocation of any portable source in the state of Ohio that meets the following requirements under this paragraph:
 - (i) The company has demonstrated the following:
 - (a) The portable source was installed after January 1, 1974 and continues to comply with any applicable BAT and state or federal air pollution rule or law; and
 - (b) The portable source continues to comply with the currently effective permit-to-install or PTIO or express permit-to-install or express PTIO and/or any applicable permit-to-operate; and
 - (c) The applicant has provided proper notice of intent to relocate the portable source to the director within a minimum of thirty days prior to the scheduled relocation; and
 - (d) The director has issued a notice stating that in the director's judgment, the proposed site is acceptable under rule 3745-15-07 of the Administrative Code, and
 - (e) The director has issued a notice stating that in the director's judgment, relocating the portable source will not result in the installation of a major stationary source or the modification of a major stationary source.

[Comment: Relocation of any portable source that results in the installation of a major stationary source or the modification of a major stationary source must also meet all applicable requirements under this chapter, including the requirement to obtain a permit-to-

install prior to relocation. Relocation of any portable source that results in the creation of a major source, as defined in rule 3745-77-01 of the Administrative Code, must also meet all applicable requirements under the Title V program contained in Chapter 3745-77 of the Administrative Code, which may include the requirement to apply for a Title V permit.]

- (ii) The director has issued a site approval for the new location pursuant to rule 3745-31-05 of the Administrative Code.
- (q) A drycleaning facility constructed between January 1, 1974 and December 31, 1981 in which the annual amounts of fabric drycleaned with perchloroethylene is less than sixty thousand pounds and is not located in Butler, Clermont, Cuyahoga, Franklin, Greene, Hamilton, Lake, Lorain, Lucas, Mahoning, Medina, Montgomery, Portage, Stark, Summit, Trumbull, Warren and Wood counties.
- (r) Noncontinuous solvent recycling or reclaiming units with less than twenty gallons capacity.
- (s) Non-heatset or sheet-fed presses with an OC potential to emit of less than three tons per year.
- (t) An incinerator located at a dwelling designed and used to dispose of residential wastes and having a capacity for serving six or fewer households or units per dwelling.
- (u) Equipment used for spraying or applying insecticides, pesticides and herbicides except at facilities producing these substances or mixtures for sale or distribution.
- (v) Combustors used exclusively for the purpose of research and development of more efficient combustion of coal or more effective prevention of air pollutant emissions from coal combustion, less than ten million British thermal units per hour and an annual average capacity factor of not more than twenty per cent.
- (w) Solvent cold cleaners that meet the provisions of paragraph (O) of rule 3745-21-09 of the Administrative Code and have a liquid surface area less than or equal to ten square feet or a reservoir opening of less than six inches in diameter.
- (x) Ink-jet printers.
- (y) Grinding and machining operations, abrasive blasting, pneumatic conveying, and wood working operations controlled with a fabric filter, scrubber, or

mist collector designed to emit not more than 0.03 grains of particulate per dry standard cubic foot of exhaust gas with less than four thousand actual cubic feet per minute volume, venting inside a building, and emitting less than ten pounds per day of nonparticulate matter air contaminants.

- (z) Uncontrolled grinding, machining, and sanding operations, abrasive cleaning operations (dry or wet), pneumatic conveying and woodworking operations that have no visible emissions, vent to the inside of a building and emit less than ten pounds per day of nonparticulate matter air contaminants.
- (aa) Parts washers and rinse tanks using detergent cleaners.
- (bb) Aluminum die-casting machines.
- (cc) Air contaminant sources at nonproduction research and development operations with a potential to emit from any air contaminant source of less than one ton per year of any criteria pollutant per air contaminant source.
- (dd) Vegetable oil storage tanks and pumps and valves used in vegetable oil processing operations.
- (ee) Gasoline dispensing facilities, as defined in paragraph (H) of rule 3745-21-01 of the Administrative Code, or other motor fuel dispensing facilities that are equipped with Stage I vapor control and are not located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren, or Wood counties.
- (ff) Gasoline dispensing facilities, as defined in paragraph (H) of rule 3745-21-01 of the Administrative Code, or other motor fuel dispensing facilities that have an individual maximum annual throughput of less than six thousand gallons of gasoline per year.
- (gg) Air separation plants.
- (hh) All maintenance welding.
- (ii) Arc welding where emissions of particulate matter are vented to a control device located and vented inside the building.
- (jj) Passive methane venting systems from non-hazardous waste landfills.
- (kk) Coating applicators with properly designed and operated particulate matter control devices and venting systems that employ less than five gallons of

only air-dried coating material in any one day provided that the applicators are:

- (i) Not located in a nonattainment area for ozone,
 - (ii) Not subject to limits specified in or not specifically exempted from rule 3745-21-09 of the Administrative Code,
 - (iii) Not subject to federal standards of performance for new stationary sources; and
 - (iv) Not located at a facility with actual emissions of twenty-five or more tons of volatile organic materials per year and are not subject to a standard under Section 112 of the Clean Air Act.
- (ll) Refrigerant reclaiming and recycling machines located at motor vehicle repair facilities.
- (mm) Natural gas compressor engines used for maintenance activities with a heat input rate of no greater than ten million British thermal units per hour fired by natural gas, gasoline or distillate oil (with less than or equal to 0.5 per cent by weight sulfur).
- (nn) Emergency electrical generators, emergency air compressors or emergency water pumps less than or equal to fifty horsepower that burn gasoline, natural gas, distillate oil (with less than or equal to 0.5 per cent by weight sulfur), or liquid petroleum gas.

For the purposes of this paragraph, the definitions in paragraph (A)(4)(a)(viii) of this rule apply.

- (oo) Two-stroke or four-stroke, air-cooled, gasoline-powered engines no more than twenty horsepower used for lawnmowers, small electric generators, compressors, pumps, minibikes, snowthrowers, garden tractors or other similar uses.
- (pp) Non-road engines, subject to the following provisos:
- (i) Consistent with this exemption and pursuant to division (T)(3) of section 3745.11 of the Revised Code, permit-to-install fees for the installation of exempt non-road engines, as required under section 3745.11 of the Revised Code, are hereby waived for any permit-to-install issued for an exempt non-road engine where the permittee has not yet paid the fee.
 - (ii) This exemption does not apply to non-road engines that emit visible particulate emissions with opacities greater than twenty per cent as a

six-minute average as determined by USEPA method 9 of 40 CFR Part 60, Appendix A.

- (qq) Internal combustion engine(s) used for locomotion installed in a marine vessel, an aircraft, a locomotive, a recreational vehicle, a motor vehicle (self-propelled vehicles designed for transporting persons or property on a street or highway), a vehicle used solely for competition, or an off-highway vehicle.
- (rr) A dynamometer operation for fully assembled motor vehicles. This exemption includes dynamometer operations used as part of final assembly of new motor vehicles, roll testing of new motor vehicles, testing of vehicles used solely for competition, testing of motor vehicles for compliance with emissions standards, motor vehicle maintenance, road testing and repair dynamometers and other similar fully assembled motor vehicle dynamometer operations.
- (ss) The one time use of a mobile treatment unit or vacuum truck in order to contain and/or prevent further migration of a hazardous material spill during an emergency response. This exemption shall be effective for thirty days from the date the mobile treatment unit or vacuum truck is first put into use unless the owner or operator meets one of the following requirements within the thirty day period:
 - (i) Applies for a permit-to-install or PTIO in accordance with rule 3745-31-02 of the Administrative Code. The exemption shall expire upon final issuance or final denial of the permit-to-install or PTIO.
 - (ii) Submits written notification, in accordance with paragraph (A)(4)(a)(ii) of this rule, of the applicability of a permit-by-rule in paragraph (A)(4)(e) or (A)(4)(f) of this rule. The exemption shall expire upon receipt of the written notification by the appropriate Ohio environmental protection agency district office or local air agency.

(2) Federal based exemptions

The following exemption applies regardless of the applicability of the national emission standards for hazardous air pollutants and/or the new source performance standards.

- (a) Cleanup activities associated with the removal or remedial action conducted entirely on site, where such remedial action is selected and carried out in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121(e) and where such action meets all applicable air pollution emission limits and policies.

