DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

AIR POLLUTION CONTROL

(By authority conferred on the director of the department of environmental quality by sections 5503 and 5512 of 1994 PA 451, MCL 324.5503 and 324.5512, and Executive Reorganization Order No. 1995-18, MCL 324.99903)

PART 6. EMISSION LIMITATIONS AND PROHIBITIONS-- EXISTING SOURCES OF VOLATILE ORGANIC COMPOUND EMISSIONS

R 336.1601 Definitions.

Rule 601. As used in this part:

(a) "Existing source" means any of the following:

(i) Any process or process equipment which is subject to the provisions of R 336.1604 to R 336.1618 and which either has been placed into operation before July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of part 2 of these rules, was made to the department before July 1, 1979.

(ii) Any process or process equipment which is subject to the provi-sions of R 336.1619 to R 336.1625 and which either has been placed into operation before July 1, 1980, or for which an application for a permit to install, pursuant to the provisions of part 2 of these rules, was made to the department before July 1, 1980.

(iii) Any process or process equipment which is subject to the provi-sions of R 336.1628 and which either has been placed into operation before January 5, 1981, or for which an application for a permit to install, pursuant to the provisions of part 2 of these rules, was made to the department before January 5, 1981.

(iv) Any process or process equipment which is subject to the provi-sions of R 336.1629 and which either has been placed into operation before January 20, 1984, or for which an application for a permit to install, pursuant to the provisions of part 2 of these rules, was made to the department before January 20, 1984.

(v) Any process or process equipment which is subject to the provisions of R 336.1630 or R 336.1631 and which either has been placed into operation before July 1, 1987, or for which an application for a permit to install, pursuant to the provisions of part 2 of these rules, was made to the department before July 1, 1987.

(vi) Any process or process equipment which is subject to the provi-sions of R 336.1632 and which either has been placed into operation before the effec-tive date of R 336.1632 or for which an application for a permit to install, pursuant to the provisions of part 2 of these rules, was made to the department before the effective date of R 336.1632.

(vii) Any process or process equipment which is not subject to the provi-sions of any rule in this part and which either has been placed into operation before July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of part 2 of these rules, was made to the department before July 1, 1979.The term does not include a process or process equipment operated for research, development, or pilot studies, if the operation is not for the purpose of producing saleable products or goods.

(b) "Person responsible" means a person who owns, leases, controls, operates, or supervises a source of air contami-nants.

History: 1980 AACS; 1981 AACS; 1989 AACS; 1993 AACS; 2002 AACS.

R 336.1602 Existing sources of volatile organic compound emissions generally.

Rule 602. (1) A person shall not cause or allow the emission of volatile organic compounds from any existing source in excess of the provisions of any rule of this part or the maximum allowable emission rate specified in any of the following, whichever results in the lowest maximum allowable emission rate:

(a) A permit to install.

(b) A permit to operate.

(c) A renewable operating permit issued under R 336.1210.

(d) A voluntary agreement.

(e) A performance contract.

(f) A stipulation.

(g) An order of the department.

(2) Department approvals for the equivalent emission rates, alternate emission rates, or compliance methods that are authorized pursuant to any of the provisions listed in subdivision (a) of this subrule shall be in compliance with all of the following provisions:

(a) The provisions of this subrule apply to approvals by the department pursuant to any of the following provisions:

(i) R 336.1610(5)(a) (More than 24-hour but less than 1-month averaging period).

(ii) R 336.1610(11) table 63 (Column B - transfer efficiency).

(iii) R 336.1611(1) (Equivalent control method).

(iv) R 336.1620(3)(a) (More than 24-hour but less than 1-month averaging period).

(v) R 336.1621(3) (Transfer efficiency).

(vi) R 336.1621(4) (Baseline transfer efficiency less than 60%).

(vii) R 336.1621(6)(a) (More than 24-hour but less than 1-month averaging period).

(viii) R 336.1621(9)(e) (Metallic-nonmetallic part).

(ix) R 336.1622(1) (Equivalent control method).

(x) R 336.1623(1) (Equivalent control method).

(xi) R 336.1623(8)(d) (Equivalent compliance provisions).

(xii) R 336.1624(1) (Equivalent emission rate).

(xiii) R 336.1624(5)(d) (More than 24-hour but less than 1-month averaging period).

(xiv) R 336.1625(1) (Equivalent control method, except alternative to condenser in R 336.1625(2)(b)).

(xv) R 336.1625(2)(b) (Alternative control method).

(xvi) R 336.1625(8) (Alternative control system).

(xvii) R 336.1628(1) (Equivalent control method).

(xviii) R 336.1629(1) (Equivalent control method).

(xix) R 336.1630(1) (Equivalent control method).

(xx) R 336.1631(1) (Equivalent control method).

(xxi) R 336.1631(5) (Alternate compliance method).

(xxii) R 336.1632(8)(a) (More than 24-hour but less than 1-month averaging period).

(xxiii) R 336.1632(13) (Alternate compliance provisions).

(xxiv) R 336.1632(14) (Cross-line averaging).

(xxv) R 336.2004(4) (Alternate test method).

(xxvi) R 336.2040(5)(a)(i)(A) (Alternate test method).

(xxvii) R 336.2040(5)(a)(iv) (Alternate test method).

(xxviii) R 336.2040(9) (Transfer efficiency test method).

(xxix) R 336.2040(9)(j)(ii) (Alternate measurement procedure).

(xxx) R 336.2040(10) (Modified capture efficiency test method).

(xxxi) R 336.2040(11)(a)(iv) (Alternate test method).

(xxxii) R 336.2040(11)(b)(ii) (Alternate test method).

(b) Department approvals for the equivalent emission rates, alternate emission rates, or compliance methods that are authorized by any of the provisions identified in subdivision (a) of this subrule shall be in compliance with all of the following provisions:

(i) The proposed approval shall be subject to a 30-day public comment period.

(ii) When the proposed approval is noticed for a 30-day public comment period, a copy of the notice shall also be sent to the United States environmental protection agency.

(iii) The proposed approval is subject to a public hearing immediately after the 30-day public comment period that is required in paragraph (i) of this subdivision.

(iv) The department approval shall become part of a legally enforceable order of the department, permit to install, or permit to operate.

(v) The legally enforceable document identified in paragraph (iv) of this subdivision shall be sent to the United States environmental protection agency as a request for a revision of the Michigan state implementa-tion plan, together with all of the other information that is required for the submittal of a complete state implementation plan revision request. Department approval and the legally enforceable document shall have no effect on the federally approved state implementation plan until and unless the submitted state implementation plan revision request is formally approved by the United States environmental protection agency.

(3) Department approvals for the equivalent emission rates, alternate emission rates, or compliance methods that are authorized by the provisions identified in subdivision (a) of this subrule shall be in compliance with both of the following provisions:

(a) The provisions of this subrule apply to approvals by the department pursuant to R 336.1625(4) (Alternate condenser temperature).

(b) Department approvals for the equivalent emission rates, alternate emission rates, or compliance methods that are authorized pursuant to the provisions identified in subdivision (a) of this subrule shall be in compliance with both of the following provisions:

(i) The department approval shall become part of a legally enforceable order of the department, permit to install, or permit to operate.

(ii) A copy of the legally enforceable document that is identified in paragraph (i) of this subdivision shall be sent to the United States environ-mental protection agency.

(4) In R 336.1610, R 336.1621, and R 336.1632, where emission limits are expressed in pounds of volatile organic compounds per gallon of coating, minus water, as applied, the phrase "minus water" shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound.

History: 1980 AACS; 1993 AACS; 1998-2000 AACS; 2002 AACS.

R 336.1603 Rescinded.

History: 1980 AACS; 1981 AACS; 1997 AACS.

R 336.1604 Storage of organic compounds having true vapor pressure of more than 1.5 psia, but less than 11 psia, in existing fixed roof station-ary vessels of more than 40,000-gallon capacity.

Rule 604. (1) After April 30, 1981, it is unlawful for a person to store any organic compound having a true vapor pressure of more than 1.5 psia, but less than 11 psia, at actual storage conditions in any existing fixed roof stationary vessel of more than 40,000-gallon capacity, unless 1 of the following conditions is met:

(a) The vessel is a pressure tank capable of maintaining working pres-sures sufficient to prevent organic vapor or gas loss to the atmosphere at all times, except under emergency conditions.

(b) The vessel is equipped and maintained with a floating cover or roof which rests upon, and is supported by, the liquid being contained and has a closure seal or seals to reduce the space between the cover or roof edge and the vessel wall. The seal or any seal fabric shall not have visible holes, tears, or other nonfunctional openings.

(c) The vessel is equipped and maintained with a vapor recovery system, or other control system approved by the department, which recovers not less than 90%, by weight, of the uncontrolled organic vapor that would otherwise be emitted into the atmosphere.

(2) All openings, except stub drains, in any stationary vessel subject to the provisions of this rule shall be equipped with covers, lids, or seals so that all of the following conditions are met:

(a) The cover, lid, or seal is in the closed position at all times, except when in actual use.

(b) Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports.

(c) Rim vents, if provided, are set at the manufacturer's recommended setting or are set to open when the roof is being floated off the roof leg supports.

History: 1980 AACS; 1981 AACS; 2002 AACS.

R 336.1605 Storage of organic compounds having true vapor pressure of 11 or more psia in existing stationary vessels of more than 40,000-gallon capacity.

Rule 605. (1) After April 30, 1981, it is unlawful for a person to store any organic compound having a true vapor pressure of 11 or more psia at actual storage conditions in any existing stationary vessel of more than 40,000-gallon capacity, unless 1 of the following conditions is met:

(a) The vessel is a pressure tank capable of maintaining working pres-sures sufficient to prevent organic vapor or gas loss to the atmosphere at all times, except under emergency conditions.

(b) The vessel is equipped and maintained with a vapor recovery system, or other control system approved by the department, which recovers not less than 90%, by weight, of the uncontrolled organic vapor that would otherwise be emitted into the atmosphere.

(2) All openings in any stationary vessel subject to the provisions of this rule shall be equipped with covers, lids, or seals so that the covers, lids, or seals are in a closed position at all times, except when in actual use.

History: 1980 AACS; 2002 AACS.

R 336.1606 Loading gasoline into existing stationary vessels of more than 2,000-gallon capacity at dispensing facilities handling 250,000 or more gallons per year.

Rule 606. (1) After June 30, 1980, it is unlawful for a person to load or allow the loading of gasoline from a delivery vessel into any existing stationary vessel of more than 2,000-gallon capacity located at a gasoline dispensing facility which is in any county listed in table 61-a and which has a throughput of 250,000 or more gallons per year, unless such stationary vessel is equipped with a permanent submerged fill pipe.

(2) After June 30, 1981, it is unlawful for a person to load or allow the loading of gasoline from a delivery vessel into any existing
stationary vessel of more than 2,000-gallon capacity located at a gasoline dispensing facility which is outside of any county listed in table 61-a and which has a throughput of 250,000 or more gallons per year, unless such stationary vessel is equipped with a permanent submerged fill pipe.

(3) After December 31, 1982, it is unlawful for a person to load or allow the loading of gasoline from a delivery vessel into any existing
stationary vessel of more than 2,000-gallon capacity located at a gasoline-dispensing facility which is in any area listed in table 61 and which has a throughput of 250,000 or more gallons per year, unless such stationary vessel is controlled by a vapor balance system or an equivalent control system ap-proved by the department. The vapor balance system shall capture displaced gasoline vapor and air by means of a vaportight collection line and shall be designed to return not less than 90%, by weight, of the displaced gasoline vapor from the stationary vessel to the delivery vessel.

(4) Any stationary vessel that is subject to the provisions of subrule (3) of this rule shall be equipped, maintained, or controlled with both of the following:

(a) An interlocking system or procedure to ensure that the vaportight collection line is connected before any gasoline can be loaded.

(b) A device to ensure that the vaportight collection line shall close upon disconnection so as to prevent the release of gasoline vapor.

(5) Any delivery vessel that is subject to the provisions of subrule (3) of this rule shall be vaportight and shall be filled only at a loading facility that is equipped with a system as required by R 336.1608(3) and (4), R 336.1609(2) and (3), R 336.1705(2) and (3), or R 336.1706(2) and (3).

(6) The provisions of subrules (3) and (4) of this rule shall not apply to a stationary vessel at a gasoline-dispensing facility that is served exclusively by gasoline-loading facilities exempted by the department under R 336.1608(7).

(7) Tables 61 and 61-a read as follows:

Tables corresponding to rules in PDF format

Tables 61 and 61a

History: 1980 AACS; 1989 AACS; 2002 AACS.

R 336.1607 Loading gasoline into existing stationary vessels of more than 2,000-gallon capacity at loading facilities.

Rule 607. (1) After June 30, 1980, it is unlawful for a person to load, or allow the loading of, gasoline from a delivery vessel into any existing stationary vessel of more than 2,000-gallon capacity located at a gasoline-loading facility in any county listed in table 61-a, unless the stationary vessel is equipped with a permanent submerged fill pipe.

(2) After June 30, 1981, it is unlawful for a person to load, or allow the loading of, gasoline from a delivery vessel into any existing stationary vessel of more than 2,000-gallon capacity located at a gasoline-loading facility outside of any county listed in table 61-a, unless the stationary vessel is equipped with a permanent submerged fill pipe.

(3) After December 31, 1982, it is unlawful for a person to load, or allow the loading of, gasoline from a delivery vessel into any existing stationary vessel of more than 2,000-gallon capacity located at either of the following loading facilities, unless the stationary vessel is con-trolled by a vapor balance system or an equivalent control system approved by the department:

(a) A loading facility located in any area listed in table 61.

(b) A loading facility which is located in any area that is not listed in table 61 and which delivers gasoline to a gasoline-dispensing facility subject to R 336.1606(3) and (4) or R 336.1703(2) and (3). The vapor balance system shall capture displaced gasoline vapor and air by means of a vaportight collection line and shall be designed to return not less than 90%, by weight, of the displaced gasoline vapor from the station-ary vessel to the delivery vessel.

