

Texas Commission on Environmental Quality

5 Chapter 115 - Control of Air Pollution from Volatile Organic Compounds

5E Subchapter E : Solvent-Using Processes

5E1 DIVISION 1 : DEGREASING PROCESSES

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Outline:

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EPA Approval Information for Current SIP-Approved Sections

5-78 TXd52 TX014, Sections 412 and 413:

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Errors in Federal Register amendatory language:

** State approval date should be June 3, 2015, NOT June 15, 2015.
** Section 115.415 - the title should be "Testing Requirements", NOT "Testing".
** Section 115.417 should NOT be listed in the amendatory language table on page 82 FR 60549 in the December 21, 2017 Final Rule Federal Register. Section 115.417 was repealed and replaced with new Section 115.411. See page 60547, paragraphs 2(a)(iii) and (iv), in the December 21, 2017 Federal Register. This is also confirmed in the Proposed rule published October 5, 2017 (82 FR 46450) on page 46451 in Regulations.gov document EPA-R06-OAR-2015-0832-0001 [TX179-01]; in the Technical Support Document in Regulations.gov document EPA-R06-OAR-2015-0832-0002 [TX179-02] on pages 7 and 8; in the July 10, 2015 SIP submittal in EPA-R06-OAR-2015-0832-0002 [TX179-03]; and in Chapter 115, Subchapter E, Division 1, as adopted by the Texas Commission on Environmental Quality (TCEQ) June 3, 2015, in the Texas Commission on Environmental Quality regulations web site.

Tx5E1TXd204***end SIP-Approved Information***TX179***y59*** 11 pages***
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SUBCHAPTER E: SOLVENT-USING PROCESSES
DIVISION 1: DEGREASING PROCESSES
§§115.410 - 115.413, 115.415, 115.416, 115.419
Effective June 25, 2015

§115.410. Applicability and Definitions.

(a) Applicability. The provisions of this division apply in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas as defined in §115.10 of this title (relating to Definitions) and in Bastrop, Bexar, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties to all persons using volatile organic compound-containing solvent for cold solvent degreasing processes, open-top vapor degreasing processes, and conveyORIZED degreasing processes.

(b) Definitions. Unless specifically defined in the Texas Clean Air Act (Texas Health and Safety Code, Chapter 382) or in §§3.2, 101.1, or 115.10 of this title (relating to Definitions), the terms in this division have the meanings commonly used in the field of air pollution control.

Adopted June 3, 2015

Effective June 25, 2015

§115.411. Exemptions.

The following exemptions apply in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Bastrop, Bexar, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties.

(1) Any cold solvent cleaning system is exempt from the provisions of §115.412(1)(B) of this title (relating to Control Requirements) and may use an external drainage facility in place of an internal type drainage system, if the true vapor pressure of the solvent is less than or equal to 0.6 pounds per square inch absolute (psia) (4.1 kilo Pascals (kPa)) as measured at 100 degrees Fahrenheit (38 degrees Celsius) or if a cleaned part cannot fit into an internal drainage facility.

(2) The following are exempt from the requirements of §115.412(1)(E) of this title:

(A) a cold solvent cleaning system for which the true vapor pressure of the solvent is less than or equal to 0.6 psia (4.1 kPa) as measured at 100 degrees

Fahrenheit (38 degrees Celsius), provided that the solvent is not heated above 120 degrees Fahrenheit (49 degrees Celsius); and

(B) remote reservoir cold solvent cleaners.

(3) Any conveyORIZED degreaser with less than 20 square feet (ft²) (2 square meters (m²)) of air/vapor interface is exempt from the requirement of §115.412(3)(A) of this title.

(4) An owner or operator who operates a remote reservoir cold solvent cleaner that uses solvent with a true vapor pressure equal to or less than 0.6 psia (4.1 kPa) measured at 100 degrees Fahrenheit (38 degrees Celsius) and that has a drain area less than 16 square inches (in²) (100 square centimeters (cm²)) and who properly disposes of waste solvent in enclosed containers is exempt from §115.412(1) of this title.

(5) In Gregg, Nueces, and Victoria Counties, degreasing operations located on any property that can emit, when uncontrolled, a combined weight of volatile organic compounds less than 550 pounds in any consecutive 24-hour period are exempt from the provisions of §115.412 of this title.