(3) Discretionary exemptions

- (a) The director, at his/her discretion, may exempt the installation and operation of an air contaminant source or any other source associated with the clean-up of a spill or a leaking underground storage tank from the requirements to obtain a permit-to-install or PTIO.
- (b) The director, at his/her discretion, may exempt the installation and operation of an air contaminant source from the requirements to obtain a permit-to-install or PTIO to deal with an emergency situation involving immediate threats to human health, property or the environment.
- (c) The director, at his/her discretion, may exempt the installation and operation of an air contaminant source from the requirements to obtain a permit-to-install or PTIO for the emergency replacement of storage tanks associated with a leaking underground storage tank for a period not to exceed six months.
- (d) The director, at his/her discretion and in writing, may exempt the installation and operation or modification of an air contaminant source from the requirement to obtain a permit-to-install or PTIO for a period of up to six months for purposes of research and development of more effective prevention or control of air pollutant emissions or of more efficient combustion of coal.
- (e) A temporary source that, as so ordered by the director at his/her discretion, is to be operated for the purpose of testing air contaminant pollution emissions so that a suitable control technology can be ascertained and will not operate for more than two calendar years.
- (f) The director, at his/her discretion and in writing, may exempt the temporary modification and operation of an air contaminant source from the requirements to obtain a permit-to-install or PTIO for a period of up to sixty days for the purpose of evaluating new production feasibility and/or air quality impacts from the temporary modification. A request for this exemption shall be made in writing and shall provide a detailed description of the proposed temporary modification to the air contaminant source, the time period over which the modification will occur, any changes in air emissions from the air contaminant source as a result of the temporary modification, and the ambient impact of the emissions from the air contaminant source as a result of the temporary modification. The director may require that performance tests be conducted during the period of the temporary modification.
- (g) The director, at his/her discretion and in writing, may exempt any treatability studies or on-site response actions (cleanup operations) that meet all

applicable air emission limits and policies from the requirement to obtain a permit-to-install or PTIO. Anyone requesting this exemption must provide the director with sufficient information to make this decision.

(4) Permit-by-rule exemptions

The following air contaminant sources are exempt from the requirement to obtain a permit-to-install or PTIO. These exemptions are valid only as long as the owner or operator complies with all of the permit-by-rule general provisions, meets the qualifying criteria defined in the applicable permit-by-rule and complies with all of the requirements under the applicable permit-by-rule specific provisions. Upon request by the director, the owner or operator of a facility that has exceeded the permit-by-rule thresholds or that the director finds is causing or may cause a public nuisance in violation of rule 3745-15-07 of the Administrative Code shall submit an application for a permit-to-install or PTIO.

These exemptions do not, however, exempt any air contaminant source from requirements of the Clean Air Act, including being considered for purposes of determining whether a facility constitutes a major source or is otherwise regulated under Chapter 3745-77 of the Administrative Code or any requirement to list insignificant activities and emission levels in a Title V permit application. In addition, this rule does not relieve the owner or operator from the requirement of including the emissions associated with the exempt sources into any major NSR permitting action.

(a) General provisions

These general provisions apply to all owner or operators who are utilizing one or more of the permit-by-rule exemptions listed in paragraphs (A)(4)(b) to (A)(4)(l) of this rule.

(i) Recordkeeping requirements

The owner or operator shall collect and maintain the records described for each air contaminant source exempted under paragraph (A)(4) of this rule and these records shall be retained in the owner or operator's files for a period of not less than five years, unless otherwise specified in each exemption. These records shall be made available to the director or any authorized representative of the director for review during normal business hours.

(ii) Notification requirements for new installations

For the purposes of this paragraph, a new permit-by-rule air contaminant source is an air contaminant source installed after the promulgation date of any new applicable permit-by-rule or July 29,

2005, whichever comes later. The owner or operator of a new permit-by-rule air contaminant source electing to use an applicable permit-by-rule exemption shall submit a written notification in a form and manner prescribed by the director prior to installation of the air contaminant source. This notification, or form, shall be submitted to the appropriate Ohio environmental protection agency district office or local air agency, and shall contain the following information, at a minimum:

- (a) The owner or operator's and the facility contact's name;
- (b) The facility mailing address and telephone number;
- (c) The location of the air contaminant source(s);
- (d) A description of the air contaminant source, including any pollution control(s); and
- (e) A statement by the owner or operator that indicates which permit-by-rule applies to the air contaminant source.

(iii) Notification requirements for existing permitted sources

The owner or operator of an air contaminant source which is operating under an existing permit-to-install, PTIO and/or permit-to-operate may continue to operate in compliance with that permit or may submit a written request to the Ohio environmental protection agency to revoke any such individual permit or permits and to allow the air contaminant source to operate under the permit-by-rule provisions. The director may revoke a permit-to-install, PTIO and/or permit-to-operate if the permittee requests revocation, agrees to meet all permit-by-rule qualifying and operating conditions, and the director determines that the revocation will not result in the violation of any applicable laws. When a permittee requests a revocation pursuant to this paragraph, the director, without prior hearing, shall make a final determination on the request and inform the permittee in writing. If the director agrees with the request to operate under the permit-by-rule, then the permit-by-rule becomes applicable to the permittee on the date the existing permit-to-install, PTIO and/or permit-to-operate are revoked.

(iv) Notification requirements for existing permit-by-rule sources

The owner or operator of an air contaminant source that is operating under one of the permit-by-rules that existed prior to July 29, 2005 (emergency electrical generators, injection and compression molding, crushing and screening plants, soil-vapor extraction and soil-liquid extraction) and desires to continue operating under the permit-by-rule

shall submit a written notification which contains all of the elements required in paragraph (A)(4)(a)(ii) of this rule. This notification shall be submitted to the appropriate Ohio environmental protection agency district office or local air agency and shall be submitted by July 29, 2006.

(v) Records retention requirements

Each record of any monitoring data, testing data, and support information required pursuant to a specific permit-by-rule shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the specific permit-by-rule. Such records may be maintained in computerized form.

(vi) Reporting requirements

The owner or operator shall submit required reports in the following manner:

- (a) Reports of any monitoring and/or recordkeeping information required by a specific permit-by-rule shall be submitted to the appropriate Ohio environmental protection agency district office or local air agency.
- (b) Except as otherwise may be provided in a permit-by-rule specific reporting requirements paragraph of a specific permit-by-rule, a written report of any deviations (excursions) from emission limitations, operational restrictions, qualifying criteria, and control equipment operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in the permit-by-rule shall be submitted to the appropriate Ohio environmental protection agency district office or local air agency within thirty days of the date the deviation occurred. The report shall describe the specific limitation and/or operational restriction exceeded, the probable cause of such deviation, and any corrective actions or preventive measures that have been or will be taken.

(vii) Scheduled maintenance/malfunction reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of rule 3745-15-06 of the Administrative Code. The malfunction of any emissions units or any

associated air pollution control system(s) shall be reported to the appropriate Ohio environmental protection agency district office or local air agency in accordance with paragraph (B) of rule 3745-15-06 of the Administrative Code. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is served by such control system(s).

(viii) Definitions. For the purposes of the permit-by-rule exemption in paragraph (A)(4)(b) of this rule, the following definitions apply. These definitions are in addition to terms defined for this chapter in rule 3745-31-01 of the Administrative Code:

(a) "Emergency" means:

(i) A public emergency caused by flooding, damaging winds or tornado, fire, or other natural disaster; or

(ii) An electric power outage due to a failure of the electrical grid, local supply equipment failure, facility equipment failure; or

(iii) Conditions where a regional transmission organization notifies electric distributors that an emergency exists or may occur and it is necessary to implement emergency procedures for voluntary load curtailments by customers within Ohio, in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels, or other emergency conditions leading to a potential electrical blackout; or

(iv) Any situation that the director determines to be an immediate threat to human health, property, or the environment.

(b) "Emergency electrical generator," "emergency water pump," or "emergency air compressor," means, respectively, an electrical generator, water pump, or air compressor powered by an emergency internal combustion engine.

(c) "Emergency internal combustion engine" means a stationary reciprocating engine or stationary turbine engine, whose operation is limited to emergency situations and readiness testing and maintenance. An engine used for non emergency use (for instance to produce peaking power or used in a non emergency energy assistance program is not an emergency internal combustion engine under this definition.

- (b) Emergency electrical generators, emergency water pumps, or emergency air compressors powered by internal combustion engines greater than fifty horsepower (37.3 Kilowatts) where each engine operates at any one facility for no more than five hundred hours per rolling twelve-month period and where such engine burns gasoline, natural gas, distillate oil (with less than or equal to 0.5 per cent by weight sulfur), or liquid petroleum gas and that maintains the following records:
 - (i) Monthly records that contain the rolling twelve-month hours of operation; and
 - (ii) Records that show the type of fuel used and the sulfur content (in per cent by weight) of any distillate oil used.