(4) Any stationary vessel that is subject to the provisions of subrule (3) of this rule shall be equipped, maintained, or controlled with all of the following:

(a) An interlocking system or procedure to ensure that the vaportight collection line is connected before any gasoline can be loaded.

(b) A device to ensure that the vaportight collection line shall close upon disconnection so as to prevent the release of gasoline vapor.

(c) Pressure-vacuum relief valves on aboveground stationary vessels with a minimum pressure valve setting of 8 ounces, if that setting does not exceed the container's maximum pressure rating.

(5) Any delivery vessel subject to subrule (3) of this rule shall be vaportight.

(6) A person who is responsible for the operation of all control measures required by this rule shall develop written procedures for the operation of all such control measures. The procedures shall be posted in an accessi-ble, conspicuous location near the stationary vessel.

History: 1980 AACS; 1989 AACS; 2002 AACS.

R 336.1608 Loading gasoline into delivery vessels at existing loading facilities handling less than 5,000,000 gallons per year.

Rule 608. (1) After June 30, 1980, it is unlawful for a person to load, or allow the loading of, gasoline from a stationary vessel into any delivery vessel located at an existing gasoline-loading facility which is located in any county listed in table 61-a and which has a throughput of less than 5,000,000 gallons of gasoline per year, unless the delivery vessel is filled by a submerged fill pipe.

(2) After June 30, 1981, it is unlawful for a person to load, or allow the loading of, gasoline from a stationary vessel into any delivery vessel located at an existing gasoline-loading facility which is located outside of any county listed in table 61-a and which has a throughput of less than 5,000,000 gallons of gasoline per year, unless the delivery vessel is filled by a submerged fill pipe.

(3) After December 31, 1982, it is unlawful for a person to load, or allow the loading of, gasoline from a stationary vessel into any delivery vessel located at either of the following loading facilities

having a throughput of less than 5,000,000 gallons per year, unless the delivery vessel is controlled by a vapor balance system or an equivalent control system approved by the department:

(a) An existing loading facility located in any area listed in table 61.

(b) An existing loading facility which is located in any area that is not listed in table 61 and which delivers gasoline to a gasoline-dispensing facility subject to R 336.1606(3) and (4) or R 336.1703(2) and (3). The vapor balance system shall capture displaced gasoline vapor and air by means of a vaportight collection line and shall be designed to return not less than 90%, by weight, of the displaced gasoline vapor from the delivery vessel to the stationary vessel.

(4) Any delivery vessel that is loaded at a facility subject to subrule (3) of this rule shall be equipped, maintained, or controlled with all of the following:

(a) An interlocking system or procedure to ensure that the vaportight collection line is connected before any gasoline can be loaded.

(b) A device to ensure that the vaportight collection line will close upon disconnection so as to prevent the release of gasoline vapor.

(c) A device or procedure to accomplish complete drainage before the loading device is disconnected or to prevent liquid drainage from the loading device when not in use.

(d) Pressure-vacuum relief valves that are vaportight and set to prevent the emission of displaced gasoline vapor during the loading of the delivery vessel, except under emergency conditions.

(e) Hatch openings that are kept closed and vaportight during the loading of the delivery vessel.

(5) Any stationary vessel at a facility subject to subrule (3) of this rule shall be vaportight.

(6) A person who is responsible for the operation of all control measures required by this rule shall develop written procedures for the operation of all such control measures. The procedures shall be posted in an accessi-ble, conspicuous location near the loading device.

(7) The provisions of subrule (3) of this rule shall not apply to any gasoline-loading facility that has a throughput of less than 1,000,000 gallons of gasoline per year.

History: 1980 AACS; 1989 AACS; 2002 AACS.

R 336.1609 Loading delivery vessels with organic compounds having true vapor pressure of more than 1.5 psia at existing loading facilities handling 5,000,000 or more gallons of such compounds per year.

Rule 609. (1) After June 30, 1981, it is unlawful for a person to load, or allow the loading of, any organic compound that has a true vapor pressure of more than 1.5 psia at actual conditions from any stationary vessel into any delivery vessel located at an existing loading facility which is outside any county listed in table 61-a and which has a throughput of 5,000,000 or more gallons of such compounds per year, unless such delivery vessel is filled by a submerged fill pipe.

(2) After December 31, 1982, it is unlawful for a person to load, or allow the loading of, any organic compound that has a true vapor pressure of more than 1.5 psia at actual conditions from any stationary vessel into any delivery vessel located at an existing loading facility which is in any county listed in table 61-a and which has a throughput of 5,000,000 or more gallons of such compounds per year, unless such delivery vessel is controlled by a vapor recovery system that captures all displaced organic vapor and air by means of a vapor-tight collection line and recovers the organic vapor such that emissions to the atmosphere do not exceed 0.7 pounds of organic vapor per 1,000 gallons of organic compounds loaded.

(3) Any delivery vessel located at a facility that is subject to the provisions of subrule (2) of this rule shall be equipped, maintained, or controlled with all of the following:

(a) An interlocking system or procedure to ensure that the vapor-tight collection line is connected before any organic compound can be loaded.

(b) A device to ensure that the vapor-tight collection line shall close upon disconnection so as to prevent the release of organic vapor.

(c) A device to accomplish complete drainage before the loading device is disconnected, or a device to prevent liquid drainage from the loading device when not in use.

(d) Pressure-vacuum relief valves that are vapor-tight and set to prevent the emission of displaced organic vapor during the loading of the delivery vessel, except under emergency conditions.

(e) Hatch openings that are kept closed and vapor-tight during the loading of the delivery vessel.

(4) A person who is responsible for the operation of all control measures required by this rule shall develop written procedures for the operation of all such control measures. Such procedures shall be posted in an accessible, conspicuous location near the loading device.

(5) The provisions of subrule (2) of this rule shall not apply to the loading of crude oil or condensate into delivery vessels at production facilities if such loading is accomplished with a submerged fill pipe after June 30, 1981.

History: 1980 AACS; 1989 AACS.

R 336.1610 Existing coating lines; emission of volatile organic compounds from existing automobile, light-duty truck, and other product and material coating lines.

Rule 610. (1) A person shall not cause or allow the emission of volatile organic compounds from the coating of automobiles and light-duty trucks, from any existing coating line, in excess of the applicable emission rates shown in table 62.

(2) A person shall not cause or allow the emission of volatile organic compounds from the coating of any of the following, from an existing coating line, in excess of the applicable emission rates shown in column A of table 63 or the equivalent emission rates in column B of table 63:

(a) Cans.

(b) Coils.

(c) Large appliances.

(d) Metal furniture.

(e) Magnet wire.

(f) The nonmetallic surfaces of fabrics, vinyl, or paper.

(3) Subrule (2) of this rule notwithstanding and as an alternative to the allowable emission rate established by table 63, the existing paper coating lines at Fletcher paper company of Alpena may comply with subrule (2) of this rule by not exceeding a volatile organic compound emission rate of 180 tons per calendar year and 30 tons per calendar month.

(4) A person who is responsible for the operation of a coating line that is subject to this rule shall obtain current information and keep records necessary for the determination of compliance with this rule, as required in R 336.2041.

(5) For each coating line, compliance with the emission limits specified in table 62 and table 63 shall be based upon all of the following provisions:

(a) For prime coat operations that utilize an electrodeposition process in automobile and light-duty truck coating lines that are regulated under table 62, compliance shall be based upon all coatings that belong to the same coating category that is used during each calendar month averaging period.

For all other coatings, compliance shall be based upon the volume-weighted average of all coatings which belong to the same coating category and which are used during each calendar day averaging period. The department may specifically authorize compliance to be based upon a longer averaging period, which shall not be more than 1 calendar month.

(b) If coatings that belong to more than 1 coating category are used on the same coating line during the specified averaging period, then compliance shall be determined separately for each coating category.

(c) The information and records as required by subrule (4) of this rule.

(6) Compliance with the emission limits specified in this rule shall be determined using the applicable method described in the following subdivisions:

(a) For the prime-electrodeposition process and for the final repair emission limits specified in table 62, the method described in either R 336.2040(12)(a) if the coating line does not have an add-on emissions control device or R 336.2040(12)(b) if the coating line has 1 or more add-on emissions control devices.

(b) For the primer surfacer and topcoat emission limits specified in table 62, compliance shall be determined by the methodology described in the publication entitled "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-duty Truck Topcoat Opera-tions," EPA-450/3-88-018, December, 1988, which is adopted by reference in these rules. A copy of this document may be inspected at the Lansing office of the air quality division of the department of environmental quality. A copy of this document may be obtained from the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, or

the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161, order no. PB89152276, at a cost as of the time of adoption of these rules of $36.50 each.

References to topcoat operations in this publication shall also apply to primer surfacer lines, with the following added provisions:

(i) Unless specifically included in the adopted publication, if an anti-chip, color-in-prime, blackout, or spot primer coating is applied as part of either a primer surfacer or topcoat coating operation, then the anti-chip, color-in-prime, blackout, or spot primer coating shall be included in the transfer efficiency tests for that coating operation, conducted according to section 18 or 19 of the adopted publication, and the transfer efficiency values in section 20 of the adopted publication shall not be used.

(ii) If spot primer is applied as part of a primer surfacer coating operation, then the daily usage of spot primer, as calculated in section 8 of the adopted publication, may be derived from monthly usage of spot primer based upon the number of vehicles processed in the primer surfacer operation each day. If an add-on emissions control device is used on the coating line application area to achieve compliance with the primer surfacer or topcoat emission limits specified in table 62, then the capture efficiency shall be determined in accordance with R 336.2040(10).

(c) For the emission limits specified in column B of table 63, the method described in either R 336.2040(12)(e) if the coating line does not have an add-on emissions control device or R 336.2040(12)(f) if the coating line has 1 or more add-on emissions control devices.

(d) For the emission limits specified in column A of table 63, the method described in either R 336.2040(12)(a) if the coating line does not have an add-on emissions control device or R 336.2040(12)(b) if the coating line has 1 or more add-on emissions control devices.

(7) The provisions of this rule, with the exception of the provisions in subrule (4) of this rule, shall not apply to coating lines which are within a stationary source and which have a combined actual emission rate of volatile organic compounds of less than 100 pounds per day or 2,000 pounds per month as of the effective date of this amendatory rule. If the combined actual emission rate equals or is more than 100 pounds per day for a subsequent day or 2,000 pounds per month for a subsequent month, then this rule shall permanently apply to the coating lines.

(8) A person may exclude low-use coatings that total 55 gallons or less per rolling 12-month period at a stationary source from the provisions of this rule, except for subrule (4) of this rule.

(9) Between November 1 and March 31, a person may discontinue the operation of a natural gas-fired afterburner that is used to achieve compliance with the emission limits in this rule, unless the afterburner is used to achieve compliance with, or is required by, any of the following:

(a) Any other provision of these rules.

(b) A permit to install.

(c) A permit to operate.

(d) A voluntary agreement.

(e) A performance contract.

(f) A stipulation.

(g) An order of the department.

(10) If the operation of a natural gas-fired afterburner is discontinued between November 1 and March 31 under subrule (9) of this rule, then both of the following provisions shall apply between November 1 and March 31:

(a) All other provisions of this rule, except for the emission limits, shall remain in effect.

(b) All other measures that are used to comply with the emission limits in this rule between April 1 and October 31 shall continue to be used.

(11) Tables 62 and 63 read as follows:

Tables corresponding to rules in PDF format

Tables 62 and 63

History: 1980 AACS; 1980 AACS; 1981 AACS; 1989 AACS; 1993 AACS; 1999 AACS; 2002 AACS.

R 336.1611 Existing cold cleaners.

Rule 611. (1) A person shall not operate an existing cold cleaner unless all of the provisions of subrules (2) to (4) are met or unless an equivalent control method is approved by the department.

(2) A person shall not operate an existing cold cleaner unless all of the following conditions are met:

(a) A cover shall be installed and shall be closed when parts are not being handled in the cleaner.

(b) A device shall be available for draining cleaned parts, and the parts shall be drained not less than 15 seconds or until dripping ceases.

(c) Waste organic solvent shall be stored only in closed containers, unless the stored solvent is demonstrated to be a safety hazard and is disposed of so that not more than 20%, by weight, is allowed to evaporate into the atmosphere.

(3) A person who is responsible for the operation of a cold cleaner shall develop written procedures for compliance with the provisions of this rule. The procedures shall be posted in an accessible, conspicuous location near the cold cleaner.

(4) The provisions of this rule do not apply to cold cleaners that are subject to the provisions of the halogenated solvent cleaner national emission standards for hazardous air pollutants (1995), which are adopted by reference in R 336.1651.

History: 1980 AACS; 1993 AACS; 1997 AACS.

R 336.1612 Existing open top vapor degreasers.

Rule 612. (1) After June 30, 1980, it is unlawful for a person to operate an existing open top vapor degreaser unless all of the provisions of the following subrules are met or unless an equivalent control method is approved by the department.

(2) It is unlawful for a person to operate an existing open top vapor degreaser unless all of the following conditions are met:

(a) A cover shall be installed that is designed to be opened and closed easily without disturbing the vapor zone. The cover shall be closed at all times, except when processing workloads through the degreaser.

(b) A procedure shall be developed to minimize organic solvent carryout by doing all of the following:

(i) Racking parts to allow complete drainage.

(ii) Moving parts in and out of the degreaser at a vertical speed of less than 11 feet per minute when a powered hoist is used to raise or lower the parts.

(iii) Holding parts in the vapor zone not less than 30 seconds or until condensation ceases.

(iv) Tipping or tumbling parts in a manner such that no pools of organic solvent remain on the cleaned parts before removal.

(v) Allowing parts to dry within the degreaser for not less than 15 seconds or until visually dry.

(c) Total workload shall not occupy more than 1/2 of the degreaser's open top area.

(d) Organic solvent shall not be sprayed above the vapor level.

(e) Organic solvent leaks shall be repaired immediately.

(f) The degreaser shall be operated in a manner such that no water is visibly detectable in solvent exiting the water separator.

(g) Exhaust ventilation shall not exceed 65 cubic feet per minute per square foot of degreaser open area, unless necessary to meet OSHA requirements.

