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- (6) All 3-hour periods (during actual coating operations) during which the average combustion temperature is more than 28 Celsius degrees below the average combustion temperature during the most recent performance test that demonstrated compliance for those affected facilities monitoring thermal incinerator combustion gas temperature:
- (7) All 3-hour periods (during actual coating operations) during which the average gas temperature immediately before the catalyst bed is more than 28 Celsius degrees below the average gas temperature during the most recent performance test that demonstrated compliance and all 3-hour periods (during actual coating operations) during which the average gas temperature difference across the catalyst bed is less than 80 percent of the average gas temperature difference during the most recent performance test that demonstrated compliance for those affected facilities monitoring catalytic incinerator catalyst bed temperature; and
- (8) All 3-hour periods (during actual coating operations) during which the average total enclosure or VOC capture system monitoring device readings vary by 5 percent or more from the average value measured during the most recent performance test that demonstrated compliance for those affected facilities monitoring a total enclosure pursuant to §60.714(h) or VOC capture system pursuant to §60.714(g).
- (e) Each owner or operator of an affected coating operation, or affected coating mix preparation equipment subject to §60.712(c), not required to submit reports under §60.717(d) because no reportable periods have occurred shall submit semiannual reports so affirming.
- (f) Each owner or operator of affected coating mix preparation equipment that is constructed at a time when no affected coating operation is being constructed shall:
- (1) Be exempt from the reporting requirements specified in 60.7(a)(1), (2), and (4); and
- (2) Submit the notification of actual startup specified in §60.7(a)(3).
- (g) The owner or operator of affected coating mix preparation equipment that is constructed at the same time as

- an affected coating operation shall include the affected coating mix preparation equipment in all the reporting requirements for the affected coating operation specified in §60.7(a)(1) through (4).
- (h) The reports required under paragraphs (b) through (e) of this section shall be postmarked within 30 days of the end of the reporting period.
- (i) The requirements of this subsection remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In this event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

(Sec. 114 of the Clean Air Act as amended (42 U.S.C. 7414))

[53 FR 38914, Oct. 3, 1988; 53 FR 43799, Oct. 28, 1988, as amended at 53 FR 47955, Nov. 29, 1988; 64 FR 7467, Feb. 12, 1999]

### § 60.718 Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) Authorities which will not be delegated to States:

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§60.711(a)(16)
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 $\S\,60.713(b)(1)(i)$ 

§60.713(b)(1)(ii)

§60.713(b)(5)(i)

§ 60.713(d) § 60.715(a)

§ 60.716

[53 FR 38914, Oct. 3, 1988; 53 FR 47955, Nov. 29, 1988]

## Subpart TTT—Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines

Source: 53 FR 2676, Jan. 29, 1988, unless otherwise noted.

#### § 60.720

# § 60.720 Applicability and designation of affected facility.

- (a) The provisions of this subpart apply to each spray booth in which plastic parts for use in the manufacture of business machines receive prime coats, color coats, texture coats, or touch-up coats.
- (b) This subpart applies to any affected facility for which construction, modification, or reconstruction begins after January 8, 1986.

#### § 60.721 Definitions.

(a) As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of this part.

Business machine means a device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission, such as:

- (1) Products classified as typewriters under SIC Code 3572:
- (2) Products classified as electronic computing devices under SIC Code 3573;
- (3) Products classified as calculating and accounting machines under SIC Code 3574:
- (4) Products classified as telephone and telegraph equipment under SIC Code 3661;
- (5) Products classified as office machines, not elsewhere classified, under SIC Code 3579; and
- (6) Photocopy machines, a subcategory of products classified as photographic equipment under SIC code

Coating operation means the use of a spray booth for the application of a single type of coating (e.g., prime coat); the use of the same spray booth for the application of another type of coating (e.g., texture coat) constitutes a separate coating operation for which compliance determinations are performed separately.

Coating solids applied means the coating solids that adhere to the surface of the plastic business machine part being coated.

Color coat means the coat applied to a part that affects the color and gloss of the part, not including the prime coat or texture coat. This definition includes fog coating, but does not include

conductive sensitizers or electromagnetic interference/radio frequency interference shielding coatings.