- (c) Equipment used for injection and compression molding of resins where:
 - (i) The facility does not qualify for the exemption under paragraph (A)(1)(k) or (A)(1)(m) of this rule; and
 - (ii) The facility uses no more than one thousand pounds of VOC in external mold release agents and flatting spray per rolling twelve-month period; and
 - (a) The facility uses no thermoset resins and no more than six million pounds of thermoplastic resins (e.g., polyethylene, polypropylene, polycarbonate, and polyvinyl chloride, etc.) per rolling twelve-month period in injection machines at the facility (this type of molding operation involves materials that soften and melt upon heating or pressurization heating with no chemical change and no permanent change in physical properties. It does not involve curing, thermosetting or cross-linking.); or
 - (b) The facility uses no thermoplastic resins and no more than five hundred thousand pounds of thermoset resins (e.g., polyesters, polyurethanes, epoxy resins, etc.) per rolling twelve-month period in injection and compression molding machines at the facility (these types of molding operations use a thermoset resin and involve a chemical reaction, usually involving heat, that converts the material (e.g., polyesters, polyurethanes, epoxy resins, etc.) to a solid, insoluble state using a hardening or curing operation.); or
 - (iii) No more than three tons of VOCs per rolling twelve-month period are emitted from injection and compression molding machines at the facility, including VOCs emitted as calculated by using emission factors approved by the Ohio environmental protection agency; and

- (iv) The facility maintains monthly records that contain the rolling twelve-month usage of thermoplastic resins, thermosetting resins and VOCs in external mold release agents and flatting spray used in all injection and compression molding machines at the facility, and the Ohio environmental protection agency approved emission factors used to calculate the emissions.

(d) Nonmetallic mineral processing plants permit-by-rule

(i) Qualifications

A nonmetallic mineral processing plant, as defined under 40 CFR Part 60, Subpart OOO, that meets the following qualifications is eligible to use this permit-by-rule:

- (a) Fixed sand and gravel plants and crushed stone plants (including concrete and asphalt paving plants) with capacities, as defined in 40 CFR 60.671, of twenty-three megagrams per hour (twenty-five tons per hour) or less;
- (b) Portable stone and gravel plants and crushed stone plants (including concrete and asphalt paving plants) with capacities, as defined in 40 CFR 60.671, of one hundred thirty-six megagrams per hour (one hundred fifty tons per hour) or less;
- (c) Common clay plants and pumice plants with capacities, as defined in 40 CFR 60.671, of nine megagrams per hour (ten tons per hour) or less; and
- (d) Fixed and portable soil screening plants with capacities, as defined in 40 CFR 60.671, of one hundred thirty-six megagrams per hour (one hundred fifty tons per hour) or less.

(ii) Requirements

A nonmetallic mineral processing plant identified in paragraph (A)(4)(d)(i) of this rule shall either employ a baghouse, wet scrubber, water sprays or combination thereof that is designed and operated to emit no more than ten per cent opacity from stack or fugitive emission points, or employ an enclosed design that is designed and operated to emit no more than fifteen per cent opacity from stack or fugitive emission points, and that maintain the following daily records:

- (a) Material throughput in tons per day; and

- (iii) A description of the liquid extraction and liquid-vapor stripping processes to be used in the remediation activities.
 - (iv) An estimate of the air contaminant emissions in parts per million by volume, pounds per hour and tons per year.
 - (v) A description of the costs of the vapor control equipment to be used to control emissions from the remediation activities.
 - (vi) A description of the projected start date of the remediation project, a list of the project milestones and an estimate of how long the remediation activities will operate.
 - (vii) A notice of when the soil-liquid extraction remediation activities begin, when major project milestones are met and when the remediation activities are completed.
- (g) Auto body refinishing facility permit-by-rule

(i) Qualifications

An auto body refinishing facility that meets all of the following qualifications is eligible to use this permit-by-rule:

- (a) The facility has two or fewer paint spray booths used for painting.
- (b) The facility does not do more than fifty jobs per week.
- (c) The facility does not use more than three thousand gallons combined of all coatings, solvents, and other VOC containing materials in any calendar year.
- (d) The facility performs all painting operations in enclosed spray booth(s) which are designed to confine and direct the paint overspray, fumes, and vapors to a powered ventilation system and are equipped with either a dry filtration or water wash system(s) to capture paint overspray.
- (e) The facility applies any paint or coatings by one of the following means; high volume low pressure (HVLV) spray equipment, or electrostatic application equipment.
- (f) The exhaust stack(s) of each paint spray booth at the facility:
 - (i) Is equipped with a fan designed to achieve an exhaust flow capacity of at least ten thousand cubic feet per minute.

- (ii) Discharges air contaminants in a vertical direction, without obstructions like rain caps, goose neck exhaust, or other obstructions.
- (iii) Has a stack height which is at least sixteen feet, as measured from ground level to the point of discharge to the atmosphere.
- (iv) Has a point of discharge no closer than sixty feet to the nearest facility property line.

(ii) Applicable emission limitations and/or control requirements

- (a) The applicable rules, emission limitations and control requirements that apply to the facility subject to this permit-by-rule are defined in the following table:

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Applicable Rule(s)	Applicable Emission Limitations/Control Requirements
Paragraph (A)(3) of rule 3745-31-05 of the Administrative Code	Facility emissions of VOC shall not exceed nine pounds per hour and 11.7 tons per year. Facility emissions of combined HAPs shall not exceed nine pounds per hour and 11.7 tons per year. Facility emissions of a single HAP shall not exceed 4.5 pounds per hour and 5.85 tons per year.
Paragraph (U)(1) of rule 3745-21-09 of the Administrative Code	This operation is exempt from the requirements of this rule pursuant to paragraph (U)(2)(c) of rule 3745-21-09 of the Administrative Code.
Rule 2745-21-18 of the Administrative Code	The provisions of this rule are only applicable to facilities located in Butler, Clark, Clermont, Greene, Hamilton, Miami, Montgomery and Warren counties.

(iii) Operational requirements

- (a) The owner or operator of the facility shall regularly maintain the spray painting application equipment, exhaust filtration systems, and spray booths in accordance with the recommended procedures and maintenance intervals of the respective manufacturers in order to minimize air contaminant emissions.
- (b) Paint application equipment shall be cleaned using one or more of the following means:

- (iv) The total volume, in gallons, of all VOC-containing materials used or purchased.
 - (b) The owner or operator of the facility shall maintain a record of the number of jobs performed per week.
 - (c) The owner or operator of the facility shall maintain documentation which demonstrates each exhaust stack complies with the design requirements listed in paragraph (A)(4)(g)(i)(f) of this rule.
 - (d) For facilities located in Butler, Clark, Clermont, Greene, Hamilton, Miami, Montgomery and Warren counties, the owner or operator shall submit documentation sufficient to demonstrate that all employees applying coatings are properly trained in the use of a high volume low pressure (HVLP) sprayer and electrostatic spray equipment and in the handling of a coating and any solvents used to clean the spray equipment. The owner or operator shall maintain a copy of this documentation on-site and make the documentation available to the Ohio environmental protection agency, or its representative, upon request.
- (v) Testing requirements
- (a) Compliance with the annual material usage limitation shall be based upon the recordkeeping requirements specified in paragraph (A)(4)(g)(iv)(a) of this rule.
 - (b) Compliance with the hourly VOC/combined HAP emission limitation is based on multiplying the maximum of one job per hour by a maximum emission factor of nine pounds VOC/combined HAP per job. Compliance with the hourly single HAP emission limitation is based on multiplying the maximum of one job per hour by a maximum emission factor of 4.5 pounds single HAP per job.
 - (c) Compliance with the annual tons per year VOC/combined HAP emission limitation is based on multiplying the maximum number of jobs per week, fifty, by an emission factor of nine pounds VOC/combined HAP per job by fifty-two weeks per year and dividing by two thousand pounds per ton. Compliance with the annual tons per year single HAP emission limitation is based on multiplying the maximum number of jobs per week, 50, by an emission factor of 4.5 pounds single HAP per job by fifty-two weeks per year and dividing by two thousand pounds per ton.

(h) Gasoline dispensing facility with Stage I controls permit-by-rule

(i) Qualifications

A gasoline dispensing facility, as defined in paragraph (H) of rule 3745-21-01 of the Administrative Code, which is not otherwise exempted under paragraph (A)(1)(ee) or (A)(1)(ff) of this rule, and meets all of the following conditions is eligible to use this permit-by-rule:

- (a) Is located in Delaware, Franklin, Licking, Lucas, Mahoning, Stark, Trumbull, and Wood counties.
- (b) Has all gasoline storage tanks equipped with submerged fill pipes, as defined in paragraph (H) of rule 3745-21-01 of the Administrative Code.
- (c) Employs a Stage I vapor balance or vapor control system in accordance with paragraph (R) of rule 3745-21-09 of the Administrative Code to control the vapors displaced from the stationary storage tanks during delivery vessel transfer operations, unless exempted from Stage I requirements by one of the provisions of paragraph (R)(4) of rule 3745-21-09 of the Administrative Code.
- (d) Has a gasoline throughput of less than three million eight hundred thousand gallons per year.