(h) Waste organic solvent shall be stored only in closed containers, unless demonstrated to be a safety hazard and disposed of in a manner such that not more than 20% by weight is allowed to evaporate into the atmosphere.

(3) A person responsible for the provisions of this rule shall develop written procedures for the operation of all such provisions, and such procedures shall be posted in an accessible, conspicuous location near the vapor degreaser.

(4) The provisions of this rule do not apply to any existing open top vapor degreaser having an air/vapor interface of less than 4 square feet.

(5) The provisions of this rule do not apply to an existing open top vapor degreaser that is subject to the provisions of the halogenated solvent cleaner national emission standards for hazardous air pollutants (1995), which are adopted by reference in R 336.1651.

History: 1980 AACS; 1997 AACS; 2002 AACS.

R 336.1613 Existing conveyorized cold cleaners.

Rule 613. (1) After June 30, 1980, it is unlawful for a person to operate an existing conveyorized cold cleaner unless all of the provisions of the following subrules are met or unless an equivalent control method is approved by the department.

(2) It is unlawful for a person to operate an existing conveyorized cold cleaner unless all of the following conditions are met:

(a) A procedure shall be developed to minimize organic solvent carryout by doing both of the following:

(i) Racking parts for best drainage.

(ii) Maintaining the conveyor speed at a level that shall prevent dripping of solvent off the cleaned parts.

(b) Organic solvent leaks shall be repaired immediately.

(c) The cleaner shall be operated in a manner such that no water is visibly detectable in solvent exiting the water separator.

(d) Waste organic solvent shall be stored only in closed containers, unless demonstrated to be a safety hazard and disposed of in a manner such that not more than 20% by weight is allowed to evaporate into the atmosphere.

(3) A person responsible for the provisions of this rule shall develop written procedures for the operation of all such provisions, and such procedures shall be posted in an accessible, conspicuous location near the cold cleaner.

(4) The provisions of this rule do not apply to an existing conveyorized cold cleaner that is subject to the provisions of the halogenated solvent cleaner national emission standards for hazardous air pollutants (1995), which are adopted by reference in R 336.1651.

History: 1980 AACS; 1997 AACS.

R 336.1614 Existing conveyorized vapor degreasers.

Rule 614. (1) After June 30, 1980, it is unlawful for a person to operate an existing conveyorized vapor degreaser unless all of the provisions of the following subrules are met or unless an equivalent control method is approved by the department.

(2) It is unlawful for a person to operate an existing conveyorized vapor degreaser unless all of the following conditions are met:

(a) A procedure shall be developed to minimize organic solvent carryout by doing both of the following:

(i) Racking parts for best drainage.

(ii) Maintaining the vertical conveyor speed at less than 11 feet per minute.

(b) Organic solvent leaks shall be repaired immediately.

(c) The degreaser shall be operated in a manner such that no water is visibly detectable in solvent exiting the water separator.

(d) Exhaust ventilation shall not exceed 65 cubic feet per minute per square foot of degreaser open area, unless necessary to meet OSHA requirements.

(e) Waste organic solvent shall be stored only in closed containers, unless demonstrated to be a safety hazard and disposed of in a manner such that not more than 20% by weight is allowed to evaporate into the atmosphere.

(3) A person responsible for the provisions of this rule shall develop written procedures for the operation of all such provisions, and such procedures shall be posted in an accessible, conspicuous location near the vapor degreaser.

(4) The provisions of this rule do not apply to an existing conveyorized vapor degreaser that is subject to the provisions of the halogenated solvent cleaner national emission standards for hazardous air pollutants (1995), which are adopted by reference in R 336.1651.

History: 1980 AACS; 1997 AACS.

R 336.1615 Existing vacuum-producing systems at petroleum refineries.

Rule 615. After December 31, 1979, it is unlawful for a person to cause or allow the emission of any volatile organic compound from the condensers, hot wells, or accumulators of any existing vacuum-producing system at a petroleum refinery, unless the emission is controlled by 1 of the follow-ing methods:

(a) Capture and disposal in a fuel gas system.

(b) Combustion in a smokeless flare.

(c) Any method approved by the department that recovers not less than 90%, by weight, of the uncontrolled volatile organic compound emissions that would otherwise be emitted into the atmosphere.

1. Pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied.

2. Pounds of volatile organic compounds emitted per gallon of applied coating solids. The purpose of column B emission limits is to allow credit for transfer efficiencies greater than the baseline transfer efficiency.

Note: department approval of the transfer efficiency test method is required.

3. The allowable emission rate does not apply to coatings that are used for the repair of scratches and nicks.

History: 1980 AACS; 2002 AACS.

R 336.1616 Process unit turnarounds at petroleum refineries.

Rule 616. (1) After December 31, 1979, it is unlawful for a person to cause or allow the emission of any volatile organic compound from any process unit turnaround at any petroleum refinery, unless the emission is controlled by 1 of the following methods:

(a) Capture and disposal in a fuel gas system.

(b) Combustion in a smokeless flare.

(c) Any method approved by the department that recovers not less than 90%, by weight, of the uncontrolled volatile organic compounds that would otherwise be emitted into the atmosphere. (2) The provisions of this rule shall apply until the pressure of all vessels in the system is less than 5 psi gauge.

(3) Except as provided for in subrule (4) of this rule, the department shall be notified not less than 30 days before any process unit turnaround subject to the provisions of this rule.

(4) In the case of a process unit turnaround caused by circumstances beyond the control of the refinery owner or operator, the department shall be notified as soon as reasonably possible.

History: 1980 AACS; 1989 AACS; 2002 AACS.

R 336.1617 Existing organic compound-water separators at petroleum refineries.

Rule 617. (1) After December 31, 1980, it is unlawful for a person to operate any existing organic compound-water separator at a refinery unless all separator compartments and all forebays are equipped with a solid cover with all openings sealed and totally enclosing the liquid contents or unless an equivalent method is approved by the department.

(2) All openings in covers, separators, and forebays of any organic compound-water separator subject to the provisions of subrule (1) of this rule shall be equipped with lids or seals so that the lids or seals are in the closed position at all times, except when in actual use.

History: 1980 AACS; 2002 AACS.

R 336.1618 Use of cutback paving asphalt.

Rule 618. After December 31, 1982, it is unlawful for a person to manu-facture, mix, store, use, or apply cutback paving asphalts from May 1 to September 30, unless prior approval is given by the department. In granting such authorizations, the department shall consider both of the following:

(a) The need for long-life stockpile storage.

(b) Use of such cutback paving asphalt solely as a penetrating prime coat.

History: 1980 AACS; 2002 AACS.

R 336.1619 Standards for perchloroethylene dry cleaning equipment; adoption of standards by reference.

Rule 619. A person responsible for the operation of a perchloroethylene dry cleaner that is subject to 40 C.F.R. part 63, subpart M, §§63.320 to 63.325 (2000), the perchloroethylene dry cleaner national emission standard for hazardous air pollutants, shall comply with 40 C.F.R. part 63, subpart M (2000). The provisions of 40 C.F.R. part 63, subpart M, §§63.320 to 63.325, are adopted by reference in these rules and are available for inspection and purchase at the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, at cost. Copies may be obtained from the Superintendent of
Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost as of the time of adoption of these rules of $66.00, or on the United States government printing office internet web site at http://www.access.gpo.gov.

History: 1981 AACS; 1993 AACS; 1997 AACS; 2002 AACS.

R 336.1620 Emission of volatile organic compounds from existing flat wood paneling coating lines.

Rule 620. (1) A person shall not cause or allow the emission of volatile organic compounds from the coating of flat wood paneling from any existing coating line in excess of the applicable emission rates as follows:

(a) Six pounds per 1,000 square feet of coated finished product from printed interior panels made of hardwood, plywood, or thin particle board, regardless of the number of coats applied.

(b) Twelve pounds per 1,000 square feet of coated finished product from natural finish hardwood plywood panels, regardless of the number of coats applied.

(c) Ten pounds per 1,000 square feet of coated finished product from class II finishes on hardboard panels, regardless of the number of coats applied.

(2) A person who is responsible for the operation of a coating line that is subject to this rule shall obtain current information, and keep daily records necessary, for the determination of compliance with this rule, as required in R 336.2041.

(3) For each coating line, compliance with the emission limits specified in this rule shall be based upon all of the following:

(a) The volume-weighted average of all coatings which belong to the same coating category and which are used during each calendar day averaging period.The department may specifically authorize compliance to be based upon a longer averaging period, which shall not be more than 1 calendar month.

(b) If coatings that belong to more than 1 coating category are used on the same coating line during the specified averaging period, then compliance shall be determined separately for each coating category.

(c) The information and records as required by the provisions of subrule

(2) of this rule.

(4) Compliance with the limits specified in subrule (1) of this rule shall be determined using the method described in either R 336.2040(12)(i) if the coating line does not have an add-on emissions control device or R 336.2040(12)(j) if the coating line has 1 or more add-on emissions control devices.

(5) This rule, with the exception of subrule (2) of this rule, does not apply to flat wood paneling coating lines which are within a stationary source and which have a combined actual emission rate of volatile organic compounds of less than 100 pounds per day or 2,000 pounds per month as of the effective date of this amendatory rule. If the combined actual emission rate equals or exceeds 100 pounds per day for a subsequent day or 2,000 pounds per month for a subsequent month, then this rule shall permanently apply to the coating lines.

(6) A person may exclude low-use coatings that total 55 gallons or less per rolling 12-month period at a stationary source from the provisions of this rule, except for subrule (2) of this rule.

(7) A person may discontinue the operation of a natural gas-fired afterburner, which is used to achieve compliance with the emission limits in this rule, between November 1 and March 31 unless the afterburner is used to achieve compliance with, or is required by, any of the following:

(a) Any other provision of these rules.

(b) A permit to install.
(c) A permit to operate.
(d) A voluntary agreement.
(e) A performance contract.
(f) A stipulation.
(g) An order of the department.
(8) If the operation of a natural gas-fired afterburner is discontinued between November 1 and March 31 under subrule (7) of this rule, then both of the following provisions shall apply between November 1 and March 31:
(a) All other provisions of this rule, except the emission limits, shall remain in effect.
(b) All other measures that are used to comply with the emission limits in this rule between April 1 and October 31 shall continue to be used.

History: 1981 AACS; 1993 AACS; 1998-2000 AACS.

R 336.1621 Emission of volatile organic compounds from existing metallic surface coating lines.
Rule 621. (1) A person shall not cause or allow the emission of volatile organic compounds from the coating of metallic surfaces from any existing coating line in excess of the applicable emission rates as follows:
(a) Four and three-tenths pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for clear coatings.
(b) Three and one-half pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for air-dried coatings.
(c) Three and one-half pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for extreme performance coatings.
(d) Four and eight-tenths pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for truck final repair coatings.
(e) Four and nine-tenths pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for glass adhesion body primer.For the purpose of this subdivision, "glass adhesion body primer" means the prime coating that is applied to automobile or truck bodies as part of the glass bonding system.
(f) Four and three-tenths pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for steel pail and drum interior coatings.
(g) Three pounds of volatile organic compounds emitted per gallon of coating, minus water, as applied for all other coatings.
(2) If the provisions of more than 1 subdivision of subrule (1) of this rule are applicable for a specific coating, then the least stringent provision shall apply.
(3) To take credit for improved transfer efficiency, upon written request and approval by the department, a person may achieve the emission limits specified in subrule (1) of this rule by an equivalent emission limit expressed in pounds of volatile organic compounds emitted per gallon of applied coating solids.The equivalent emission limit shall be established by the following equation:

Where:
A = Allowable equivalent emission limit, pounds of volatile organic compounds per gallon of applied coating solids.
E = Applicable emission limit as specified in subrule (1) of this rule, pounds of volatile organic compounds per gallon of coating, minus water, as applied.
S = Solids volume fraction representative of a compliance coating, gallon of solids per gallon of coating, minus water, as applied.
The value of "S" shall be determined by using the following equation:

S = 1 - E/7.36 (TE)b = Overall baseline transfer efficiency of the coating line as specified in subrule (4) of this rule, percent. Where multiple application methods are used on the coating line, the overall baseline transfer efficiency shall be determined using the method described
in R 336.2040 (9). Department approval of the transfer efficiency test method is required.

(4) For the purpose of establishing an equivalent emission limit under subrule (3) of this rule, the value of (TE)b, the overall baseline transfer efficiency of the coating line, shall be 60%. Notwithstanding this provision, a person may request, in writing to the department, and the department may approve, a value for (TE)b that is less than 60%, but not less than 40%. A request for a value for (TE)b of less than 60% shall include a demonstration that the lower requested value is representative of the overall transfer efficiency achieved by similar coating lines which use the most efficient type of application equipment that is reasonably available for the similar coating lines.

(5) A person who is responsible for the operation of a coating line that is subject to this rule shall obtain current information, and keep daily records necessary, for the determination of compliance with the provisions of this rule, as required in R 336.2041.

(6) For each coating line, compliance with the emission limits specified in this rule shall be based upon all of the following:

(a) The volume-weighted average of all coatings which belong to the same coating category and which are used during each calendar day averaging period. The department may specifically authorize compliance to be based upon a longer averaging period, which shall not be more than 1 calendar month.

(b) If coatings that belong to more than 1 coating category are used on the same coating line during the specified averaging period, then compliance shall be determined separately for each coating category.

(c) The information and records required by subrule (5) of this rule.

(7) Compliance with the emission limits specified in this rule shall be determined using the applicable method described in the following subdivisions:

(a) For coating lines that are subject to the emission limits specified in subrule (1) of this rule, the method described in either R 336.2040(12)(a) if the coating line has no add-on emissions control device or R 336.2040(12)(b) if the coating line has 1 or more add-on emissions control devices.

(b) For coating lines subject to the equivalent emission limits specified in subrule (3) of this rule, the method described in either R 336.2040(12)(e) if the coating line has no add-on emissions control device or R 336.2040(12)(f) if the coating line has 1 or more add-on emissions control device.

(8) This rule does not apply to the coating of metallic surfaces that are subject to R 336.1610.

(9) This rule does not apply to any of the following:

(a) Automobile refinishing.