Conductive sensitizer means a coating applied to a plastic substrate to render it conductive for purposes of electrostatic application of subsequent prime, color, texture, or touch-up coats.

Electromagnetic interference/radio frequency interference (EMI/RFI) shielding coating means a conductive coating that is applied to a plastic substrate to attenuate EMI/RFI signals.

Fog coating (also known as mist coating and uniforming) means a thin coating applied to plastic parts that have molded-in color or texture or both to improve color uniformity.

Nominal 1-month period means either a calendar month, 30-day month, accounting month, or similar monthly time period that is established prior to the performance test (i.e., in a statement submitted with notification of anticipated actual startup pursuant to 40 CFR 60 7(2))

*Plastic parts* means panels, housings, bases, covers, and other business machine components formed of synthetic polymers.

Prime coat means the initial coat applied to a part when more than one coating is applied, not including conductive sensitizers or electromagnetic interference/radio frequency interference shielding coatings.

Spray booth means the structure housing automatic or manual spray application equipment where a coating is applied to plastic parts for business machines.

Texture coat means the rough coat that is characterized by discrete, raised spots on the exterior surface of the part. This definition does not include conductive sensitizers or EMI/RFI shielding coatings.

Touch-up coat means the coat applied to correct any imperfections in the finish after color or texture coats have been applied. This definition does not include conductive sensitizers or EMI/RFI shielding coatings.

Transfer efficiency means the ratio of the amount of coating solids deposited onto the surface of a plastic business machine part to the total amount of coating solids used.

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VOC emissions means the mass of VOC's emitted from the surface coating of plastic parts for business machines expressed as kilograms of VOC's per liter of coating solids applied (i.e., deposited on the surface).

- (b) All symbols used in this subpart not defined below are given meaning in the Act or subpart A of this part.
- $D_c$  = density of each coating as received (kilograms per liter)
- $D_{d} = density \ of \ each \ diluent \ VOC \ (kilograms \ per \ liter)$
- $L_c$  = the volume of each coating consumed, as received (liters)
- $L_d$  = the volume of each diluent VOC added to coatings (liters)
- $L_s$  = the volume of coating solids consumed (liters)
- $M_d$  = the mass of diluent VOC's consumed (kilograms)
- $M_o$  = the mass of VOC's in coatings consumed, as received (kilograms)
- N=the volume-weighted average mass of VOC emissions to the atmosphere per unit volume of coating solids applied (kilograms per liter)
- T=the transfer efficiency for each type of application equipment used at a coating operation (fraction)
- $T_{avg}$  = the volume-weighted average transfer efficiency for a coating operation (fraction)
- $V_s$  = the proportion of solids in each coating, as received (fraction by volume)
- W<sub>o</sub> = the proportion of VOC's in each coating, as received (fraction by weight)
- [53 FR 2676, Jan. 29, 1988, as amended at 54 FR 25459, June 15, 1989]

## § 60.722 Standards for volatile organic compounds.

- (a) Each owner or operator of any affected facility which is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test, required by §§60.8 and 60.723 is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after the initial startup, whichever date comes first. No affected facility shall cause the discharge into the atmosphere in excess of:
- (1) 1.5 kilograms of VOC's per liter of coating solids applied from prime coating of plastic parts for business machines.

- (2) 1.5 kilograms of VOC's per liter of coating solids applied from color coating of plastic parts for business machines.
- (3) 2.3 kilograms of VOC's per liter of coating solids applied from texture coating of plastic parts for business machines.
- (4) 2.3 kilograms of VOC's per liter of coatings solids applied from touch-up coating of plastic parts for business machines.
- (b) All VOC emissions that are caused by coatings applied in each affected facility, regardless of the actual point of discharge of emissions into the atmosphere, shall be included in determining compliance with the emission limits in paragraph (a) of this section.