(ii) Applicable emission limitations and/or control requirements

- (a) The applicable rules, emission limitations and control requirements that apply to the facility subject to this permit-by-rule are defined in the following table:

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Applicable Rule(s)	Applicable Emission Limitations/Control Requirements
Paragraph (A)(3) of rule 3745-31-05 of the Administrative Code	OC emissions from the facility shall not exceed twenty-five tons per year. The facility shall employ submerged fill pipes on all gasoline storage tanks. The requirements of this rule also include compliance with the requirements of paragraph (R) of rule 3745-21-09 of the Administrative Code.
Paragraph (R) of rule 3745-21-09 of the	The control efficiency of the vapor balance

Administrative Code	or vapor control system shall be at least ninety per cent by weight for VOCs.
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(iii) Operational restrictions

The facility shall comply with the following operational restrictions for the Stage I vapor control system:

- (a) The vapor balance system shall be kept in good working order and shall be used at all times during the transfer of gasoline.
- (b) There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.
- (c) There shall be no leaks in the vapor lines or liquid lines during the transfer of gasoline.
- (d) The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six inches of the bottom of the storage tank.
- (e) All fill caps shall be in place and clamped during normal storage conditions.
- (f) The owner or operator of the facility shall repair within fifteen days any leak from the vapor balance system or vapor control system which is employed to meet the requirements of paragraph (R)(1) of rule 3745-21-09 of the Administrative Code when such leak is equal to or greater than one hundred per cent of the lower explosive limit as propane, as determined under paragraph (K) of rule 3745-21-10 of the Administrative Code.

(iv) Monitoring and/or recordkeeping requirements

- (a) The owner or operator of the facility shall maintain records of the results of any leak checks, including, at a minimum, the following information:
 - (i) Date of inspection.
 - (ii) Findings (may indicate no leaks discovered or location, nature, and severity of each leak).
 - (iii) Leak determination method.

(iv) Corrective action (date each leak repaired and reasons for any repair interval in excess of fifteen calendar days).

(v) Inspector's name and signature.

(b) The owner or operator of the facility shall maintain records of the annual gasoline and diesel/kerosene/used oil (if applicable) throughput for the facility.

(v) Permit-by-rule specific reporting requirements

(a) Any leak from the vapor balance system or vapor control system that is not repaired within fifteen days after identification shall be reported to the appropriate Ohio environmental protection agency district office or local air agency within thirty days after the repair is completed.

(b) Any owner or operator of a facility which is claiming an exemption from the Stage I vapor control requirements pursuant to paragraph (R)(4) of rule 3745-21-09 of the Administrative Code is exempt from paragraphs (A)(4)(h)(ii) to (A)(4)(h)(iv) of this rule but shall comply with the following requirements:

(i) The owner or operator shall maintain records of the quantity of gasoline delivered to the facility during each month, and shall retain these records for a period of three years.

(ii) The owner or operator shall notify the applicable Ohio environmental protection agency district office or local air agency if the gasoline throughput for any rolling twelve-month period is equal to or greater than one hundred twenty thousand gallons within forty-five days after the exceedance occurs.

(vi) Testing requirements

(a) Compliance with the annual OC emission limitation is based on multiplying the maximum annual gasoline throughput specified in this permit-by-rule (three million eight hundred thousand gallons) by an emission factor of thirteen pounds of OCs per one thousand gallons of gasoline and dividing by two thousand pounds per ton. The OC emissions from all diesel, kerosene, and used oil tank filling and dispensing operations, if present at the facility, are assumed to be negligible.

(i) Gasoline dispensing facility with Stage I and Stage II controls permit-by-rule

(i) Qualifications

A gasoline dispensing facility, as defined by paragraph (H) of rule 3745-21-01 of the Administrative Code, which is not otherwise exempted under paragraph (A)(1)(ee) or (A)(1)(ff) of this rule, and meets all of the following conditions is eligible to use this permit-by-rule:

- (a) Is located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Geauga, Greene, Hamilton, Lake, Lorain, Medina, Miami, Montgomery, Portage, Summit, and Warren counties.
- (b) Employs storage tanks equipped with submerged fill pipes, as defined by paragraph (H) of rule 3745-21-01 of the Administrative Code.
- (c) Employs a Stage I vapor balance or vapor control system in accordance with paragraph (R) of rule 3745-21-09 of the Administrative Code, unless exempted from Stage I requirements pursuant to paragraph (R)(4) of rule 3745-21-09 of the Administrative Code.
- (d) Employs a CARB certified Stage II vapor control system, as defined by paragraph (H) of rule 3745-21-01 of the Administrative Code, and in accordance with paragraph (DDD) of rule 3745-21-09 of the Administrative Code, unless exempted from Stage II requirements by one of the provisions of paragraph (DDD)(4) of rule 3745-21-09 of the Administrative Code.

[Comment: The meaning of CARB certified and CARB certification used throughout this permit-by-rule shall be consistent with the definition specified by paragraph (H) of rule 3745-21-01 of the Administrative Code.]

- (e) Has a gasoline throughput of less than sixteen million gallons per year.

(ii) Applicable emission limitations and/or control requirements

- (a) The applicable rules, emission limitations and control requirements that apply to the facility subject to this permit-by-rule are defined in the following table:

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Applicable Rule(s)	Applicable Emission Limitations/Control
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	Requirements
Paragraph (A)(3) of rule 3745-31-05 of the Administrative Code	OC emissions from the facility shall not exceed twenty-five tons per year. The facility shall employ submerged fill pipes on all storage tanks. The requirements of this rule also include compliance with the requirements of paragraphs (R) and (DDD) of rule 3745-21-09 of the Administrative Code.
Paragraph (R) of rule 3745-21-09 of the Administrative Code	The control efficiency of the Stage I vapor balance or vapor control system shall be at least ninety per cent by weight for VOCs.
Paragraph (DDD) of rule 3745-21-09 of the Administrative Code	The control efficiency of the Stage II vapor control system shall be at least ninety-five per cent by weight for VOCs.

(iii) Operational restrictions

(a) The owner or operator shall comply with the following operational restrictions for the Stage I vapor control system:

- (i) The vapor balance system shall be kept in good working order and shall be used at all times during the transfer of gasoline.
- (ii) There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.
- (iii) There shall be no leaks in the vapor lines or liquid lines during the transfer of gasoline.
- (iv) The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six inches of the bottom of the storage tank.
- (v) All fill caps shall be in place and clamped during normal storage conditions.
- (vi) The owner or operator of the facility shall repair within fifteen days any leak from the vapor balance system or vapor control system which is employed to meet the requirements of paragraph (R)(1) of rule 3745-21-09 of the Administrative Code when such leak is equal to or greater than one hundred per cent of the lower explosive limit as propane, as determined under paragraph (K) of rule 3745-21-10 of the Administrative Code.

(b) The owner or operator shall install, operate and maintain the Stage II vapor control system in accordance with the manufacturer's specifications, the applicable CARB certification, and all requirements of paragraph (DDD)(1) of rule 3745-21-09 of the Administrative Code.

(iv) Monitoring and/or recordkeeping requirements

(a) The owner or operator shall maintain records of the results of any leak checks, including, at a minimum, the following information:

(i) Date of inspection.

(ii) Findings (may indicate no leaks discovered or location, nature, and severity of each leak).

(iii) Leak determination method.

(iv) Corrective action (date each leak repaired and reasons for any repair interval in excess of fifteen calendar days).

(v) Inspector's name and signature.

(b) The owner or operator shall maintain records as specified by paragraph (DDD)(3) of rule 3745-21-09 of the Administrative Code and any records required by the applicable CARB certification. The owner or operator does not need to maintain copies of the most recent permit-to-operate and permit-to-operate application, as required by paragraph (DDD)(3)(a) of rule 3745-21-09 of the Administrative Code if electing to operate under this permit-by-rule.

(c) The owner or operator of the facility shall maintain records of the annual gasoline and diesel/kerosene/used oil (if applicable) throughput for the facility.

(v) Permit-by-rule specific reporting requirements

(a) Any owner or operator who is claiming an exemption for a facility from the Stage I or Stage II vapor control requirements pursuant to paragraph (R)(4) or (DDD)(4) of rule 3745-21-09 of the Administrative Code shall notify the appropriate Ohio environmental protection agency district office or local air agency using the written notification procedures described in paragraph (A)(4)(a) of this rule to describe the nature of the exemption.