(b) Customized topcoating of less than 35 automobiles or trucks, or both, per day.

(c) Coating of the exterior of airplanes when the part to be coated has already been assembled on the airplane.

(d) Coating of the exterior of marine vessels when the part to be coated has already been assembled on the marine vessel.

(e) Coating of a part consisting of both metallic and nonmetallic components if a demonstration is made, to the satisfaction of the department, that the limits of this rule cannot be met due to the presence of the nonmetallic component. In this case, and if the nonmetallic component of the part is plastic and used as an automobile, truck, or business machine plastic part, R 336.1632 shall apply to the coating of the part.

(10) This rule, except for subrule (5) of this rule, does not apply to a metallic surface coating line that complies with both of the following provisions:

(a) The coating line has an actual emission rate of volatile organic compounds equal to or less than 2,000 pounds per month and 10.0 tons per year as of the effective date of this amendatory rule. If the actual rate of emissions from an exempted metallic surface coating line exceeds 2,000 pounds per month for a subsequent month or 10.0 tons per year for a subsequent year, then the provisions of this rule shall thereafter permanently apply to the metallic surface coating line.

(b) Volatile organic compound emissions from the coating line, when combined with the total emissions of volatile organic compounds from all other metallic surface coating lines at the stationary source that are exempted by this subrule, do not exceed 30.0 tons per year.

(11) A person may exclude low-use coatings that total 55 gallons or less per rolling 12-month period at a stationary source from the provisions of this rule, except for subrule (5) of this rule.

(12) A person may discontinue the operation of a natural gas-fired afterburner, which is used to achieve compliance with the emission limits in this rule, between November 1 and March 31 unless the afterburner is used to achieve compliance with, or is required by, any of the following:

(a) Any other provisions of these rules.

(b) A permit to install.
(c) A permit to operate.
(d) A voluntary agreement.
(e) A performance contract.
(f) A stipulation.
(g) An order of the department.

(13) If the operation of a natural gas-fired afterburner is discontinued between November 1 and March 31 under subrule (12) of this rule, then both of the following provisions shall apply between November 1 and March 31:

(a) All other provisions of this rule, except the emission limits, shall remain in effect.

(b) All other measures that are used to comply with the emission limits in this rule between April 1 and October 31 shall continue to be used.

History: 1981 AACS; 1993 AACS; 1998-2000 AACS.

R 336.1622 Emission of volatile organic compounds from existing components of petroleum refineries; refinery monitoring program.

Rule 622. (1) A person shall not cause or allow the emission of any volatile organic compound from any existing component, as listed in subrule

(2) of this rule, of a petroleum refinery, including topping plants, unless all of the provisions of this rule are satisfied or unless an equivalent control method, as approved by the department, is implemented. An alternate acceptable control method is described in 40 C.F.R., subpart GGG, §§60.590 to 60.593 (2000), standards of performance for equipment leaks of volatile organic compound in petroleum refineries. The provisions of 40 C.F.R., part 60, subpart GGG (2000), are adopted by reference in these rules and are available for inspection and purchase at the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, at cost. Copies may be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost as of the time of adoption of these rules of $66.00, or on the United States government printing office internet web site at http://www.access.gpo.gov.

(2) A person shall not operate an existing petroleum refinery unless a monitoring program and schedule approved by the department is implemented.This monitoring program and schedule shall provide for, and identify by type and refinery unit, by quarter, all of the following:

(a) An annual inspection of all of the following components:
(i) Pump seals.
(ii) Process valves in liquid volatile organic compound service.
(iii) Process drains.
(iv) Components that are difficult to monitor.

(b) A quarterly inspection of all of the following components:
(i) Compressor seals.
(ii) Process valves in gaseous volatile organic compound service.
(iii) Pressure-relief valves in gaseous volatile organic compound service.

(c) A weekly visual inspection of all pump seals from which volatile organic compounds could leak.

(d) An immediate inspection of any pump seal from which a liquid, which includes a volatile organic compound, is observed dripping.

(e) An inspection of any relief valve from which a volatile organic compound could discharge within 2 normal business days of its venting to the atmosphere.

(f) An inspection as soon as is practical, but not later than 2 normal business days, after the repair of any component that was found leaking.

(3) Except for the visual inspections required by subrule (2)(c) of this rule, all inspections shall be performed using equipment and procedures as specified in federal reference test method 21 as described in R 336.2004.For the purpose of this rule, a component is leaking when a concentration of more than 10,000 ppm, by volume, as methane or hexane, is measured by method 21.

(4) If implementation of the quarterly leak detection program as specified in subrule (2)(b) of this rule shows that 2% or less of the process valves in a given refinery unit are leaking for 2 consecutive

quarters, then the inspections of process valves in that refinery unit may be skipped for 1 quarter. If 2% or less of the process valves in a given
refinery unit are leaking for 5 consecutive quarters, then the inspections may be done annually. If a subsequent inspection shows that more than 2% of the process valves are leaking, then quarterly inspections of valves shall again be required.

(5) The percent of valves leaking on a refinery unit, as referenced in subrule (4) of this rule, shall be determined by dividing the total number of valves found to be leaking on the refinery unit during the specified monitoring period by the total number of valves on the refinery unit that are required to be monitored by this rule.

(6) The provisions of this rule do not apply to any of the following:

(a) Pressure-relief valves that vent to an operating flare header, fuel gas system, or vapor control device.

(b) Components that are unsafe to monitor, until monitoring personnel would no longer be exposed to immediate danger.

(c) Storage tank valves.

(d) Valves that are not externally regulated.

(e) Components that process, transfer, or contain 1 or more volatile organic compounds in the liquid phase under actual conditions, all of which have a true vapor pressure of less than 1.55 psia.

(7) Notwithstanding the provisions of subrule (2) of this rule, the monitoring of components, such as process drains and valves, that are used solely in effecting a refinery unit turnaround is required only within the quarter following the turnaround.

(8) A leak that is detected pursuant to the monitoring program provisions of subrule (2) of this rule or for any other reason shall be repaired. Except as provided in subrule (10) of this rule, this leak shall be repaired as soon as possible, but not more than 15 days after the leak is detected. Until the time that the leak is repaired and retested verifying a successful repair, the component causing the leak shall bear a weather-resistant, numbered, identifying tag that indicates the date the leak was discovered.

(9) A log of all leaks detected pursuant to the provisions of subrules (2), (3), (5), and (6) of this rule or by any other method shall be maintained by the operator of the petroleum refinery. This log shall identify all of the following:

(a) The leaking component by type and location.

(b) The number of the identifying tag.

(c) The date the leak was discovered.

(d) The date the leak was repaired.

(e) The date the component was retested after the repair with an indication of the testing results.

(f) The person or persons who performed the inspections.The log shall be made available to any representative of the department during normal business hours of the refinery and shall be kept for a minimum of 2 years.

(10) If a leak cannot be repaired within 15 days due to circumstances beyond the control of the operator of the petroleum refinery or because the leaking component cannot be repaired unless a significant portion of the refinery unit is shut down for turnaround, then the operator shall maintain a separate log of the nonrepair. The log shall identify all of the following:

(a) The leaking component by type, location, and refinery unit.

(b) The date on which the leak was discovered.

(c) The reason why the leak cannot be repaired within 15 days.

(d) The estimated date of repair.

(11) Within 25 days of the end of the previous quarter, the operator shall submit to the department a report which contains all of the following information for that quarter:

(a) The total number of components tested, by type.

(b) The total number of components found leaking and repaired, by type.

(c) The accumulative total number of components, by refinery unit and type, found to be leaking and not repaired within the required time period and the reason for nonrepair.

(d) The type or types of monitoring equipment utilized during the quarter. The report required by this subrule shall be made on a form approved by the department.

(12) The department may require the early shutdown for turnaround of a refinery unit if the department feels that there are a significant number of leaks that would justify this action.

(13) Except for safety pressure-relief valves, a person shall not operate existing petroleum refinery equipment that has a valve at the end of a pipe or line which contains a volatile organic compound, unless

the pipe or line is sealed with a second valve, blind flange, plug, or cap. The sealing device may be removed only when a sample is being taken or during maintenance operations. A current, written description detailing routine sampling procedures and listing the sealing devices involved shall be maintained and, upon request by the department, shall be submitted to the department in an acceptable format.

History: 1981 AACS; 1993 AACS; 1997 AACS; 2002 AACS.

R 336.1623 Storage of petroleum liquids having a true vapor pressure of more than 1.0 psia, but less than 11.0 psia, in existing external floating roof stationary vessels of more than 40,000-gallon capacity.

Rule 623. (1) A person shall not store any petroleum liquid having a true vapor pressure of more than 1.0 psia, but less than 11 psia, at actual storage conditions in any existing external floating roof stationary vessel of more than 40,000-gallon capacity, unless the provisions of subrules (2) to (11) of this rule are met or unless an equivalent control method, as approved by the department, is implemented.

(2) Any stationary vessel subject to the provisions of this rule shall be equipped with a floating roof to which a continuous rim-mounted secondary seal has been attached.

(3) The secondary seal, as required by subrule (2) of this rule, shall meet all of the following requirements:

(a) There shall be no visible holes, tears, or other nonfunctional openings in the seal or seal fabric.

(b) The seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the vessel wall.

(c) For vessels equipped with vapor-mounted primary seals, the accumu-lated area of gaps exceeding 1/8 of an inch in width between the secondary seal and the vessel wall shall not exceed 1.0 square inch per foot of tank diameter.

(4) All openings in the external floating roof in any stationary vessel subject to the provisions of this rule, except for automatic bleeder vents, rim space vents, and leg sleeves, shall be equipped with both of the following:

(a) Covers, seals, or lids that shall remain in the closed position, except when the openings are in actual use.

(b) Projections into the vessel that remain below the liquid surface at all times.

(5) All automatic bleeder vents in any stationary vessel subject to the provisions of this rule shall be closed at all times, except when the floating roof is floated off or landed on the roof leg supports.

(6) All rim vents in any stationary vessel subject to the provisions of this rule shall be set to open only when the floating roof is being floated off the leg supports or at the manufacturer's recommended setting.

(7) All emergency floating roof drains in any stationary vessel subject to the provisions of this rule shall be provided with slotted membrane fabric covers, or equivalent covers, that cover not less than 90% of the area of the opening.

(8) A person who is responsible for the operation of a stationary vessel subject to the provisions of this rule shall comply with all of the following requirements:

(a) Perform a semiannual routine inspection to ensure compliance with all provisions of subrules (2) to (7) of this rule, with the exception of subrule (3)(c) of this rule.

(b) For vessels equipped with a vapor-mounted primary seal, perform an annual inspection to document compliance with the provisions of subrule (3)(c) of this rule.

(c) Maintain a record of the results of the inspections performed as required by this subrule. This record shall be made available to any representative of the department and shall be kept for a minimum of 2 years.

(d) The provisions of this subrule may, upon written notice, be modified by the department if considered necessary to accomplish the purpose of this rule.

(9) The provisions of subrules (2) and (3) of this rule do not apply to any of the following external floating roof stationary vessels:

(a) Vessels that are used to store waxy, heavy-pour crude oil.

(b) Vessels of less than 420,000-gallon capacity that are used to store produced crude oil and condensate before lease custody transfer.

(c) Vessels of welded construction which are equipped with a primary seal consisting of a metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted, liquid-filled-type seal and which contain a petroleum liquid that has a true vapor pressure of less than 4.0 psia.

(d) Vessels that are used to store jet naphtha (jet b or jp-4).

(10) A person who is responsible for the operation of a stationary vessel that meets 1 of the exemption provisions of subrule (9) of this rule shall maintain records that include all of the following information:

(a) The type of vessel and, for a stationary vessel that meets the exemption provisions of subrule (9)(c) of this rule, the type of primary seal.

(b) The capacity of the stationary vessel.

(c) The contents of the stationary vessel.

(d) For a stationary vessel that meets the exemption provisions of subrule (9)(c) of this rule, the true vapor pressure of the petroleum liquid in the stationary vessel.

(11) The provisions of subrules (2) to (8) of this rule do not apply to any existing floating roof stationary vessel that contains a petroleum liquid which has a true vapor pressure of less than 1.5 psia. A person who is responsible for such stationary vessel shall maintain a record that includes all of the following information:

(a) Average monthly stored liquid temperature.

(b) Type of petroleum liquid.

(c) Reid vapor pressure of the petroleum liquid.

The record that is required by this subrule shall be made available to any representative of the department and shall be kept for a minimum of 2 years.

History: 1981 AACS; 1993 AACS; 2002 AACS.

R 336.1624 Emission of volatile organic compounds from existing graphic arts lines.

Rule 624. (1) A person shall not cause or allow the emission of any volatile organic compound from an existing graphic arts line, unless all of the provisions of the following subrules are met or unless an equivalent emission rate, as approved by the department, is achieved. For the purpose of this rule, the term "graphic arts" applies to rotogravure and flexographic operations only.

(2) For the purpose of this rule, both of the following provisions apply:

(a) In calculating the calendar day averaging period percent reduction of volatile organic compound emissions from a graphic arts line that is subject to the emission limits specified in subrule (3)(c) of this rule, the starting level shall be the total amount of volatile organic compounds used on the graphic arts line during the calendar day averaging period. This level shall be expressed as pounds of volatile organic compounds.

(b) It will be assumed that all volatile organic compounds applied to the substrate are emitted, unless captured and controlled by control equipment.

(3) A person shall not cause or allow the emission of any volatile organic compound from an existing graphic arts line, unless the provisions of 1 or more of the following subdivisions are met:

(a) The volatile fraction of all inks and coatings used on a graphic arts line as applied to the substrate shall contain a maximum of 25%, by volume, of volatile organic compounds, based upon a calendar day averaging period.

(b) The nonvolatile fraction of all inks and coatings used on a graphic arts line as applied to the substrate, minus water, shall be a minimum of 60%, by volume, based upon a calendar day averaging period.

(c) The overall reduction in volatile organic compound emissions, based on pounds of volatile organic compounds from a graphic arts line for which
compliance is to be achieved through the use of 1 or more add-on emissions control devices shall be 1 of the following, based upon a calendar day averaging period:

(i) For publication rotogravure printing, a minimum of 75%.