Adopted June 3, 2015

Effective June 25, 2015

§115.412. Control Requirements.

In the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas as defined in §115.10 of this title (relating to Definitions) and in Gregg, Nueces, Victoria, Bexar, Comal, Guadalupe, Wilson, Bastrop, Caldwell, Hays, Travis, and Williamson Counties, the following control requirements shall apply.

(1) Cold solvent cleaning. No person shall own or operate a system utilizing a volatile organic compound (VOC) for the cold solvent cleaning of objects without the following controls.

(A) A cover shall be provided for each cleaner which shall be kept closed whenever parts are not being handled in the cleaner. The cover shall be designed for easy one-handed operation if any of the following exists:

(i) the true vapor pressure of the solvent is greater than 0.3 psia (2 kPa) as measured at 100 degrees Fahrenheit (38 degrees Celsius);

(ii) the solvent is agitated; or

(iii) the solvent is heated.

(B) An internal cleaned-parts drainage facility, for enclosed draining under a cover, shall be provided for all cold solvent cleaners.

(C) A permanent label summarizing the operating requirements in subparagraph (F) of this paragraph shall be attached to the cleaner in a conspicuous location near the operator.

(D) If a solvent spray is used, it must be a solid fluid stream (not a fine, atomized, or shower-type spray) and at an operating pressure of ten psig or less as necessary to prevent splashing above the acceptable freeboard.

(E) The system shall be equipped with a freeboard that provides a ratio equal to or greater than 0.7, or a water cover (solvent must be insoluble in and heavier than water). To determine the freeboard ratio, the freeboard height measurement is taken from the top of the degreaser to the top of the air/solvent level. This number is then divided by the smallest width measurement. The width measurement is taken at the smallest interior dimension. This dimension could be located at any point, from the top or opening of the unit to the air/solvent level.

(F) The operating procedures shall be as follows.

(i) Waste solvent shall not be disposed of or transferred to another party such that the waste solvent can evaporate into the atmosphere. Waste solvents shall be stored only in covered containers.

(ii) The degreaser cover shall be kept closed whenever parts are not being handled in the cleaner.

(iii) Parts shall be drained for at least 15 seconds or until dripping ceases.

(iv) Porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased.

(2) Open-top vapor degreasing. No person shall own or operate a system utilizing a VOC for the open-top vapor degreasing of objects without the following controls:

(A) a cover that can be opened and closed easily without disturbing the vapor zone;

(B) the following devices which will automatically shut off the sump heat:

(i) a condenser coolant flow sensor and thermostat which will detect if the condenser coolant is not circulating or if the condenser coolant temperature exceeds the solvent manufacturer's recommendations;

(ii) a solvent level sensor which will detect if the solvent level drops below acceptable design limits; and

(iii) a vapor level sensor which will detect if the vapor level rises above acceptable design limits;

(C) a spray safety switch which will shut off the spray pump to prevent spraying above the vapor level;

(D) one of the following controls:

(i) a freeboard that provides a ratio equal to or greater than 0.75 and, if the degreaser opening is greater than 10 ft² (1m²), a powered cover. To determine the freeboard ratio, the freeboard height measurement is taken from the top of the degreaser to the top of the air/vapor level. This number is then divided by the smallest width measurement. The width measurement is taken at the smallest interior dimension. This dimension could be located at any point, from the top or opening of the unit to the air/vapor level;

(ii) a properly sized refrigerated chiller capable of achieving 85% or greater control of VOC emissions;

(iii) an enclosed design where the cover or door opens only when the dry part is actually entering or exiting the degreaser; or

(iv) a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft² (15m³/min per m²) of air/vapor area (with the cover open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

(E) a permanent, conspicuous, label summarizing the operating procedures listed in subparagraph (F) of this paragraph;

(F) the following operating procedures:

(i) the cover shall be closed at all times except when processing work loads through the degreaser;

(ii) parts shall be positioned so that complete drainage is obtained;

(iii) parts shall be moved in and out of the degreaser at less than 11 ft/min (3.3 m/min);

(iv) the work load shall be retained in the vapor zone at least 30 seconds or until condensation ceases;