- (b) Any leak from the vapor balance system or vapor control system that is not repaired within fifteen days after identification shall be reported to the appropriate Ohio environmental protection agency district office or local air agency within thirty days after the repair is completed.
- (c) A comprehensive written report on the results of any tests performed in accordance with the testing requirements of paragraph (A)(4)(h)(vi) of this rule shall be submitted to the appropriate Ohio environmental protection agency district office or local air agency within thirty days following the completion of the tests.

(vi) Testing requirements

- (a) Within sixty days after the installation or modification of a Stage II vapor control system, the owner or operator shall perform the tests specified by paragraph (DDD)(2) of rule 3745-21-09 of the Administrative Code.

At intervals not to exceed five years, the owner or operator of the facility shall repeat and demonstrate compliance with the static leak test requirements contained in appendix A to rule 3745-21-10 of the Administrative Code (unless a greater frequency is specified in the applicable CARB certification), and the dynamic pressure performance test requirements contained in appendix B to rule 3745-21-10 of the Administrative Code (unless the dynamic pressure performance test is not applicable to the specific Stage II vapor control system, as specified in the applicable CARB certification).

Not later than thirty days prior to any required tests, the owner or operator of the facility shall submit a test notification to the appropriate Ohio environmental protection agency district office or local air agency. The test notification shall describe the proposed test methods and procedures, the time and the date of the tests, and the person who will be conducting the tests. Failure to submit such notification prior to the tests may result in the Ohio environmental protection agency's refusal to accept the results of the tests. Personnel from the appropriate Ohio environmental protection agency district office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information during the tests. After completion of any tests, the facility shall complete and retain on site a copy of the post test

inspection form contained in appendix C to rule 3745-21-10 of the Administrative Code.

- (b) The owner or operator of the gasoline dispensing facility shall perform and comply with any vapor control system tests (i.e., static leak tests, air-to-liquid ratio, etc.) specified in the applicable CARB certification for the vapor control system installed. The tests shall be performed at the frequency specified in the CARB certification. If the applicable CARB certification for the vapor recovery system does not include such testing requirements, the owner or operator shall, at a minimum, comply with the static leak and dynamic pressure test requirements at intervals specified in paragraph (DDD)(2) of rule 3745-21-09 of the Administrative Code.
- (c) Compliance with the annual OC emission limitation is based on multiplying the maximum annual gasoline throughput specified in this permit-by-rule (sixteen million gallons) by an emission factor of 3.1 pounds of OCs per thousand gallons of gasoline and dividing by two thousand pounds per ton. The OC emissions from all diesel, kerosene, and used oil tank filling and dispensing operations, if present at the facility, are assumed to be negligible.

(vii) Miscellaneous requirements

- (a) All Stage II vapor control systems employed at facilities operating under this permit-by-rule, including all associated underground and above ground plumbing, shall be installed, tested, operated and maintained in accordance with the applicable CARB certification. Copies of CARB certification documents, including executive orders, approval letters, equipment advisories, and equivalent test procedures are available from the appropriate Ohio environmental protection agency district office or local air agency upon request.

(j) Boiler and heater permit-by-rule

(i) Qualifications

Boilers, preheaters, air heaters, water heaters, or heaters used for other heat exchange media that meet all of the following qualifications are eligible to use this permit-by-rule:

[Comment: Air contaminant sources which meet the definition of process heater as specified in 40 CFR Part 60, Subpart Dc are not eligible to use this permit-by-rule.]

- (a) The maximum rated heat input capacity of the air contaminant source is greater than ten million British thermal units per hour and less than or equal to one hundred million British thermal units per hour.
- (b) The air contaminant source is capable of burning only natural gas.
- (c) The emissions from the air contaminant source consist entirely of the products of fuel combustion.
- (d) Air contaminant sources with a maximum rated heat input capacity of greater than fifty million British thermal units per hour shall be equipped with low-NO_x burners or other combustion control techniques designed to meet an emission limitation of not greater than 0.050 pound of nitrogen oxides per million British thermal units of heat input.

(ii) Applicable emission limitations and/or control requirements

- (a) The applicable rules, emission limitations, and control requirements that apply to each air contaminant source subject to this permit-by-rule are defined in the following table:

Applicable Rule(s)	Applicable Emission Limitations/Control Requirements
Paragraph (A) of rule 3745-17-07 of the Administrative Code	The visible particulate matter emission limitations specified by this rule are less stringent than the visible particulate matter emission limitation established pursuant to paragraph (A)(3) of rule 3745-31-05 of the Administrative Code.
Paragraph (B) of rule 3745-17-10 of the Administrative Code	Particulate matter emissions shall not exceed 0.020 pound per million British thermal units of actual heat input.
Paragraph (B) of rule 3745-23-06 of the Administrative Code	Units meeting the permit-by-rule qualification criteria satisfy the latest available control techniques and operating practices pursuant to the rule.
Paragraph (A) of rule 3745-18-06 of the Administrative Code	Air contaminant sources are exempt from this rule when natural gas is the only fuel burned.
Paragraph (A)(3) of rule 3745-31-05 of the Administrative Code	Particulate matter emissions shall not exceed 8.76 tons per year. Nitrogen oxides emissions shall not exceed 5.0 pounds per hour and 21.90 tons per year. Carbon

	<p>monoxide emissions shall not exceed 8.24 pounds per hour and 36.07 tons per year. OC emissions shall not exceed 1.08 pounds per hour and 4.72 tons per year. Sulfur dioxide emissions shall not exceed 0.06 pound per hour and 0.26 ton per year. Visible particulate matter emissions shall not exceed five per cent opacity, as a six-minute average. The requirements of this rule also include compliance with the requirements of rule 3745-18-06, rule 3745-23-06, and paragraph (B) of rule 3745-17-10 of the Administrative Code.</p>
40 CFR Part 60, Subpart Dc	<p>This regulation does not specify emission limitations for air contaminant sources that only fire natural gas.</p>

(iii) Monitoring and/or recordkeeping requirements

- (a) The owner or operator shall maintain, at the location of the air contaminant source, documentation showing the maximum rated heat input capacity of the air contaminant source(s) and evidence that the air contaminant source(s) can only fire natural gas.
- (b) The owner or operator shall maintain monthly records of the total amount of natural gas fired for the air contaminant source(s).

(iv) Permit-by-rule specific reporting requirements

- (a) For air contaminant sources installed after July 29, 2005, the owner or operator electing to use this permit-by-rule shall report the following, in accordance with 40 CFR Part 60, Subpart Dc, to the appropriate Ohio environmental protection agency district office or local air agency at the appropriate times:
 - (i) Construction date (no later than thirty days after such date).
 - (ii) Actual start-up date (within fifteen days after such date).
 - (iii) Date of performance testing (if required, at least thirty days prior to testing).
 - (iv) The maximum rated heat input capacity of the air contaminant source(s) and the type of fuel(s) fired (no later than thirty days after installation date).

(v) Testing requirements

- (a) Compliance with the hourly emission limitations is based on multiplying the maximum hourly gas firing capacity of the air contaminant source (in million cubic feet per hour) by the emission factor specified by the United States environmental protection agency in Section 1.4 of the "Compilation of Air Pollutant Emission Factors (AP-42)", (in pounds per million cubic feet fired) for each pollutant. Compliance with the pounds per million British thermal units particulate emission limitation is based on dividing the filterable particulate emission factor specified by the United States environmental protection agency in Section 1.4 of the "Compilation of Air Pollutant Emission Factors (AP-42)" by one thousand twenty. If required by the Ohio environmental protection agency, the owner or operator shall demonstrate compliance with the pounds per million British thermal units and hourly emission limitations of this permit-by-rule in accordance with the appropriate test methods specified in 40 CFR Part 60, Appendix A.
- (b) Compliance with the annual emission limitations shall be assumed as long as compliance with the pound per million British thermal units and hourly emission limitations are maintained. These annual emission limitations represent the emissions calculated at the maximum capacity of the equipment and eight thousand seven hundred sixty hours per year of operation.
- (c) If required by the Ohio environmental protection agency, compliance with the visible particulate emission limitations shall be demonstrated in accordance with USEPA method 9 of 40 CFR Part 60, Appendix A.