(ii) For packaging rotogravure printing, a minimum of 65%.

(iii) For flexographic printing, a minimum of 60%.

(4) A person who is responsible for the operation of a graphic arts line that is subject to this rule shall obtain current information, and keep records necessary, for a determination of compliance with this rule, as follows:

(a) As required in subrule (12) of this rule for sources subject to subrule (3)(a) or (b) of this rule.

(b) As required in R 336.2041(10)(d) and (e) for sources subject to subrule (3)(c) of this rule.

(5) Compliance with the emission limits specified in this rule shall be based upon all of the following provisions, as applicable:

(a) Compliance with the emission limit specified in subrule (3)(a) or

(b) of this rule shall be based upon all inks and coatings that are used duringeach calendar day averaging period.

(b) Compliance with the applicable calendar day averaging period overall reduction provision specified in subrule (3)(c) of this rule shall be based upon all inks and coatings that are used during each calendar day averaging period.

(c) If more than 1 compliance option listed in subrule (3) of this rule is used on a graphic arts line during a calendar day averaging period, then compliance shall be determined separately for each option used and shall be based upon all inks and coatings used for each option during each calendar day averaging period.

(d) The department may specifically authorize compliance to be based upon a longer averaging period than the calendar day averaging period specified in subdivision (a), (b), or (c) of this subrule, but the period shall not be more than 1 calendar month.

(e) The information and records as required by subrule (4) of this rule.

(6) Compliance with subrule (3)(a) and (b) of this rule shall be determined using the method described in subrule (11) of this rule. Compliance with subrule (3)(c) of this rule shall be determined using the method described in R 336.2040(11).

(7) This rule, except for subrule (4) of this rule, does not apply to graphic arts lines which are within a stationary source and which have a total combined actual emission rate of volatile organic compounds of less than 100 pounds per day or 2,000 pounds per month as of the effective date of
this amendatory rule. If the combined actual emission rate equals or is more than 100 pounds per day for a subsequent day or 2,000 pounds per month for a subsequent month, then this rule shall permanently apply to the graphic arts lines.

(8) A person may exclude low-use inks or coatings that total 55 gallons or less per rolling 12-month period at a stationary source from the provisions of this rule, except for subrule (4) of this rule.

(9) A person may discontinue the operation of a natural gas-fired afterburner, which is used to achieve compliance with the emission limits in this rule, between November 1 and March 31 unless the afterburner is used to achieve compliance with, or is required by, any of the following:

(a) Any other provisions of these rules.

(b) A permit to install.

(c) A permit to operate.

(d) A voluntary agreement.

(e) A performance contract.

(f) A stipulation.

(g) An order of the department.

(10) If the operation of a natural gas-fired afterburner is discontinued between November 1 and March 31 under subrule (9) of this rule, then both of the following provisions shall apply between November 1 and March 31:

(a) All other provisions of this rule, except the emission limits, shall remain in effect.

(b) All other measures that are used to comply with the emission limits in this rule between April 1 and October 31 shall continue to be used.

(11) Compliance with subrule (3)(a) and (b) of this rule shall be determined as follows:

(a) The following equation shall be used to determine if the volatile fraction of all inks and coatings used on a graphic arts line, as applied, meets the volatile organic compound limitation specified in subrule (3)(a) of this rule:

$$VOC = \frac{\sum_{i=1}^{N} L_1 V_{voci} + \sum_{i=1}^{N} L_i V_{vci}}{\sum_{i=1}^{N} L_i V_{vci}} \times 100$$

Where:

VOC = Volatile organic compound fraction of the volatile fraction of all inks and coatings used on a graphic arts line, as applied, each calendaday averaging period, percent.

I = Individual ink or coating, as applied.

N = Number of different inks and coatings used on a graphic arts line, as applied, each calendar day averaging period.

LI = Volume of each ink or coating, as applied, used on the calendar day averaging period, gallons.

VVOCI = Volume fraction of volatile organic compounds in each ink or coating, as applied, percent.

VVCI = Volume fraction of volatiles in each ink or coating, as applied, percent.

The provisions of subrule (3)(a) of this rule shall be met if the value for "VOC" in the equation is less than or equal to 25 percent.

(b) The following equation shall be used to determine if the nonvolatile fraction of all inks and coatings used on a graphic arts line, as applied, meets the limitation specified in subrule (3)(b) of this rule:

$$NV = \frac{\sum_{I=1}^{N} L1V1}{\sum_{I=1}^{N} L1(V1 + VOC1)} \times 100$$

Where:

NV = Nonvolatile fraction of all inks and coatings used on a graphic arts line, as applied, minus water and exempt compounds, by volume, on a calendar day averaging period, percent.

I = Individual ink or coating, as applied.

N = Number of different coatings and inks used on a graphic arts line, as applied, each calendar day averaging period.

LI = Volume of each ink or coating, as applied, used on the calendar day averaging period, gallons.

VI = Volume fraction of nonvolatiles in each ink or coating, as applied, percent.

VOCI = Volume fraction of volatile organic compounds in each ink or coating, as applied, percent.

The provisions of subrule (3)(b) of this rule shall be met if the value for "NV" in the equation is equal to or greater than 60 percent.

(12) A person subject to subrule (3)(a) or (b) of this rule shall keep the following records:

(a) For graphic arts lines subject to subrule (3)(a) of this rule:

(i) The name, identification number, and volume "LI", of each ink or coating used each calendar day averaging period.

(ii) The volume fraction of volatile organic compounds in each ink or coating, as applied, each calendar day averaging period.

(iii) The volume fraction of volatiles in each ink or coating, as applied, during each calendar day averaging period.

(iv) The volatile organic compound fraction of the volatile fraction of all inks and coatings used on a graphic arts line, as applied, each calendar day averaging period.

(b) For graphic arts lines subject to subrule (3)(b) of this rule:

(i) The name, identification number, and volume "LI", of each ink or coating used each calendar day averaging period.

(ii) The volume fraction of nonvolatiles in each ink or coating, as applied, each calendar day averaging period.

(iii) The volume fraction of nonvolatiles in all inks and coatings used each calendar day averaging period.

History: 1981 AACS; 1993 AACS; 1999 AACS.

R 336.1625 Emission of volatile organic compound from existing equipment utilized in manufacturing synthesized pharmaceutical products.

Rule 625. (1) A person shall not cause or allow the emission of any volatile organic compound from existing equipment utilized in the manufacturing of synthesized pharmaceutical products, unless all of the provisions of the following subrules are met or unless an equivalent control method, as approved by the department, is implemented.

(2) A person shall not operate an existing reactor, distillation operation, crystallizer, centrifuge, or vacuum dryer, unless the emissions from this equipment are controlled by either of the following:

(a) A condenser, such that the outlet gas temperature does not exceed the following levels:

(i) Minus 25 degrees Celsius (minus 13 degrees Fahrenheit) when the sum of the partial pressure or pressures of the volatile organic compound or compounds in the gas stream, as measured at 20 degrees Celsius (68 degrees Fahrenheit), is greater than 300 millimeters of mercury (5.8 pounds per square inch).

(ii) Minus 15 degrees Celsius (5 degrees Fahrenheit) when the sum of the partial pressure or pressures of the volatile organic compound or compounds in the gas stream, as measured at 20 degrees Celsius (68degrees Fahrenheit), is greater than 150 millimeters of mercury (2.9 pounds per square inch).

(iii) Zero degrees Celsius (32 degrees Fahrenheit) when the sum of the partial pressure or pressures of the volatile organic compound or compounds in the gas stream, as measured at 20 degrees Celsius (68degrees Fahrenheit), is greater than 75 millimeters of mercury (1.5 pounds per square inch).

(iv) Ten degrees Celsius (50 degrees Fahrenheit) when the sum of the partial pressure or pressures of the volatile organic compound or compounds in the gas stream, as measured at 20 degrees Celsius (68 degrees Fahrenheit), is greater than 52.5 millimeters of mercury (1.0 pounds per square inch).

(v) Twenty-five degrees Celsius (77 degrees Fahrenheit) when the sum of the partial pressure or pressures of the volatile organic compound or compounds in the gas stream, as measured at 20 degrees Celsius (68 degrees Fahrenheit), is greater than 26.2 millimeters of mercury (0.5 pounds per square inch).

(b) An alternative control technology, the use of which results in an emission level no greater than would occur by meeting the provisions of subdivision (a) of this subrule. For purposes of comparing the actual emission level from an alternative control technology to the allowable emission level resulting from meeting the provisions of subdivision (a) of this subrule, the actual emission level shall be determined using the methods described in R 336.2004 and the allowable emission level shall be determined using the calculation methods described in appendix B of "Control of Volatile Organic Emissions From Manufacture of Synthesized Pharmaceutical Products," EPA-450/2-78-029, December 1978. Appendix B of EPA-450/2-78-029 is adopted by reference in these rules. A copy of the document may be obtained without charge from the Air Quality Division, Department of Environmental Quality, 106 West Allegan Street, P. O. Box 30260, Lansing, Michigan 48909-7760, or from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, Document No. PB-290580, at a cost as of the time of adoption of these rules of $41.00 each.

(3) For the purpose of this rule, the sum of the partial pressure or pressures of the volatile organic compound or compounds in the gas stream is to be determined as follows:

Where:

Pt = Sum of the partial pressures of all volatile organic compounds.

Pi = Vapor pressure of volatile organic compounds at 20 degrees Celsius (68 degrees Fahrenheit).

Xi = Mole fraction of volatile organic compounds in liquid mixture.

n = Number of different volatile organic compounds in liquid mixture.

i = Individual volatile organic compound.

The mole fraction, Xi, is determined as follows:
Xi = moles of "i" in liquid mixture total moles of liquid mixture

The total moles of liquid mixture shall include both the moles of volatile organic compounds and volatile inorganic compounds (such as water) in the liquid mixture.

(4) Notwithstanding the provisions of subrule (2)(a) of this rule, a person shall not be required to reduce the temperature of a gas stream below the freezing point of a condensable component in that gas stream if it can be demonstrated, using intrinsic chemical data, to the satisfaction of the department, that in doing so, the condenser would be rendered ineffective. In this case, the temperature of the gas stream shall be reduced as low as can be achieved without freezing of the condenser occurring.

(5) The provisions of this rule do not apply to any single existing reactor, distillation operation, crystallizer, centrifuge, or vacuum dryer that has a maximum uncontrolled volatile organic compound emission rate of less than 15 pounds per day.

(6) A person shall not operate an existing air dryer or production equipment exhaust system unless the volatile organic compound emissions from this equipment are reduced by not less than 90% if the uncontrolled volatile organic compound emissions are 330 pounds per day or more or are reduced to less than or equal to 33 pounds per day if the uncontrolled volatile organic compound emissions are less than 330 pounds per day.

(7) A person shall not load or allow the loading of a volatile organic compound that has a vapor pressure of more than 210 millimeters of mercury (4.1 pounds per square inch), as measured at 20 degrees Celsius (68 degrees Fahrenheit), from a truck or railcar into an existing stationary vessel of more than a 2,000-gallon capacity, unless a vapor balance system or an alternate control system that provides not less than 90% control of loading emissions is utilized.

(8) A person shall not store a volatile organic compound that has a vapor pressure of more than 75 millimeters of mercury (1.5 pounds per square inch), as measured at 20 degrees Celsius (68 degrees Fahrenheit), in an existing aboveground stationary vessel, unless the stationary vessel is equipped with a pressure/vacuum conservation vent set at plus or minus 1.5 millimeters of mercury (0.03 pounds per square inch) or an alternate control system at least as effective. For purposes of comparing the actual emission level from an alternative control technology to the allowable emission level resulting from the use of a pressure/vacuum conservation vent meeting this requirement, the actual emission level shall be determined using the methods described in R 336.2004 and the allowable emission level shall be determined using the calculation methods described in appendix B of "Control of Volatile Organic Emissions From Manufacture of Synthesized Pharmaceutical Products," EPA-450/2-78-029, December 1978. Appendix B of EPA-450/2-78-029 is adopted by reference in subrule (2)(b) of this rule.

(9) A person shall not operate an existing centrifuge, rotary vacuum filter, or other filter that has an exposed liquid surface, where the liquid contains a volatile organic compound or compounds and the sum of the partial pressure or pressures of volatile organic compound or compounds is 26.2 millimeters of mercury (0.5 pounds per square inch) or more, as measured at 20 degrees Celsius (68 degrees Fahrenheit), unless the equipment is enclosed.

(10) A person shall not operate an existing in-process tank that may contain a volatile organic compound at any time, unless the tank is equipped with a cover and the cover remains closed, except when production, sampling, maintenance, or inspection procedures require operator access.

(11) A person shall not operate any existing equipment utilized in the manufacturing of synthesized pharmaceutical products from which a liquid containing a volatile organic compound or compounds can be observed dripping or running, unless the leak is repaired immediately, if possible, but not later than the first time the equipment is off-line for a period of time that is long enough to complete the repair.

(12) A person who is responsible for the operation of a synthesized pharmaceutical process subject to the provisions of this rule shall obtain current information and maintain records that are necessary for a determina-tion of compliance with the provisions of this rule. The information shall include all of the following:

(a) For operations subject to the provisions of subrule (2) of this rule, all of the following information:

(i) A list of all volatile organic compounds in each gas stream.

(ii) The vapor pressure, as measured at 20 degrees Celsius (68 degrees Fahrenheit), of each volatile organic compound.

(iii) The mole fraction of each volatile organic compound in the liquid mixture.

(iv) Continuous records of the gas outlet temperature of each condenser orof a parameter that ensures proper operation of an equivalent control device used pursuant to subrule (2)(b) of this rule.

(b) For operations that are in compliance with the exemption provisions of subrule (5) of this rule, the amount of material entering and exiting each reactor, distillation operation, crystallizer, centrifuge, and vacuum dryer.

(c) For air dryers subject to the provisions of subrule (6) of this rule, the amount of material entering and exiting each air dryer.