# § 60.723 Performance tests and compliance provisions.

- (a) Section 60.8 (d) and (f) do not apply to the performance test procedures required by this section.
- (b) The owner or operator of an affected facility shall conduct an initial performance test as required under  $\S 60.8(a)$  and thereafter a performance test each nominal 1-month period for each affected facility according to the procedures in this section.
- (1) The owner or operator shall determine the composition of coatings by analysis of each coating, as received, using Method 24, from data that have been determined by the coating manufacturer using Method 24, or by other methods approved by the Administrator.
- (2) The owner or operator shall determine the volume of coating and the mass of VOC used for dilution of coatings from company records during each nominal 1-month period. If a common coating distribution system serves more than one affected facility or serves both affected and nonaffected spray booths, the owner or operator shall estimate the volume of coatings used at each facility by using procedures approved by the Administrator.
- (i) The owner or operator shall calculate the volume-weighted average mass of VOC's in coatings emitted per unit volume of coating solids applied (N) at each coating operation [i.e., for each type of coating (prime, color, texture, and touch-up) used] during each

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nominal 1-month period for each affected facility. Each 1-month calculation is considered a performance test. Except as provided in paragraph (b)(2)(iii) of this section, N will be determined by the following procedures:

(A) Calculate the mass of VOC's used  $(M_o + M_d)$  for each coating operation during each nominal 1-month period for each affected facility by the following equation:

$$M_0 + M_d = \sum_{i=1}^{n} L_{ci}^{D}_{ci}^{W}_{oi} + \sum_{j=1}^{m} L_{dj}^{D}_{dj}$$

where n is the number of coatings of each type used during each nominal 1-month period and m is the number of different diluent VOC's used during each nominal 1-month period. ( $\Sigma$  L<sub>dj</sub> D<sub>dj</sub> will be 0 if no VOC's are added to the coatings, as received.)

(B) Calculate the total volume of coating solids consumed  $(L_{\rm s})$  in each nominal 1-month period for each coating operation for each affected facility by the following equation:

where n is the number of coatings of each type used during each nominal 1-month period.

(C) Select the appropriate transfer efficiency (T) from table 1 for each type of coating applications equipment used at each coating operation. If the owner or operator can demonstrate to the satisfaction of the Administrator that transfer efficiencies other than those shown are appropriate, the Administrator will approve their use on a case-by-case basis. Transfer efficiency values for application methods not listed below shall be approved by the Administrator will be approved by the Administrator will be approved by the Administrator will approved by the Administrator will approve the proventies of t

istrator on a case-by-case basis. An owner or operator must submit sufficient data for the Administrator to judge the validity of the transfer efficiency claims.

(D) Where more than one application method is used within a single coating operation, the owner or operator shall determine the volume of each coating applied by each method through a means acceptable to the Administrator and compute the volume-weighted average transfer efficiency by the following equation:

$$T_{avg} = \frac{\sum_{z}^{n} \sum_{k=1}^{r} L_{cik}V_{sik}T_{k}}{L_{s}}$$

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TABLE 1—TRANSFER EFFICIENCIES

Application methods	Transfer efficiency	Type of coating
Air atomized spray	0.25	Prime, color, texture, touch-up, and fog coats.
Air-assistd airless spray.	.40	Prime and color coats.
Electrostatic air spray	.40	Do.

where n is the number of coatings of each type used and p is the number of application methods used.

(E) Calculate the volume-weighted average mass of VOC's emitted per unit volume of coating solids applied (N) during each nominal 1-month period for each coating operation for each affected facility by the following equation:

$$N = \frac{M_o + M_d}{L_s T_{avg}}$$

 $(T_{\text{avg}} = T \text{ when only one type of coating operation occurs}).$ 

(ii) Where the volume-weighted average mass of VOC's emitted to the atmosphere per unit volume of coating solids applied (N) is less than or equal to 1.5 kilograms per liter for prime coats, is less than or equal to 1.5 kilograms per liter for color coats, is less than or equal to 2.3 kilograms per liter for texture coats, and is less than or equal to 2.3 kilograms per liter for touch-up coats, the affected facility is in compliance.

(iii) If each individual coating used by an affected facility has a VOC content (kg VOC/l of solids), as received, which when divided by the lowest transfer efficiency at which the coating is applied for each coating operation results in a value equal to or less than 1.5 kilograms per liter for prime and color coats and equal to or less than 2.3 kilograms per liter for texture and touch-up coats, the affected facility is in compliance provided that no VOC's are added to the coatings during distribution or application.