(k) Small printing facility permit-by-rule

(i) Qualifications

A printing facility that meets the following qualifications is eligible to use this permit-by-rule:

- (a) The facility has one or more printing lines which utilize only the screen, digital, flexographic, letterpress, non-heatset lithographic, or heatset lithographic printing processes, and which do not utilize add-on emission control equipment.
- (b) The facility emits no more than the following tons of VOCs as demonstrated by either calculating actual facility-wide emissions,

using methods approved by the Ohio environmental protection agency, or by electing to comply with the material usage limitations specified in paragraph (A)(4)(k)(i)(d) of this rule:

- (i) No more than ten tons of VOCs per calendar year from all printing processes; and
 - (ii) For a facility in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties; less than 3.0 tons of VOCs from all letterpress and lithographic printing processes (including emissions from cleaning solutions used on lithographic and/or letterpress printing lines and fountain solutions) per rolling twelve-month period.
- (c) The facility emits no more than five tons of a single HAP and ten tons of combined HAPs in any calendar year as demonstrated by either calculating actual facility-wide emissions, using methods approved by the Ohio environmental protection agency, or by electing to comply with the material usage limitations specified in paragraph (A)(4)(k)(i)(d) of this rule.
- (d) In lieu of calculating emissions to demonstrate compliance with the annual facility emission limitations specified in paragraphs (A)(4)(k)(i)(b) and (A)(4)(k)(i)(c) of this rule, the owner or operator may elect to qualify the facility for this permit-by-rule by meeting the following material usage limitations for all materials employed at the facility:
- (i) Uses no more than one thousand three hundred thirty-three gallons of materials containing the same single HAP and no more than two thousand six hundred sixty-seven gallons of materials containing any HAPs in any calendar year.
 - (ii) Operates only heatset offset lithographic printing lines and uses no more than twenty thousand pounds in any calendar year, except when the facility is located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties, then five thousand four hundred pounds per rolling twelve-month period, of ink, cleaning solvent, and fountain solution additives combined; or
 - (iii) Operates only non-heatset offset lithographic printing lines and uses no more than two thousand eight hundred fifty gallons in any calendar year, except when the facility is located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties, then seven hundred

sixty-eight gallons per rolling twelve-month period, of cleaning solvent, and fountain solution additives combined; or

- (iv) Operates only digital printing lines and uses no more than two thousand four hundred twenty-five gallons in any calendar year of solvent from inks and clean-up solutions and other solvent-containing materials combined; or
 - (v) Operates only screen printing lines and uses no more than two thousand eight hundred fifty gallons in any calendar year of solvent from inks and clean-up solutions and other solvent-containing materials combined; or
 - (vi) Operates only letterpress printing lines and uses no more than two thousand eight hundred fifty gallons in any calendar year, except when the facility is located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties, then no more than seven hundred sixty-eight gallons per rolling twelve-month period, of solvent from inks and clean-up solutions and other solvent-containing materials combined; or
 - (vii) Operates only water-based or ultraviolet (UV)-cured material flexographic printing lines and uses no more than eighty thousand pounds in any calendar year of water-based inks, coatings, and adhesives, combined; or
 - (viii) Operates only solvent based material flexographic printing lines and uses no more than twenty thousand pounds in any calendar year of solvent from inks, dilution solvents, coatings, cleaning solutions and adhesives, combined; or
 - (ix) Operates any combination of screen, digital, flexographic, letterpress, non-heatset lithographic, or heatset lithographic printing lines and the facility uses no more than the most stringent of the material usage limitations contained in paragraphs (A)(4)(k)(ii) to (A)(4)(k)(viii) of this rule for the type of air contaminant source(s) at the facility.
- (ii) Applicable emission limitations and/or control requirements
- (a) The applicable rules, emission limitations and control requirements that apply to the facility subject to this permit-by-rule are defined in the following table:

Applicable Rule(s)	Applicable Emission Limitations/Control Requirements
Paragraph (A)(3) of rule 3745-31-05 of the Administrative Code	Facility emissions shall not exceed ten tons of VOC, five tons of a single HAP and ten tons of combined HAPs for any calendar year; except for facilities located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties, where total VOC emissions from all lithographic and/or letterpress printing operations shall not equal or exceed 3.0 tons per rolling twelve-month period.
Paragraph (Y)(2)(b) of rule 3745-21-09 of the Administrative Code (flexographic presses only)	Exempt from the requirements of paragraph (Y)(1) of rule 3745-21-09 of the Administrative Code since the qualifying criteria ensure that the combined maximum usage of coatings and inks in all presses at the facility is less than one hundred forty-eight tons per year.
Paragraph (A)(3) of rule 3745-21-22 of the Administrative Code (letterpress and lithographic printing lines located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties only)	Exempt from the requirements of rule 3745-21-22 of the Administrative Code since the qualifying criteria ensure that the actual VOC emissions from all letterpress and lithographic printing operations at the facility are less than 3.0 tons per rolling twelve-month period.

(iii) Monitoring and/or recordkeeping requirements

(a) The owner or operator of the printing facility shall maintain annual records at the facility that list the following information for each graphic arts material (ink, fountain solution additives, clean-up solvents, etc.) employed in the facility during each calendar year. In addition, the records required under paragraphs (A)(4)(k)(iii)(a)(i) to (A)(4)(k)(iii)(a)(iii) of this rule shall be maintained on a monthly basis for lithographic and/or letterpress printing lines located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties.

(i) The name and identification number of each material employed.

(ii) The quantity of each material employed, in gallons or pounds.

(iii) The OC content of each material, in pounds per gallon, or per cent, by weight.

- (iv) The individual HAP content for each HAP-containing material, in pounds of individual HAP per gallon of material.
- (v) The total combined HAP content of each material, in pounds of total HAP per gallon of material.
- (vi) For lithographic and/or letterpress printing lines located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties, a twelve-month rolling summation, for all other lines and counties, an annual (calendar year) summation of usage in gallons, or pounds, of each graphic arts material if the facility elects to demonstrate compliance with the material usage limitations specified in paragraph (A)(4)(k)(i)(d) of this rule; or
- (vii) For lithographic and/or letterpress printing lines located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties, a twelve-month rolling summation, for all other lines and counties, an annual (calendar year) summation of total facility emissions of VOC, individual HAP, and combined HAP from all graphic arts materials employed if the facility elects to calculate actual emissions to demonstrate compliance with the emission limitations specified in paragraphs (A)(4)(k)(i)(b) and (A)(4)(k)(i)(c) of this rule.

(iv) Permit-by-rule specific reporting requirements

- (a) If a small printing facility electing to operate under this permit-by-rule should elect to operate under the permit-by-rule provisions for a mid-size printing facility specified by paragraph (A)(4)(l) of this rule, the owner or operator of such facility shall comply with the notification requirements of paragraph (A)(4)(a)(ii) of this rule prior to operating under the permit-by-rule provisions for mid-size printing facilities.

(v) Testing Requirements

- (a) Compliance with the annual material usage limitations shall be based upon the recordkeeping requirements specified in paragraph (A)(4)(k)(iii)(a) of this rule.
- (b) For screen, letterpress, and non-heatset lithographic printing, compliance with the annual VOC emission limitation is based on the annual material usage limitations, in gallons, multiplied by a maximum VOC content of 7.0 pounds per gallon, and divided by two thousand pounds per ton. For digital printing, compliance

with the annual VOC emission limitation is based on the annual material usage limitations, in gallons, multiplied by a maximum VOC content of 7.5 pounds per gallon, and divided by two thousand pounds per ton. For water-based or ultraviolet (UV)-cured flexographic printing, compliance with the annual VOC emission limitation is based on the annual material usage limitation, in pounds, multiplied by an assumed maximum VOC content of twenty-five per cent, and divided by two thousand pounds per ton. For solvent-based flexographic printing and heatset lithographic printing, compliance with the annual VOC emission limitation is based on the annual material usage limitation, in pounds, multiplied by an assumed maximum VOC content of one hundred per cent, and divided by two thousand pounds per ton. For all printing types, compliance with the annual HAP emission limitations is based on the annual material usage limitations specified in paragraph (A)(4)(k)(i)(c)(i) of this rule, in gallons, multiplied by a maximum HAP content of 7.5 pounds per gallon, and divided by two thousand pounds per ton.

- (c) An owner or operator of the facility electing to demonstrate compliance with the annual (calendar year) or rolling twelve-month summation VOC, annual (calendar year) HAP, and combined annual (calendar year) HAP emission limitations by calculating the actual facility emissions may use the actual material VOC contents and usage rates from records required by paragraph (A)(4)(k)(iii) of this rule. The calculations shall be performed using methods approved by the Ohio environmental protection agency.

(l) Mid-size printing facility permit-by-rule

(i) Qualifications

A printing facility that meets the following qualifications is eligible to use this permit-by-rule:

- (a) The facility has one or more printing lines which utilize only the screen, digital, flexographic, letterpress, non-heatset lithographic, or heatset lithographic printing processes, and which do not utilize add-on emission control equipment.
- (b) The facility emits no more than twenty-five tons of VOCs, five tons of a single HAP and 12.5 tons of combined HAPs in any rolling, twelve-month period as demonstrated by either calculating actual facility-wide emissions, using methods approved by the Ohio environmental protection agency, or by electing to comply with the

material usage limitations specified in paragraph (A)(4)(l)(i)(c) of this rule.