(d) For operations subject to the provisions of subrule (7) of this rule, the following information:

(i) The date when each stationary vessel is loaded.

(ii) The type and vapor pressure, as measured at 20 degrees Celsius (68 degrees Fahrenheit), of each volatile organic compound loaded into each stationary vessel.

(e) For operations subject to the provisions of subrule (9) of this rule, all of the following information:

(i) A list of all volatile organic compounds in the liquid.

(ii) The vapor pressure, as measured at 20 degrees Celsius (68 degrees Fahrenheit), of each volatile organic compound.

(iii) The mole fraction of each volatile organic compound in the liquid mixture.

(f) For operations subject to the provisions of subrule (11) of this rule, the following information:

(i) The date each leak was detected.

(ii) The date each leak was repaired.

History: 1981 AACS; 1993 AACS; 2000 AACS.

R 336.1626 Rescinded.

History: 1981 AACS; 1989 AACS.

R 336.1627 Delivery vessels; vapor collection systems.

Rule 627. (1) A person shall not operate any delivery vessel that is subject to control by a vapor collection system, either vapor balance or recovery system, required by R 336.1606, R 336.1607, R 336.1608, R 336.1609, R 336.1703, R 336.1704, R 336.1705, or R 336.1706, unless all of the provisions of this rule are met.

(2) Delivery vessels shall comply with all requirements described in the U.S. Environmental Protection Agency Method 27, as adopted by reference in R 336.2004(1)(u).

(3) The owner of any delivery vessel that is subject to subrule (1) of this rule shall test the delivery vessel in accordance with R 336.2004(1)(u) within 1 year of the date of the previous test. Notification of the exact time and location of the test shall be given to the department, in writing, not less than 7 days before the actual test. If the time or location of the test changes for any reason, then the owner or operator shall notify the department as soon as practical.

(4) The test shall comply with documentation requirements described in the U.S. Environmental Protection Agency Method 27 and shall be submitted to the department within 30 days of the test completion and in a form acceptable to the department. Upon successful completion of the required testing, the vessel shall be deemed provisionally certified providing the department does not invalidate the certification by issuing disapproval within 45 days of receipt of the results.

(5) There shall be no visible liquid leaks from the vessel or collection system, except when the disconnection of dry breaks in liquid lines produces a few drops of liquid.

(6) A person shall not operate any vapor collection system, either vapor balance or recovery system, required by R 336.1606, R 336.1607, R 336.1608, R 336.1609, R 336.1703, R 336.1704, R 336.1705, or R 336.1706, unless all of the provisions of subrules (7) to (11) of this rule are met.

(7) There shall be no gas detector reading greater than or equal to 100% of the lower explosive limit at a distance of 1 inch from the location of the potential leak in the vapor collection system. Leaks shall be detected by a combustible gas detector using the test procedure described in R 336.2005.

(8) There shall be no visible leaks, except from the disconnection of bottom loading dry breaks and from raising top loading vapor heads, where a few drops are permitted.

(9) The vapor collection system shall be designed and operated to prevent gauge pressure in the delivery vessel from exceeding 0.6 pounds per square inch and to prevent vacuum from exceeding -0.2 pounds per square inch gauge.

(10) The department may require the owner or operator of any vapor collection system subject to the provisions of subrule (6) of this rule to test the system in accordance with R 336.2005. The tests shall be conducted within 60 days following receipt of written notification from the department. Notification of the exact time and location of the test shall be given to the department, in writing, not less than 7 days before the actual test. Documentation of the test that states the date and location of the test, test procedures, the type of equipment used, and the results of the test shall be submitted to the department within 60 days following the last date of the test. If the time or location of the test changes for any reason, then the owner or operator shall notify the department as soon as practical.

(11) Any delivery vessel or component of a vapor collection system that fails to meet any provision of this rule shall not be operated until the necessary repairs have been made, the vessel or collection system has been retested, and the test results have been submitted to the department.

History: 1981 AACS; 1993 AACS; 2002 AACS; 2006 AACS.

R 336.1628 Emission of volatile organic compounds from components of existing process equipment used in manufacturing synthetic organic chemi-cals and polymers; monitoring program.

Rule 628. (1) A person shall not cause or allow the emission of a vola-tile organic compound from a component of existing manufacturing process equipment at a synthetic organic chemical and polymer manufacturing plant located in any of the following counties, unless all of the provisions of subrules (2) to (16) of this rule are met or unless an equiva-lent control method, as approved by the department, including the control method described in 40 C.F.R., subpart VV, §§60.480 to 60.489 (2000), standards of performance for equipment leaks of volatile organic compound in the synthetic organic chemicals manufacturing industry, is implemented:

(a) Kent.
(b) Livingston.
(c) Macomb.
(d) Monroe.
(e) Muskegon.
(f) Oakland.
(g) Ottawa.
(h) St. Clair.
(i) Washtenaw.
(j) Wayne.

The provisions of 40 C.F.R., part 60, subpart VV, §§60.480 to 60.489 (2000), are adopted by reference in these rules and are available for inspection and purchase at the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, at cost. Copies may be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost as of the time of adoption of these rules of $66.00, or on the United States government printing office internet web site at http://www.access.gpo.gov.

(2) A person shall not operate existing manufacturing process equipment at a synthetic organic chemical and polymer manufacturing plant unless a monitoring program is implemented. The monitoring program shall provide for all of the following:

(a) A quarterly inspection of all components in light liquid or gaseous volatile organic compound service that are not designated as diffi-cult-to-monitor components.

(b) An annual inspection of all difficult-to-monitor components in light liquid or gaseous volatile organic compound service. Annual inspections shall take place during the period of April 1 through June 30.

(c) A weekly visual inspection of all seals of pumps in light liquid service.

(d) An immediate inspection of all components from which a liquid, which includes a volatile organic compound, is observed dripping or from which a gaseous volatile organic compound is observed venting to the atmosphere.

(e) Within 2 normal business days of its venting to the atmosphere, an inspection of each relief valve from which a volatile organic compound could discharge.

(f) An inspection, as soon as is practical, but not later than 5 calendar days, after the repair of a component that was found leaking.

(3) Except for the visual inspections required by the provisions of subrule (2)(c) of this rule, all inspections shall be performed using equipment and procedures as specified in federal reference test method 21 as described and adopted by reference in R 336.2004. A component is leaking when a concentration of more than 10,000 ppm, by volume, as methane or hexane, is measured by method 21.

(4) If implementation of the quarterly leak detection program as speci-fied in subrule (2)(a) of this rule shows that 2% or less of the process valves in a given process unit are leaking for 2 consecutive quarters, then the inspections of process valves in that unit are not required for 1 quarter. If 2% or less of the process valves in a given process unit are leaking for 5 consecutive quarters, then the inspections may be performed annually. If a subsequent inspection shows that more than 2% of the process valves are leaking, then quarterly inspections of valves shall again be required.

(5) The percentage of valves leaking on a process unit, as referenced in subrule (4) of this rule, shall be determined by dividing the total number of valves found to be leaking on the process unit during the specified monitoring period by the total number of valves on the process unit that are required to be monitored by this rule.

(6) The provisions of subrule (2) of this rule do not apply to either of the following:

(a) A component that is equipped with a closed vent system which is capable of capturing and transporting a leakage from the component to a control device that is designed and operated to reduce the volatile organic compound emissions vented to it by 95% or more.

(b) An unsafe-to-monitor component, until conditions would no longer expose monitoring personnel to immediate danger.

(7) The provisions of this rule do not apply to any of the following:

(a) A component that contains or contacts a gaseous stream with a volatile organic compound concentration of less than 10% by weight. Procedures that conform to the general methods in ASTM standards E260, E168, and E169 shall be used to determine the percentage of volatile organic compound contents in the process fluid that is contained in or contacts a piece of equipment. The provisions of ASTM standards E260, E168, and E169 are adopted by reference in these rules. Copies of the standards may be inspected at the Lansing office of the air quality division of the department of Environmental Quality. Copies of the standards may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, or from the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, at a cost as of the time of adoption
of these rules of $35.00 each for E260 and E168 and $30.00 for E169.

(b) A component that operates under a vacuum.

(c) Components of synthetic organic chemical and polymer manufacturing process units that produce 1,100 tons per calendar year or less of light liquid or gaseous volatile organic compounds.

(d) A relief valve that has an upstream rupture disc.

(8) A person shall seal open-ended lines with a second valve, a blind flange, a cap, or a plug, except when the open end is in use, as with relief valves, double block and bleed valves, and composite samplers. In the case of a second valve, the upstream valve shall be closed first after each use.

(9) A component that is found to be leaking pursuant to the monitoring program provisions of subrule (2) of this rule or for another reason shall be repaired. Except as provided in subrule (11) of this rule, the leak shall be repaired as soon as possible, but not more than 15 days after the leak is detected. Until such time as the leak is repaired and retested verify-ing a successful repair, the component that is causing the leak shall bear a weather-resistant, numbered identifying tag that indicates the date the leak was discovered.

(10) A log of all leaks that are detected under subrule (2) of this rule shall be maintained by the person who operates the synthetic organic chemical and polymer manufacturing plant. The log shall list all of the following information:

(a) The leaking component and synthetic organic chemical and polymer manufacturing process unit.

(b) The number of the identifying tag.

(c) The date the leak was discovered.

(d) The date the leak was repaired.

(e) The date the component was retested after the repair, with an indica-tion of the testing results.

(f) The person or persons who performed the inspections.

(11) All of the following provisions apply to delays in the repair of leaking components:

(a) If a leak cannot be repaired within 15 calendar days because the leaking component cannot be repaired unless the synthetic organic chemical and polymer manufacturing process unit is shut down, then the person who operates the synthetic organic chemical and polymer manufacturing plant shall main-tain a log of the nonrepair and the leak shall be repaired at the next unit turnaround.

(b) If a leak cannot be repaired within 15 calendar days due to circum-stances beyond the control of the person who operates the synthetic organic chemical and polymer manufacturing plant, then the person shall notify the department of the circumstanc-es causing the delay in repair before the end of the fifteenth day and shall maintain a log of the nonrepair. The leak shall be repaired in an expeditious manner, which shall be within 6 months of the date the leak was detected.

(c) The log specified in subdivisions (a) and (b) of this subrule shall list all of the following information:

(i) The leaking component and synthetic organic chemical and polymer manufacturing process unit.

(ii) The date on which the leak was discovered.

(iii) The reason why the leak cannot be repaired within 15 days.

(iv) The estimated date of repair.

(v) The number of the identifying tag.

(12) A log of all unsafe-to-monitor components that are not part of the written program as required by subrule (14) of this rule shall be main-tained by the person who operates the synthetic organic chemical and polymer manufac-turing plant. This log shall list all of the following information:

(a) The unsafe-to-monitor component and synthetic organic chemical and polymer manufacturing process unit.

(b) The number of the identifying tag.

(c) The reason why the component was unsafe to monitor.

(d) The date, or dates, on which the component was unsafe to monitor.

(13) Not later than 25 calendar days after the end of the previous quarter, the person who operates the synthetic organic chemical and polymer manufacturing plant shall submit, to the department, a report that contains all of the following information for that quarter:

(a) The total number of components tested, by type.

(b) The total number of components which are found leaking and which are repaired, by type.

(c) The total number of components, by synthetic organic chemical and polymer manufacturing process unit and type, which are found to be leaking and which are not repaired within the required time period and the reason for nonrepair.

(d) The type or types of monitoring equipment utilized during the quarter.

(e) The total number of unsafe-to-monitor components that are logged

as required by the provisions of subrule (12) of this rule. The report required by this subrule shall be made on a form that is provided by the department.

(14) A person who is subject to the provisions of this rule shall comply with both of the following provisions:

(a) Develop a written program detailing how the provisions of this rule will be implemented. The program shall include listings, by type and synthetic organic chemical and polymer manufacturing process unit, of all of the following:

(i) All components that are regularly inspected as required in subrule (2) of this rule.

(ii) All components that are equipped with a closed vent system subject to the provisions of subrule (6)(a) of this rule.

(iii) All components that are exempted from the provisions of this rule pursuant to the provisions of subrule (7)(b), (c), and (d) of this rule.

(iv) All difficult-to-monitor components in light liquid or gaseous volatile organic compound service.

(v) All components which are located outside a building, which can only be monitored by elevating the monitoring personnel more than 6 feet above ground level, and which are unsafe to monitor during the period of November 1 through March 31.

(b) Except as noted in subrule (16) of this rule, begin inspections as required in subrule (2) of this rule not later than 6 months after the effective date of this rule.

(15) The written program required by the provisions of subrule (14) of this rule and the logs required by the provisions of subrules (10), (11), and (12) of this rule shall be made available, to any representative of the department, on Monday through Friday between 9 a.m. and 5 p.m., at the synthetic organic chemical and polymer manufacturing plant. The logs shall be kept for a minimum of 2 years.

(16) If a synthetic organic chemical and polymer manufacturing process unit that was previously exempt pursuant to the provisions of subrule (7)(c) of this rule produces light liquid or gaseous volatile organic compounds in excess of 1,100 tons in a calendar year, then the provisions of this rule shall apply. Inspections shall begin not later than 6 months after the end of that calendar year and be maintained thereafter.

History: 1989 AACS; 1993 AACS; 1997 AACS; 2002 AACS.

R 336.1629 Emission of volatile organic compounds from components of existing process equipment used in processing natural gas; monitoring program.

Rule 629. (1) A person shall not cause or allow the emission of a volatile organic compound from a component of existing process equipment at a natural gas processing plant located in any of the following counties, unless all of the provisions of subrules (2) to (16) of this rule are met or unless an equivalent control method, as approved by the department, is implemented:

(a) Kent.
(b) Livingston.
(c) Macomb.
(d) Monroe.
(e) Muskegon.
(f) Oakland.
(g) Ottawa.
(h) St. Clair.
(i) Washtenaw.
(j) Wayne.

(2) A person shall not operate existing process equipment at a natural gas processing plant unless a monitoring program is implemented. The monitoring program shall provide for all of the following:

(a) A quarterly inspection of all components in gaseous or liquid vola-tile organic compound service that are not designated as difficult-to-monitor components.