(iv) If an affected facility uses add-on controls to control VOC emissions and if the owner or operator can demonstrate to the Administrator that the volume-weighted average mass of VOC's emitted to the atmosphere during each nominal 1-month period per

unit volume of coating solids applied (N) is within each of the applicable limits expressed in paragraph (b)(2)(ii) of this section because of this equipment, the affected facility is in compliance. In such cases, compliance will be determined by the Administrator or a case-by-case basis.

[53 FR 2676, Jan. 29, 1988, as amended at 65 FR 61778, Oct. 17, 2000]

# § 60.724 Reporting and recordkeeping requirements.

(a) The reporting requirements of §60.8(a) apply only to the initial performance test. Each owner or operator subject to the provisions of this subpart shall include the following data in the report of the initial performance test required under §60.8(a):

(1) Except as provided for in paragraph (a)(2) of this section, the volume-weighted average mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) for the initial nominal 1-month period for each coating operation from each affected facility.

(2) For each affected facility where compliance is determined under the provisions of §60.723(b)(2)(iii), a list of the coatings used during the initial nominal 1-month period, the VOC content of each coating calculated from data determined using Method 24, and the lowest transfer efficiency at which each coating is applied during the initial nominal 1-month period.

(b) Following the initial report, each owner or operator shall:

(1) Report the volume-weighted average mass of VOC's per unit volume of coating solids applied for each coating operation for each affected facility during each nominal 1-month period in which the facility is not in compliance with the applicable emission limits specified in §60.722. Reports of noncompliance shall be submitted on a quarterly basis, occurring every 3 months following the initial report; and

(2) Submit statements that each affected facility has been in compliance with the applicable emission limits specified in §60.722 during each nominal

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1-month period. Statements of compliance shall be submitted on a semi-annual basis.

- (c) These reports shall be postmarked not later than 10 days after the end of the periods specified in §60.724(b)(1) and §60.724(b)(2).
- (d) Each owner or operator subject to the provisions of this subpart shall maintain at the source, for a period of at least 2 years, records of all data and calculations used to determine monthly VOC emissions from each coating operation for each affected facility as specified in 40 CFR 60.7(d).
- (e) Reporting and recordkeeping requirements for facilities using add-on controls will be determined by the Administrator on a case-by-case basis.

[53 FR 2676, Jan. 29, 1988, as amended at 65 FR 61778, Oct. 17, 2000]

#### § 60.725 Test methods and procedures.

- (a) The reference methods in appendix A to this part except as provided under §60.8(b) shall be used to determine compliance with §60.722 as follows:
- (1) Method 24 for determination of VOC content of each coating as received.
- (2) For Method 24, the sample must be at least a 1-liter sample in a 1-liter container.
- (b) Other methods may be used to determine the VOC content of each coating if approved by the Administrator before testing.

### § 60.726 Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) Authorities which will not be delegated to the States:

 $\begin{array}{l} {\rm Section} \ 60.723(b)(1) \\ {\rm Section} \ 60.723(b)(2)(i)(C) \\ {\rm Section} \ 60.723(b)(2)(iv) \\ {\rm Section} \ 60.724(e) \\ {\rm Section} \ 60.725(b) \end{array}$ 

[53 FR 2676, Jan. 29, 1988, as amended at 53 FR 19300, May 27, 1988]

## Subpart UUU—Standards of Performance for Calciners and Dryers in Mineral Industries

SOURCE: 57 FR 44503, Sept. 28, 1992, unless otherwise noted.

# § 60.730 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.
- (b) An affected facility that is subject to the provisions of subpart LL, Metallic Mineral Processing Plants, is not subject to the provisions of this subpart. Also, the following processes and process units used at mineral processing plants are not subject to the provisions of this subpart: vertical shaft kilns in the magnesium compounds industry; the chlorination-oxidation process in the titanium dioxide industry; coating kilns, mixers, and aerators in the roofing granules industry; and tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries (as defined in §60.731, "Mineral processing plant").
- (c) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of this subpart.

#### § 60.731 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Calciner means the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating. This definition includes expansion furnaces and multiple hearth furnaces.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to