(v) any pools of solvent on the cleaned parts shall be removed by tipping the part before withdrawing it from the vapor zone;

(vi) parts shall be allowed to dry within the degreaser freeboard area for at least 15 seconds or until visually dry;

(vii) porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased;

(viii) work loads shall not occupy more than half of the degreaser open top surface area;

(ix) solvent shall not be sprayed above the vapor level;

(x) solvent leaks shall be repaired immediately, or the degreaser shall be shut down until repairs are made;

(xi) waste solvent shall not be disposed of or transferred to another party such that the waste solvent will evaporate into the atmosphere. Waste solvent shall be stored only in covered containers;

(xii) exhaust ventilation for systems other than those which vent to a major control device shall not exceed 65 cfm per ft² (20 m³/min per m²) of degreaser open area, unless necessary to meet Occupational Safety and Health Administration (OSHA) requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans or other sources of air agitation shall not be used near the degreaser opening;

(xiii) water shall not be visibly detectable in the solvent exiting the water separator.

(3) Conveyorized degreasing. No person shall own or operate a system utilizing a VOC for the conveyorized cleaning of objects without the following controls:

(A) one of the following major control devices:

(i) a properly sized refrigerated chiller capable of achieving 85% or greater control of VOC emissions; or

(ii) a carbon adsorption system with ventilation equal to or greater than 50 cfm/ft² (15 m³/min/m²) of air/vapor area (when downtime covers are open) and exhausting less than 25 ppm of solvent by volume averaged over one complete adsorption cycle;

(B) a drying tunnel or other means, such as rotating (tumbling) basket if space is available, to prevent solvent liquid or vapor carry-out;

(C) a condenser flow switch and thermostat which will shut off sump heat if the condenser coolant is not circulating or if the condenser coolant discharge temperature exceeds the solvent manufacturer's recommendation;

(D) a spray safety switch which will shut off the spray pump if the vapor level drops more than four inches (ten cm);

(E) a vapor level control thermostat which will shut off the sump heat when the vapor level rises above the designed operating level;

(F) entrances and exits which silhouette work loads so that the average clearance (between parts and edge of the degreaser opening) is either less than four inches (ten cm) or less than 10% of the width of the opening;

(G) downtime covers which close off the entrance and exit during nonoperating hours;

(H) a permanent, conspicuous label near the operator summarizing the operating requirements in subparagraph (I) of this paragraph;

(I) the following operating procedures:

(i) exhaust ventilation for systems other than those which vent to a major control device shall not exceed 65 cfm/ft² (20 m³/min/m²) of degreaser opening, unless necessary to meet OSHA requirements or unless a carbon adsorption system is installed as a major control device. Ventilation fans shall not be used near the degreaser opening;

- obtained;
- (ii) parts shall be positioned so that complete drainage is
- 11 ft/min (3.3 m/min);
- (iii) vertical conveyor speed shall be maintained at less than
- (iv) waste solvent shall not be disposed of, or transferred to another party, such that the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers;
- (v) leaks shall be repaired immediately or the degreaser shall be shut down until repairs are made;
- (vi) water shall not be visibly detectable in the solvent exiting the water separator;
- (vii) downtime covers shall be placed over entrances and exits of conveyorized degreasers immediately after the conveyor and exhaust are shut down and removed just before they are started up;
- (viii) porous or absorbent materials, such as cloth, leather, wood, or rope, shall not be degreased.

Adopted November 17, 2004

Effective December 9, 2004

§115.413. Alternate Control Requirements.

The alternate control requirements for degreasing processes in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas and in Gregg, Nueces, Victoria, Bexar, Comal, Guadalupe, Wilson, Bastrop, Caldwell, Hays, Travis, and Williamson Counties are as follows.

- (1) Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.
- (2) An alternative capture and control system for cold solvent cleaners with a demonstrated overall volatile organic compound (VOC) emission reduction efficiency of 65% or greater may be used in lieu of the requirements of §115.412(1) of this title (relating to Control Requirements), if approved by the executive director.

(3) An alternate capture and control system for open-top vapor or conveyORIZED degreasers with a demonstrated overall VOC emission reduction efficiency of 85% or greater may be used in lieu of the requirements of §115.412(2)(D) or (3)(A) of this title, if approved by the executive director.