(b) An annual inspection of all difficult-to-monitor components in gaseous or liquid volatile organic compound service. Annual inspections shall take place during the period of April 1 through June 30.

(c) A weekly visual inspection of all pump seals from which volatile organic compounds could leak.

(d) An immediate inspection of all components from which a liquid, which includes a volatile organic compound, is observed dripping or from which a gaseous volatile organic compound is observed venting to the atmosphere.

(e) Within 2 normal business days of its venting to the atmosphere, an inspection of each relief valve from which a volatile organic compound could discharge.

(f) An inspection, as soon as is practical but not later than 5 calendar days after the repair, of a component that was found leaking.

(3) Except for the visual inspections required by the provisions of subrule (2)(c) of this rule, all inspections shall be performed using equipment and procedures as specified in federal reference test method 21 as described and adopted by reference in R 336.2004. A component is leaking when a concentration of more than 10,000 ppm, by volume, as methane or hexane, is measured by method 21.

(4) If implementation of the quarterly leak detection program as speci-fied in subrule (2)(a) of this rule shows that 2% or less of the process valves in a given process unit are leaking for 2 consecutive quarters, then the inspections on process valves in that process unit are not required for 1 quarter. If 2% or less of the process valves in a given process unit are leaking for 5 consecutive quarters, then the inspection may be per-formed annually. If a subsequent inspection shows

that more than 2% of the process valves are leaking, then quarterly inspections of valves shall again be required.

(5) The percentage of valves leaking on a process unit, as referenced in subrule (4) of this rule, shall be determined by dividing the total number of valves that are found to be leaking on the process unit during the specified monitoring period by the total number of valves on the process unit that are required to be monitored by this rule.

(6) A relief valve that is located in a nonfractionating plant that is inspected only by nonplant personnel may be inspected after a pressure release the next time that the inspecting personnel are at the plant, instead of within 5 days as specified in subrule (2)(e) of this rule. A relief valve shall not be allowed to operate for more than 30 days after a pressure release without an inspection.

(7) The provisions of subrule (2) of this rule do not apply to any of the following:

(a) A component that is equipped with a closed vent system which is capable of capturing and transporting a leakage from the component to a control device that is designed and operated to reduce the volatile organic compound emissions vented to it by 95% or more.

(b) A pump which is equipped with a dual seal system that includes a barrier fluid and which is equipped with a sensor that will detect a failure of the seal system.

(c) An unsafe-to-monitor component, until conditions do not expose monitoring personnel to immediate danger.

(8) The provisions of this rule do not apply to any of the following:

(a) A component, except any in field gas service, that contains or contacts a process stream that has a volatile organic compound concentra-tion of less than 1.0% by weight. A component in field gas service is excluded from the provisions of this subrule. Procedures that conform to the general
methods in ASTM standards E260, E168, and E169 shall be used to determine the percentage of volatile organic compound contents in the process fluid that is contained in or contacts a piece of equipment. ASTM standards E260, E168, and E169 are adopted by reference in R 336.1628.

(b) A component that operates under a vacuum.

(c) A component in heavy liquid service.

(d) A reciprocating compressor in field gas service.

(e) A natural gas processing plant which has a capacity of less than 10,000,000 cubic feet per day and which does not fractionate natural gas liquids.

(f) A relief valve that has an upstream rupture disc.

(9) A person shall seal open-ended lines with a second valve, a blind flange, a cap, or a plug, except when the open end is in use, as with
relief valves and double block and bleed valves. In the case of a second valve, the upstream valve shall be closed first after each use.

(10) A component that is found to be leaking pursuant to the monitoring program provisions of subrule (2) of this rule or for another reason shall be repaired. Except as provided in subrule (12) of this rule, the leak shall be repaired as soon as possible, but not more than 15 days after the leak is detected. Until such time as the leak is repaired and retested verify-ing a successful repair, the component that is causing the leak shall bear a weather-resistant, numbered identifying tag that indicates the date the leak was discovered.

(11) A log of all leaks that are detected pursuant to the provisions of this rule shall be maintained by the person who operates the natural gas processing plant. The log shall list all of the following information:

(a) The leaking component and natural gas process unit.

(b) The number of the identifying tag.

(c) The date the leak was discovered.

(d) The date the leak was repaired.

(e) The date the component was retested after the repair, with an indica-tion of the testing results.

(f) The person or persons who performed the inspections.

(12) All of the following provisions apply to delays in the repair of leaking components:

(a) If a leak cannot be repaired within 15 calendar days because the leaking component cannot be repaired unless the natural gas process unit is shut down, then the person who operates the natural gas processing plant shall maintain a log of the nonrepair and the leak shall be repaired at the next unit turnaround.

(b) If a leak cannot be repaired within 15 calendar days due to circumstances beyond the control of the person who operates the natural gas processing plant, then the person shall notify the department of the circum-stances causing the delay in repair before the end of the fifteenth day and shall maintain a log of the nonrepair. The leak shall be repaired in an expedi-tious manner, which shall not be more than 6 months from the date the leak was detected.

(c) The log specified in subdivisions (a) and (b) of this subrule shall list all of the following information:

(i) The leaking component and natural gas process unit.

(ii) The date on which the leak was discovered.

(iii) The reason why the leak cannot be repaired within 15 days.

(iv) The estimated date of repair.

(v) The number of the identifying tag.

(13) A log of all unsafe-to-monitor components that are not part of the written program as required by the provisions of subrule (15) of this rule shall be main-tained by the person who operates the natural gas processing plant. The log shall list all of the follow-ing information:

(a) The unsafe-to-monitor component and natural gas process unit.

(b) The number of the identifying tag.

(c) The reason why the component was unsafe to monitor.

(d) The date, or dates, on which the component was unsafe to monitor.

(14) Not later than 25 calendar days after the end of the previous quarter, the person who operates the natural gas processing plant shall submit, to the department, a report that contains all of the following information for that quarter:

(a) The total number of components tested, by type.

(b) The total number of components which are found leaking and which are repaired, by type.

(c) The total number of components, by natural gas process unit and type, which are found to be leaking and which are not repaired within the required time period and the reason for nonrepair.

(d) The type or types of monitoring equipment utilized during the quarter.

(e) The total number of unsafe-to-monitor components that are logged as required by the provisions of subrule (13) of this rule.The report required by this subrule shall be made on a form that is provided by the department.

(15) A person who is subject to the provisions of this rule shall comply with both of the following provisions:

(a) Develop a written program detailing how the provisions of this rule will be implemented. The program shall include listings, by type and natural gas process unit, of all of the following:

(i) All components that are regularly inspected as required in subrule (2) of this rule.

(ii) All components that are subject to the provisions of subrule (7)(a) and (b) of this rule.

(iii) All components that are exempted from the provisions of this rule pursuant to the provisions of subrule (8) of this rule.

(iv) All difficult-to-monitor components in gaseous or liquid volatile organic compound service.

(v) All components which are located outside a building, which can only be monitored by elevating the monitoring personnel more than 6 feet above
ground level, and which are unsafe to monitor during the period of November 1 through March 31.

(b) Begin inspections, as required in subrule (2) of this rule, not later than 6 months after the effective date of this rule.

(16) The written program required by the provisions of subrule (15) of this rule and the logs required by the provisions of subrules (11), (12), and (13) of this rule shall be made available, to any representative of the department, on Monday through Friday between 9 a.m. and 5 p.m., at the natural gas processing plant. The logs shall be kept for a minimum of 2 years.

History: 1989 AACS; 1993 AACS; 2002 AACS.

R 336.1630 Emission of volatile organic compounds from existing paint manufacturing processes.

Rule 630. (1) After April 19, 1990, a person shall not cause or allow

the emission of a volatile organic compound from existing equipment utilized in paint manufacturing located in any of the following counties, unless all of the provisions of subrules (2) to (4) of this rule are met or unless an equivalent control method, as approved by the department, is implemented:

(a) Kent.
(b) Livingston.
(c) Macomb.
(d) Monroe.
(e) Muskegon.
(f) Oakland.
(g) Ottawa.
(h) St. Clair.
(i) Washtenaw.
(j) Wayne.

(2) All stationary and portable mixing tanks and high speed dispersion mills shall be equipped with covers that completely cover the
tank or mill opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shaft. The tank opening shall be covered at all times, except when operator access is necessary.

(3) The cleaning of paint manufacturing equipment and paint shipping containers shall be done by methods and materials that minimize the emission of volatile organic compounds. These methods and materials shall include 1 of the following:

(a) Hot alkali or detergent cleaning.
(b) High-pressure water cleaning.
(c) Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the method and materials being used.

(4) Wash solvent shall be stored only in closed containers.

(5) The provisions of this rule do not apply to tanks or equipment which, pursuant to the provisions of this subrule that were in effect on April 19, 1989, was exempt from the provisions of this rule that were in effect on April 19, 1989, but which are now subject to the provisions of this rule, until 1 year after the effective date of this rule.

History: 1989 AACS; 1993 AACS; 2002 AACS.

R 336.1631 Emission of volatile organic compounds from existing process equipment utilized in manufacture of polystyrene or other organic resins.

Rule 631. (l) After December 31, 1989, a person shall not cause or allow the emission of volatile organic compounds from existing process equipment that is utilized in the manufacturing of polystyrene or other organic resins located in any of the following counties, unless all of the provisions of subrules (2) to (10) of this rule are met or unless an equivalent control method, as approved by the department, is implemented:

(a) Kent.
(b) Livingston.
(c) Macomb.
(d) Monroe.
(e) Muskegon.
(f) Oakland.
(g) Ottawa.
(h) St. Clair.
(i) Washtenaw.
(j) Wayne.

(2) The emission of volatile organic compounds from existing material recovery equipment that is utilized in the manufacture of polystyrene resin by a continuous process shall not be more than 0.12 pounds per 1,000 pounds of polystyrene resin produced.

(3) A person shall not operate an existing reactor, thinning tank, or blending tank that is utilized in the manufacture of a completed organic resin unless either of the following provisions is complied with:

(a) All volatile organic compounds emitted from existing reactors, thinning tanks, and blending tanks shall be vented to control equipment that is designed and operated to reduce the quantity of volatile organic compounds by not less than 95 weight percent. Reflux condensers that are essential to the operation of the resin reactor are not considered to be control equipment.

(b) The total volatile organic compounds emitted to the atmosphere from the reactors, thinning tanks, and blending tanks do not exceed 0.5 pounds per 1,000 pounds of completed organic resin produced.

(4) Notwithstanding the provisions of subrule (3) of this rule, a person shall not operate an existing reactor, thinning tank, or blending tank utilized in the manufacture of a dry organic resin at the Solutia, inc. of Trenton unless either of the following provisions is complied with:

(a) All volatile organic compounds emitted from existing reactors, thinning tanks, and blending tanks shall be vented to control equipment that is designed and operated to reduce the quantity of volatile organic compounds by not less than 95 weight percent. Reflux condensers that are essential to the operation of the resin reactor are not considered to be control equipment.

(b) The total volatile organic compounds emitted to the atmosphere from the reactors, thinning tanks, and blending tanks do not exceed 2.6 pounds per 1,000 pounds of dry organic resin produced.

(5) Compliance with the emission limits specified in subrules (2), (3), and (4) of this rule shall be determined using the method described in R 336.2060 or an alternate method acceptable to the department. Upon request by the department, a person who is responsible for processes that are subject to the provisions of subrule (2), (3), or (4) of this rule shall submit, to the department, test data necessary for a determination of compliance.

(6) Not later than 3 months after the effective date of this rule and thereafter, a person who is responsible for processes that are subject to the provisions of subrule (2), (3), or (4) of this rule shall obtain current information and keep records necessary for a determination of compliance with the provisions of this rule. This information may include any of the following information:

(a) Emissions test data.

(b) Material balance calculations.

(c) Process production rates.

(d) Control equipment specifications and operating parameters.

(7) A person who is responsible for the operation of existing process equipment that is subject to the provisions of this rule shall submit, to the department, a written program for compliance with this rule or evidence of compliance with this rule. The written program for compliance shall be submitted to the department before October 19, 1989.

(8) The program required by subrule (7) of this rule shall include the method by which compliance with this rule shall be achieved, a description of new equipment to be installed or modifications to existing equipment to be made, and a timetable that specifies, at a minimum, all of the following dates:

(a) The date or dates equipment shall be ordered.

(b) The date or dates construction, modification, or process changes shall begin.

(c) The date or dates initial start-up of equipment shall begin.

(d) The date or dates final compliance shall be achieved.

(9) A person may discontinue the operation of a natural gas-fired afterburner, which is used to achieve compliance with the emission limits in this rule, between November 1 and March 31 unless the afterburner is used to achieve compliance with, or is required by, any of the following:

(a) Any other provisions of these rules.

(b) A permit to install.

(c) A permit to operate.

(d) A voluntary agreement.

(e) A performance contract.

(f) A stipulation.

(g) An order of the department.

(10) If the operation of a natural gas-fired afterburner is discontinued between November 1 and March 31 pursuant to the provisions of subrule (9) of this rule, then both of the following provisions shall apply during this time period:

(a) All other provisions of this rule, except for the emission limits, shall remain in effect.

(b) All other measures that are used to comply with the emission limits in this rule between April 1 and October 31 shall continue to be used.

History: 1989 AACS; 1993 AACS; 2002 AACS.

R 336.1632 Emission of volatile organic compounds from existing automobile, truck, and business machine plastic part coating lines.

Rule 632. (1) A person shall not cause or allow the emission of volatile organic compounds from an automobile, truck, or business machine plastic part coating line in any of the following counties unless all of the provisions of subrules (2) to (21) of this rule are met:

(a) Kent.
(b) Livingston.
(c) Macomb.
(d) Monroe.
(e) Muskegon.
(f) Oakland.
(g) Ottawa.
(h) St. Clair.
(i) Washtenaw.
(j) Wayne.

(2) After December 31, 1989, and until December 31, 1992, a person shall not cause or allow the emission of volatile organic compounds from the coating of plastic parts of automobiles and trucks from any existing coating line in excess of the applicable emission rates as specified in table 65.