- (c) In lieu of calculating emissions to demonstrate compliance with the facility emission limitations specified in paragraph (A)(4)(l)(i)(b) of this rule, the facility may elect to qualify for this permit-by-rule by meeting the following material usage limitations for all materials employed at the facility in any rolling, twelve-month period:
- (i) Uses no more than one thousand three hundred thirty-three gallons of materials containing the same single HAP and no more than three thousand three hundred thirty-three gallons of materials containing any HAPs.
 - (ii) Operates only heatset offset lithographic printing lines and uses no more than fifty thousand pounds of ink, cleaning solvent, and fountain solution additives combined; or
 - (iii) Operates only non-heatset offset lithographic printing lines and uses no more than seven thousand one hundred gallons of cleaning solvent and fountain solution additives combined; or
 - (iv) Operates only digital printing lines and uses no more than six thousand gallons of solvent from inks and clean-up solutions and other solvent containing materials combined; or
 - (v) Operates only screen or letterpress printing lines and uses no more than seven thousand one hundred gallons of solvent from inks and clean-up solutions and other solvent containing materials combined; or
 - (vi) Operates only water-based or ultraviolet (UV)-cured material flexographic printing lines and uses no more than two hundred thousand pounds of water-based inks, coatings, and adhesives, combined; or
 - (vii) Operates only solvent based material flexographic printing lines and uses no more than fifty thousand pounds of solvent from inks, dilution solvents, coatings, clean-up solutions and adhesives, combined; or
 - (viii) Operates any combination of screen, digital, flexographic, letterpress, non-heatset lithographic, or heatset lithographic printing processes and the facility uses no more than the most stringent of the material usage limits contained in paragraphs

(A)(4)(I)(iii) to (A)(4)(I)(viii) of this rule for the type of air contaminant source(s) at the facility.

- (d) The facility employs cleanup solutions which meet all of the following standards:
- (i) Cleanup solutions either shall not exceed thirty per cent VOC, by weight, as applied, or shall have a VOC composite partial pressure of ten millimeters of mercury (mmHg) or less at twenty degrees Celsius (sixty-eight degrees Fahrenheit).
 - (ii) Cleanup solutions shall be kept in covered containers during transport and storage.
 - (iii) Shop towels contaminated with cleanup solution shall be kept, when not in use, in covered containers.
 - (iv) The use of cleanup solutions not meeting the condition in paragraph (A)(4)(I)(i)(d)(i) of this rule shall not exceed a combined total of one hundred ten gallons in any rolling, twelve-month period.
- (e) The facility employs fountain solutions in lithographic printing processes which meet all of the following standards for VOC content, per press type:

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Press type	VOC limitation if no alcohol used (per cent by weight)	VOC limitation if alcohol used (per cent by weight)	VOC limitation if alcohol used (per cent by weight) and solution is refrigerated at sixty degrees Fahrenheit or less
Heatset	<5.0	<1.6	<3.0
Non-heatset, sheetfed	<5.0	<5.0	<8.5
Non-heatset, web	<5.0	Not allowed	Not allowed

(ii) Applicable emission limitations and/or control requirements

- (a) The applicable rules, emission limitations, and control requirements that apply to the facility subject to this permit-by-rule are defined in the following table:

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Applicable Rule(s)	Applicable Emission Limitations/Control Requirements
Paragraph (A)(3) of rule 3745-31-05 of the Administrative Code	Facility emissions shall not exceed twenty-five tons of VOC, five tons of a single HAP and 12.5 tons of combined HAPs for any rolling, twelve-month period.
Paragraph (Y)(2)(b) of rule 3745-21-09 of the Administrative Code (flexographic presses only)	Exempt from the requirements of paragraph (Y)(1) of rule 3745-21-09 of the Administrative Code since the qualifying criteria ensure that the combined maximum usage of coatings and inks in all presses at the facility is less than one hundred forty-eight tons per year.
Rule 3745-21-22 of the Administrative Code	The provisions of this rule are only applicable to letterpress and lithographic printing processes located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties where total actual VOC emissions from all lithographic and/or letterpress printing operations (including emissions from cleaning solutions used on lithographic and/or letterpress printing lines and fountain solutions) are equal to or greater than 3.0 tons of VOCs per rolling twelve-month period. The compliance date for lithographic and/or letterpress printing processes subject to rule 3745-21-22 of the Administrative Code that commenced installation before April 2, 2009 is April 10, 2010. The compliance date for all other lithographic and/or letterpress printing processes is the initial startup date of the line.

(iii) Monitoring and/or recordkeeping requirements

- (a) The owner or operator of the printing facility shall maintain monthly records at the facility that list the following information for each graphic arts material (ink, fountain solution additives, cleanup solvents, etc.) employed in the facility:
- (i) The name and identification number of each material employed.
 - (ii) The quantity of each material employed, in gallons or pounds.

- (iii) The OC content of each material, in pounds per gallon, or per cent by weight.
 - (iv) The individual HAP content for each HAP-containing material, in pounds of individual HAP per gallon of material.
 - (v) The total combined HAP content of each material, in pounds of combined HAP per gallon of material.
 - (vi) The rolling, twelve-month summation of usage in gallons of each graphic arts material employed if the facility elects to demonstrate compliance with the material usage limitations specified in paragraph (A)(4)(l)(i)(c) of this rule; or
 - (vii) The rolling, twelve-month summation of total facility emissions of VOC, individual HAP, and combined HAP from all graphic arts materials employed if the facility elects to calculate actual emissions to demonstrate compliance with the emission limitations specified in paragraph (A)(4)(l)(i)(b) of this rule.
- (b) Requirements only for letterpress and/or lithographic printing processes located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties subject to rule 3745-21-22 of the Administrative Code.
 - (i) The owner or operator of a heatset lithographic printing process with alcohol in the fountain solution shall measure:
 - (A) The VOC (alcohol) content of any altered fountain solution, at the time of alteration (e.g., addition of alcohol to a previously mixed batch), in per cent by weight, of the fountain solution employed in the press and shall maintain records of the results of the measurements at the facility for a period of five years. The alcohol content of the fountain solution shall be measured using a hydrometer. The hydrometer shall have a visual, analog, or digital readout with an accuracy of 0.5 per cent; and a standard solution shall be used to calibrate the hydrometer for the type of alcohol used in the fountain solution.
 - (B) On a daily basis, the temperature, in degrees Fahrenheit, of the fountain solution, using a thermometer or other temperature detection device capable of reading to 0.5 degrees Fahrenheit, if the owner or operator refrigerates the fountain solution. Records of the results of the

measurements shall be maintained at the facility for a period of five years.

- (ii) The owner or operator of a lithographic printing process shall maintain fountain solution preparation records, for a period of five years, by choosing one of the following methods.

For purposes of this rule, a fountain solution that is continuously blended with an automatic mixing unit is considered to be the same batch until such time that the recipe or mix ratio is changed.

- (A) For an owner or operator maintaining a recipe log for each batch of fountain solution prepared for use in the press:

(1) A recipe log that identifies all recipes used to prepare the as-applied fountain solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared for a press. Each recipe shall clearly identify the following: (1) VOC content of each concentrated alcohol substitute, added to make the batch of fountain solution, based upon the manufacturer's laboratory analysis using USEPA method 24; (2) The proportions in which the fountain solution is mixed, including the addition of alcohol and/or water. The proportion may be identified as a volume when preparing a discrete batch or may be identified as the settings when an automatic mixing unit is employed; and (3) The calculated VOC content of the final, mixed recipe.

(2) Identification of the recipe used to prepare each batch of fountain solution for use in the press.

(3) The date and time when the batch was prepared.

(4) An affirmation the batch was prepared in accordance with the recipe.

- (B) For an owner or operator not maintaining a recipe log in accordance with paragraph (A)(4)(1)(iii)(b)(ii)(A) of this rule, for each batch of fountain solution prepared for use in the press:

(1) The volume and VOC content of each concentrated alcohol substitute, added to make the batch of

fountain solution, based upon the manufacturer's laboratory analysis using USEPA method 24.