Adopted November 17, 2004

Effective December 9, 2004

§115.415. Testing Requirements.

The testing requirements for degreasing processes in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Bastrop, Bexar, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties are as follows.

(1) Compliance with §115.412(1) of this title (relating to Control Requirements) must be determined by applying the following test methods, as applicable:

(A) determination of true vapor pressure using ASTM International Test Method D323-89, ASTM Test Method D2879, ASTM Test Method D4953, ASTM Test Method D5190, or ASTM Test Method D5191 for the measurement of Reid vapor pressure, adjusted for actual storage temperature in accordance with American Petroleum Institute Publication 2517, Third Edition, 1989;

(B) minor modifications to the test methods and procedures listed in subparagraph (A) of this paragraph that are approved by the executive director;

(C) using standard reference materials for the true vapor pressure of each volatile organic compound component; or

(D) using analytical data from the solvent supplier or manufacturer's material safety data sheet.

(2) Compliance with §115.412(2)(D)(iv) and (3)(A)(ii) of this title and §115.413(3) of this title (relating to Alternate Control Requirements) must be determined by applying the following test methods, as appropriate:

(A) Test Methods 1-4 (40 Code of Federal Regulations (CFR) Part 60, Appendix A) for determining flow rates, as necessary;

(B) Test Method 18 (40 CFR Part 60, Appendix A) for determining gaseous organic compound emissions by gas chromatography;

(C) Test Method 25 (40 CFR Part 60, Appendix A) for determining total gaseous nonmethane organic emissions as carbon;

(D) Test Methods 25A or 25B (40 CFR Part 60, Appendix A) for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis; or

(E) minor modifications to these test methods and procedures approved by the executive director.

(3) Test methods other than those specified in paragraphs (1) and (2) of this section may be used if validated by 40 CFR Part 63, Appendix A, Test Method 301. For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

Adopted June 3, 2015

Effective June 25, 2015

§115.416. Recordkeeping Requirements.

The owner or operator of each degreasing process in Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston-Brazoria areas and in Bastrop, Bexar, Caldwell, Comal, Gregg, Guadalupe, Hays, Nueces, Travis, Victoria, Williamson, and Wilson Counties shall maintain the following records at the facility for at least two years and shall make such records available upon request to representatives of the executive director, the United States Environmental Protection Agency, or the local air pollution control agency having jurisdiction in the area:

(1) a record of control equipment maintenance, such as replacement of the carbon in a carbon adsorption unit;

(2) the results of all tests conducted at the facility in accordance with the requirements described in §115.415(2) of this title (relating to Testing Requirements);

(3) for each degreasing process in Gregg, Nueces, and Victoria Counties which is exempt under §115.411(5) of this title (relating to Exemptions), records of solvent usage in sufficient detail to document continuous compliance with this exemption;

(4) for each degreasing process in the Dallas-Fort Worth area, records sufficient to demonstrate continuous compliance with:

(A) the vapor pressure testing described in §115.415(1)(A) - (D) of this title; and

(B) the applicable exemptions in §115.411 of this title.

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Effective June 25, 2015

§115.419. Counties and Compliance Schedules.

(a) In Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Liberty, Montgomery, Nueces, Orange, Tarrant, Victoria, and Waller, Counties, the compliance date has passed and all affected persons shall continue to comply with this division.

(b) All affected persons in Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, and Wilson Counties shall comply with this division as soon as practicable, but no later than December 31, 2005.

(c) All affected persons in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties shall comply with this division as soon as practicable, but no later than March 1, 2009.

(d) All affected persons of a degreasing process in Wise County shall comply with this division as soon as practicable, but no later than January 1, 2017.

(e) All affected persons of a degreasing process in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties that becomes subject to this division on or after the applicable compliance date in subsection (a), (c), or (d) of this section shall comply with the requirements in this division as soon as practicable, but no later than 60 days after becoming subject.

(f) Upon the date the commission publishes notice in the *Texas Register* that the Wise County nonattainment designation for the 2008 Eight-Hour Ozone National Ambient Air Quality Standard is no longer legally effective, the owner or operator of each degreasing process in Wise County is not required to comply with any of the requirements in this division.

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