(3) After December 31, 1992, both of the following provisions shall be met:

(a) A person shall not cause or allow the emission of volatile organic compounds from the coating of plastic parts of automobiles and trucks from any existing coating line in excess of the applicable emission rates as specified in table 66.

(b) Except as provided for in subrule (16) of this rule, any coating that is subject to an emission rate specified in table 66 shall not be applied with conventional air-atomizing spray equipment. All spray equipment shall be installed, maintained, and operated in accordance with the recommendations and design of the equipment manufacturer.

(4) After December 31, 1991, both of the following provisions shall be met:

(a) A person shall not cause or allow the emission of volatile organic compounds from the coating of plastic parts of business machines from any existing coating line in excess of the applicable emission rates as specified in table 67.

(b) Except as provided for in subrule (16) of this rule, any prime or topcoat coating that is subject to the emission rate specified in table 67 shall not be applied with air-atomizing spray equipment. All spray equipment shall be installed, maintained, and operated in accordance with the recommendations and design of the equipment manufacturer.

(5) If a part consists of both plastic and metal surfaces and is exempted from the provisions of R 336.1621 based on the provisions of R 336.1621(9)(e), the part shall be subject to this rule.

(6) If a coating line is subject to the provisions of R 336.1610 or R 336.1621, the coating line shall be exempt from this rule.

(7) A person who is responsible for the operation of a coating line that is subject to this rule shall obtain current information and maintain daily records necessary for a determination of compliance with the provisions of this rule, as required in R 336.2041.

(8) For each coating line, compliance with the emission limits specified in this rule shall be based upon all of the following:

(a) The volume-weighted average of all coatings which belong to the same coating category and which are used during each calendar day averaging period. The commission may specifically authorize compliance to be based upon a longer averaging period, which shall not be more than 1 calendar month.

(b) If coatings belonging to more than 1 coating category are used on the same coating line during the specified averaging period, then compliance shall be determined separately for each coating category.

(c) The information and records as required by subrule (7) of this rule.

(9) Compliance with the emission limits specified in this rule shall be determined using the applicable method described in the following subdivisions:

(a) For the emission limits specified in subrules (2) to (4) of this rule, the method described in either R 336.2040(12)(a) if the coating line does not have an add-on emissions control device or R 336.2040(12)(b) if the coating line has 1 or more add-on emissions control devices.

(b) For the emission limits established pursuant to the provisions of subrule (13) or (14) of this rule, the method described in R 336.2040(12) that is applicable to the form of these established emission limits.

(10) A person who is responsible for the operation of an existing coating line that is subject to the provisions of this rule shall submit, to the commission, an acceptable written program for compliance with, or evidence of compliance with, the provisions of subrules (3) and (4) of this rule. This evidence shall include available emission test data, material balance calculations, control equipment specifications, or other information that demonstrates compliance. The written program for compliance or evidence of compliance shall be submitted to the commission according to the following schedule:

(a) Before July 1, 1990, for compliance with the provisions of subrule (4) of this rule.

(b) Before July 1, 1991, for compliance with the provisions of subrule (3) of this rule.

(11) The program for compliance that is required by the provisions of subrule (10) of this rule shall include the method by which compliance with this rule shall be achieved, a description of the new equipment to be installed or modifications to existing equipment to be made, and a timetable that specifies, at a minimum, all of the following dates:

(a) The date or dates equipment shall be ordered.

(b) The date or dates construction, modification, or process changes shall begin.

(c) The date or dates initial start-up of equipment shall begin.

(d) The date or dates final compliance shall be achieved if the date or dates are not the same as the date or dates specified in subdivision (c) of this subrule.

(12) A modification of coating applicator equipment for the primary purpose of achieving compliance with the provisions of subrules (3)(b) and (4)(b) of this rule, to the extent that such modification does not increase the potential to emit, shall not be subject to the provisions of R 336.1220 and R 336.1702.

(13) As part of the compliance program required by the provisions of subrule (10) of this rule, a person who is responsible for the operation of a coating line that is subject to this rule may request alternate provisions to those specified in this rule. The commission may establish alternate provisions for a period of time to be specified by the commission if all of the following conditions are met:

(a) The coating line that is subject to the alternate provisions is in compliance, or on a legally enforceable schedule of compliance, with the other rules of the commission.

(b) Compliance with the provisions of this rule is not technically or economically reasonable.

(c) All measures that are both technically feasible and economically reasonable to reduce volatile organic compound emissions as required by this rule have been implemented in accordance with, or will be implemented in accordance with, a schedule approved by the commission.All alternate provisions approved by the commission shall become part of a legally enforceable order or part of an approved permit to install or operate.

(14) The program for compliance that is required by the provisions of subrule (10) of this rule may address a combination of coating lines that are subject to the provisions of this rule, or 1 or more coating lines that are subject to the provisions of this rule in combination with 1 or more existing sources that are subject to the provisions of other rules of this part, if all of the following conditions are met:

(a) All of the requirements specified in the United States environmental protection agency's emissions trading policy statement, 51 F.R. 43814, December 4, 1986, are met. The "Emissions Trading Policy" is herein adopted by reference. A copy of the document may be inspected at the Lansing office of the air quality division of the department of natural resources. A copy of the document may be obtained from the Department of Natural Resources, P.O. Box 30028, Lansing, Michigan 48909, at a cost as of the time of adoption of these rules of $8.00 each.

(b) All existing sources are within the same stationary source.

(c) The total volatile organic compound emissions do not exceed the sum of the emissions allowed from each existing source using calculation methods acceptable to the commission and incorporating all of the requirements of the emissions trading policy statement.

(d) Emission reductions are accomplished in the time interval required for individual existing sources.

(e) All emission limits established by this program become part of a legally enforceable order of the commission, permit to install, or permit to operate.

(15) The provisions of this rule, with the exception of the provisions of subrule (7) of this rule, shall not apply to any of the following:

(a) Plastic coating lines within any stationary source that have a total combined emission rate of volatile organic compounds from plastic coating lines of less than 30 tons per calendar year. The total combined emission rate shall include emissions from coatings and coating operations exempted from this rule. If the total combined emissions equal or exceed 30 tons in any subsequent year, the provisions of this rule shall thereafter permanently apply to these plastic coating lines.

(b) The application of adhesion primes.

(c) The application of electrostatic prep coats.

(d) The application of resist coats.

(e) The application of stencil coats.

(f) The application of texture coats to automobile or truck parts.

(g) The application of vacuum metalizing coatings.

(h) The application of gloss reducer.

(i) A plastic part coating operation consisting of an applicator and any subsequent flash-off area or oven, or both, from which the total emission rate of volatile organic compounds is equal to or less than 2,000 pounds per calendar month and 10.0 tons per calendar year. The total combined emission rate of volatile organic compounds from these exempted operations at a stationary source shall not be more than 30.0 tons per calendar year. If the total emission rate for an operation is more than 2,000 pounds in any subsequent month or 10 tons per year in a subsequent year, the provisions of this rule shall thereafter permanently apply to these plastic part coating operations.

(j) Low-use coatings that total 55 gallons or less per rolling 12-month period at a stationary source.

(16) The provisions of subrules (3)(b) and (4)(b) of this rule shall not apply to the equipment used in any of the following:

(a) The application of the final coat of metallic topcoat.

(b) The application of waterborne coatings.

(c) The application of touch-up and repair coatings.

(d) Coating operations controlled by add-on emission controls.

(e) Coating operations for which an acceptable demonstration has been made that conventional air-atomizing spray equipment is the only technically feasible application method.

(f) Other coating operations that together account for a total of 20% or less of the total volume of coatings applied by nonexempt coating
application equipment calculated on a calendar day basis.

(17) A person may discontinue the operation of a natural gas-fired afterburner, which is used to achieve compliance with the emission limits in this rule, between November 1 and March 31 unless the afterburner is used to achieve compliance with, or is required by, any of the following:

(a) Any other provisions of these rules.

(b) A permit to install.

(c) A permit to operate.

(d) A voluntary agreement.

(e) A performance contract.

(f) A stipulation.

(g) An order of the commission.

(18) If the operation of a natural gas-fired afterburner is discontinued between November 1 and March 31 pursuant to the provisions of subrule (17) of this rule, then both of the following provisions shall apply during this time period:

(a) All other provisions of this rule, except for the emission limits, shall remain in effect.

(b) All other measures that are used to comply with the emission limits in this rule between April 1 and October 31 shall continue to be used.

(19) Table 65 reads as follows:

Table 65

Volatile organic compound emission limitations for existing automobile and truck plastic parts coating lines after 12/31/89

Coating category Pounds of volatile organic compounds allowed to be emitted per gallon of coating (minus water) as applied

1. High bake coating-exterior and interior parts,1,2
(a) Prime
(i) Flexible coating 5.0
(ii) Nonflexible coating 4.0
(b) Topcoat
(i) Basecoat 4.6
(ii) Clearcoat 4.3
(iii) Non-basecoat/clearcoat 4.7

2. Air-dried coating-exterior parts3
(a) Prime1 6.1
(b) Topcoat
(i) Basecoat 5.8
(ii) Clearcoat 5.4
(iii) Non-basecoat/clearcoat 6.3

3. Air-dried coating-interior parts3 6.3

4. Touch-up and repair3 6.3

1. For red and black coatings, the emission limitation shall be determined by multiplying the appropriate limit in this table by 1.15.

2. When method 24 is used to determine the volatile organic compound content of a coating, the applicable emission limitation shall be determined by adding 0.5 to the appropriate limit in this table.

3. When method 24 is used to determine the volatile organic compound content of a coating, the applicable emission limitation shall be determined by adding 0.1 to the appropriate limit in this table.

(20) Table 66 reads as follows:

Table 66

Volatile organic compound emission limitations for existing automobile and truck plastic parts coating lines after 12/31/92

Coating category Pounds of volatile organic compounds allowed to be emitted per gallon of coating (minus water) as applied

1. High bake coating-exterior and interior parts1,2
(a) Prime
(i) Flexible coating 4.5
(ii) Nonflexible coating 3.5
(b) Topcoat
(i) Basecoat 4.3
(ii) Clearcoat 4.0
(iii) Non-basecoat/clearcoat 4.3

2. Air-dried coating-exterior parts1,3
(a) Prime 4.8
(b) Topcoat
(i) Basecoat 5.0
(ii) Clearcoat 4.5

(iii) Non-basecoat/clearcoat 5.0

3. Air-dried coating-interior parts1,3 5.0

4. Touch-up and repair3 5.2

1. For red and black coatings, the emission limitation shall be determined by multiplying the appropriate limit in this table by 1.15.
2. When method 24 is used to determine the volatile organic compound content of a coating, the applicable emission limitation shall be determined by adding 0.5 to the appropriate limit in this table.
3. When method 24 is used to determine the volatile organic compound content of a coating, the applicable emission limitation shall be determined by adding 0.1 to the appropriate limit in this table.

(21) Table 67 reads as follows:

Table 67
Volatile organic compound emission limitations for existing business machine plastic parts coating lines after 12/31/91

Coating category Pounds of volatile organic compounds allowed to be emitted per gallon of coating (minus water) as applied
1. Prime 2.9
2. Topcoat 2.9
3. Texture coat 2.9
4. Fog coat 2.2
5. Touch-up and repair 2.9

History: 1989 AACS; 1993 AACS.

R 336.1651 Standards for degreasers; adoption by reference.

Rule 651. A person responsible for the operation of a degreaser subject to the provisions of 40 C.F.R. part 63, subpart T, §§63.460 to 63.469 (2000), the halogenated solvent cleaning national emission standard for hazardous air pollutants, shall comply with the provisions of 40 C.F.R. part 63, subpart T, §§63.460 to 63.469 (2000). The provisions of 40 C.F.R. part 63, subpart T, §§63.460 to 63.469 (2000), are adopted by reference in these rules and are available for inspection and purchase at the Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, at cost. Copies may also be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost as of the time of adoption of these rules of $66.00, or on the United States government printing office internet

History: 1997 AACS; 2002 AACS.

R 336.1660 Standards for volatile organic compounds emissions from consumer products.

Rule 660. (1) The provisions in the ozone transport commission's (OTC), "Model Rule for Consumer Products," dated September 13, 2006, are adopted by reference in this rule, with the following exceptions:
(a) Section (8), variances.
(b) Section (10), severability.
(c) Section (11)(f), violations.
(d) Where the date "January 1, 2005" appears in the following sections, the department shall instead recognize January 29, 2007:
(i) Section (1), applicability.
(ii) Section (3)(a), table, (f)(1)(i), and (g)(3) standards.
(iii) Section (6)(d)(1), administrative requirements.

(e) Where the date "2005" appears in section 7(d)(2) and (3), the department shall instead recognize 2007. Where the date "March 1, 2006" appears in section 7(d)(2) and (3), the department shall instead recognize March 1, 2008.

(2) Copies of the ozone transport commission's, "Model Rule for Consumer Products," dated September 13, 2006, may be obtained without charge from the Department of Environmental Quality, Air Quality Division, 525 West Allegan Street, P. O. Box 30260, Lansing, Michigan 48909-7760. A copy may also be obtained without charge from the Ozone Transport Commission, Hall of the States, 444 North Capitol Street, Suite 638, Washington, DC 20001, or on the ozone transport commission internet web site at www.otcair.org.

History: 2007 AACS.

R 336.1661 Definitions for consumer products.

Rule 661. As used in R 336.1660:

(a) The "OTC state" means state of Michigan.

(b) "Volatile organic compound" or "VOC" means a compound as defined in 40 C.F.R. §51.100 (2006). For the purpose of clarifying the definition, the provisions of 40 C.F.R. §51.100 (2006) are adopted by reference in these rules. Copies of 40 C.F.R. §51.100 are available for inspection and purchase at the Department of Environmental Quality, Air Quality Division, 525 West Allegan Street, P.O. Box 30260, Lansing, Michigan 48909-7760, at a cost at the time of adoption of these rules of $55.00. Copies may be obtained from the Superintendent of Documents, Government Printing Office, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost at the time of adoption of these rules of $45.00, or on the United States government printing office internet web site at www.gpoaccess.gov.

History: 2007 AACS.