- (2) The volume of alcohol added to make the batch of fountain solution.
 - (3) The volume of water added to make the batch of fountain solution.
 - (4) The calculated VOC content of the final, mixed batch.
 - (5) The date and time the batch was prepared.
- (iii) The owner or operator of a lithographic and/or letterpress printing process shall maintain records, for a period of five years, of one of the following for all cleaning solutions employed in all the lithographic and/or letterpress printing process:
- (A) For an owner or operator maintaining a recipe log for each batch of cleaning solution prepared:
 - (1) A recipe log that identifies all recipes used to prepare the as-applied cleaning solution. Each recipe shall be maintained in the recipe log for a period of five years from the date the recipe was last prepared. Each recipe shall clearly identify the following: (1) VOC content of each cleaning solution, based upon the manufacturer's laboratory analysis using USEPA Method 24; or (2) the VOC composite partial vapor pressure of each cleaning solution, based upon the method under paragraph (A)(4)(l)(v)(d)(iii) of this rule.
 - (2) Identification of the recipe used to prepare each batch of cleaning solution.
 - (3) The date and time when the batch was prepared.
 - (4) An affirmation the batch was prepared in accordance with the recipe.
 - (B) For an owner or operator not maintaining a recipe log, for each batch of cleaning solution prepared for use in the press, records of the VOC content or VOC composite

partial vapor pressure and the date and time the batch was prepared.

- (iv) The owner or operator of an offset lithographic and/or letterpress printing process shall maintain monthly records of the following information:
 - (A) The total amount, in gallons, of all the cleaning solutions employed; and
 - (B) The total amount, in gallons, of all the cleaning solutions employed that exceeds the allowable VOC content or VOC composite vapor pressure.
- (iv) Reporting requirements only for letterpress and/or lithographic printing processes located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties subject to rule 3745-21-22 of the Administrative Code.

The owner or operator shall notify the director of any exceedance(s) of the following applicable requirements within forty-five days after the instance occurs, and shall include a copy of the record showing the instance:

- (a) For a heatset web offset lithographic printing press determining alcohol content via hydrometer measurement, each hydrometer measurement that shows an exceedance of the alcohol content limitation.
 - (b) For a heatset web offset lithographic printing press complying via refrigerated fountain solution, each temperature reading that shows an exceedance of the temperature limitation.
 - (c) For an offset lithographic printing press, each calculated VOC content that exceeds the VOC content limitation for fountain solutions.
 - (d) For an offset lithographic or letterpress printing press, each instance when an exceedance of the VOC content or VOC composite partial vapor pressure for cleaning solution occurs.
- (v) Testing requirements
- (a) Compliance with the rolling, twelve-month material usage thresholds and/or emission limitations shall be based upon the

recordkeeping requirements specified in paragraph (A)(4)(l)(iii)(a) of this rule.

- (b) For screen, letterpress, and non-heatset lithographic printing, compliance with the annual VOC emission limitation is based on the annual material usage limitations, in gallons, multiplied by a maximum VOC content of 7.0 pounds per gallon, and divided by two thousand pounds per ton. For digital printing, compliance with the annual VOC emission limitation is based on the annual material usage limitations, in gallons, multiplied by a maximum VOC content of 7.5 pounds per gallon, and divided by two thousand pounds per ton. For water-based or UV-cured flexographic printing, compliance with the annual VOC emission limitation is based on the annual material usage limitation, in pounds, multiplied by an assumed maximum VOC content of twenty-five per cent, and divided by two thousand pounds per ton. For solvent-based flexographic printing and heatset lithographic printing, compliance with the annual VOC emission limitation is based on the annual material usage limitation, in pounds, multiplied by an assumed maximum VOC content of one hundred per cent, and divided by two thousand pounds per ton. For all printing types, compliance with the annual HAP emission limitations is based on the annual material usage limitations specified in paragraph (A)(4)(l)(i)(c)(i) of this rule, in gallons, multiplied by a maximum HAP content of 7.5 pounds per gallon, and divided by two thousand pounds per ton.
- (c) An owner or operator of the facility electing to demonstrate compliance with the annual VOC, HAP, and combined HAP emission limitations by calculating the actual facility emissions may use the actual material VOC contents and usage rates from records required by paragraph (A)(4)(l)(iii) of this rule. The calculations shall be performed using methods approved by the Ohio environmental protection agency.
- (d) Testing requirements only for letterpress and/or lithographic printing processes located in Ashtabula, Cuyahoga, Geauga, Lake, Lorain, Medina, Portage, or Summit counties subject to rule 3745-21-22 of the Administrative Code.
- (i) The owner or operator of an offset lithographic printing process shall determine compliance with the VOC content of the as-applied fountain solution requirements by one of the methods in paragraphs (A)(4)(l)(v)(d)(i)(A) to (A)(4)(l)(v)(d)(i)(C) of this rule except when paragraph (A)(4)(l)(v)(d)(i)(D) is applicable:

- (A) USEPA method 24 shall be used to determine the VOC content of the as-applied fountain solution;
 - (B) If diluted prior to use, a calculation shall be performed for VOC content that combines USEPA method 24 analytical data for the concentrated materials used to prepare the as-applied fountain solution and the proportions in which they are mixed to make the as-applied fountain solution. The analysis of the concentrated material(s) may be performed by the supplier(s) of those material(s). The analytical data may be derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on USEPA method 24 results; or
 - (C) If not diluted prior to use, the owner or operator shall use formulation information provided by the supplier, such as a MSDS sheet or equivalent information from the supplier. In the event of a dispute between information provided by the supplier and data obtained by USEPA method 24, the data obtained by USEPA method 24 shall be employed.
 - (D) For any offset lithographic printing press that is subject to the alcohol limit requirements, when adding alcohol to a fountain solution batch previously tested in accordance with one of the compliance test methods contained in paragraphs (A)(4)(l)(v)(d)(i)(A) to (A)(4)(l)(v)(d)(i)(C) of this rule, in lieu of the methods in paragraphs (A)(4)(l)(v)(d)(i)(A) to (A)(4)(l)(v)(d)(i)(C) of this rule, the owner or operator shall determine the VOC (alcohol) content of the altered fountain solution using a hydrometer.
- (ii) The owner or operator of an offset lithographic and/or letterpress printing process shall determine compliance with the VOC content of cleaning solutions requirements by one of the following methods:
- (A) USEPA method 24 shall be used to determine the VOC content of the cleaning solution;
 - (B) If diluted prior to use, a calculation shall be performed for VOC content that combines USEPA method 24 analytical data for the concentrated materials used to prepare the cleaning solution and the proportions in which they are

mixed to make the as-applied cleaning solution. The analysis of the concentrated material(s) may be performed by the supplier(s) of those material(s). The analytical data may be derived from a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on USEPA method 24 results; or

- (C) If not diluted prior to use, the owner or operator shall use formulation information provided by the supplier, such as MSDS sheet or equivalent information from the supplier. In the event of a dispute between information provided by the supplier and data obtained by USEPA method 24, the data obtained by USEPA method 24 shall be employed.
- (iii) The owner or operator of an offset lithographic and/or letterpress printing process shall determine compliance with the VOC composite partial vapor pressure of cleaning solutions requirements by one of the following methods:
- (A) If diluted prior to use, calculate the VOC composite vapor pressure of the as-applied solvent by using the formula for "VOC composite vapor pressure" as follows:
- (1) Determine the identity and quantity of each compound in a blended organic solvent by using ASTM D2306, or by using ASTM E260 for organics and ASTM D3792 for water content, if applicable, or the manufacturer's product formulation data.
 - (2) Determine the vapor pressure of each pure VOC component by using ASTM D2879 or publications such as "Perry's Chemical Engineer's Handbook," "CRC Handbook of Chemistry and Physics," or "Lange's Handbook of Chemistry."
 - (3) Calculate the VOC composite partial pressure of the solvent by using the formula for "VOC composite partial pressure." For the purpose of this calculation, the blended solvent shall be assumed to be an ideal solution where Raoult's Law applies. The partial vapor pressures of each compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit) shall be used in the formula. The VOC composite partial pressure shall be calculated as follows:

$$PP_c = \frac{\sum_{i=1}^n \frac{(W_i)(VP_i)}{MW_i}}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "i"th VOC compound, in grams.

W_w = Weight of water, in grams.

W_e = Weight of exempt compound, in grams.

MW_i = Molecular weight of the "i"th VOC compound, in grams per gram-mole.

MW_w = Molecular weight of water, in grams per gram-mole.

MW_e = Molecular weight of the "e"th exempt compound, in grams per gram- mole.

PP_c = VOC composite partial vapor pressure at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mm Hg.

VP_i = Vapor pressure of the "i"th VOC compound at twenty degrees Celsius (sixty-eight degrees Fahrenheit), in mm Hg.

(B) If not diluted prior to use, the owner or operator shall use formulation information provided by the supplier, such as a material safety data sheet (MSDS) or equivalent information from the supplier as long as it is based on results determined in accordance with the procedure under paragraph (A)(4)(1)(v)(d)(iii)(A) of this rule.

(5) De minimis exemption

Air contaminant sources which meet the requirements of rule 3745-15-05 of the Administrative Code and section 3704.011 of the Revised Code are exempt from the requirements of this chapter.

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Certification

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