D.2.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC emission limit in Condition D.2.1 shall be determined with the following

equation:

n n

VOC emissions (lb VOC/gal applied solids) =[ Σ (Ci)(Ui) / Σ (Si x TE)] x [1 - (CE x DE)]

i = 1 i = 1

Where:

Ci is the VOC content of the coating (i) in pounds of VOC per gallon of coating, as applied;

Ui is the usage rate of the coating (i) in gallons per day;

Si is the usage rate of coating (i) solids in gallons per day;

TE is the transfer efficiency of the applicator;

CE is the minimum capture efficiency of the incinerator; and

DE is the minimum destruction efficiency of the incinerator required in Condition D.4.1(b)

D.2.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

(a) Pursuant to 326 IAC 8-1-2(a), the Permittee shall operate the incinerator at all times the

PBL Oven is in operation to ensure compliance with Condition D.2.1.

(b) The incinerator on the PBL Oven shall be operated such that it achieves the minimum

destruction efficiency specified in Condition D.2.1.

D.2.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform VOC capture

and destruction efficiency testing of the thermal incinerator utilizing methods as approved by the

Commissioner at least once every two and one half (2.5) years from the date of the most recent valid

compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC

3-6 (Source Sampling Procedures) for control efficiency testing. Section C – Performance Testing

contains the Permittee’s obligation with regard to the performance testing required by this condition.

D.2.9 Operator Training Program

The Permittee shall implement an operator training program.

(a) All operators that perform surface coating operations using spray equipment or booth

maintenance shall be trained in the proper set-up and operation of the water wash

control system on the Plastic Bumper Coating Line. All existing operators shall be

trained upon permit issuance. All new operators shall be trained upon hiring or

transfer.

(b) Training shall include proper flow of water through the water pan of the water wash

system, and other factors that affect water pan capture efficiency (e.g., debris in the

water pans), and troubleshooting practices. The training program shall be written and

retained on site. The training program shall include a description of the methods to be

used at the completion of initial and refresher training to demonstrate and document

successful completion. Copies of the training program, the list of trained operators

and training records shall be maintained on site or available within 1 hour for

inspection by IDEM.

(c) All operators shall be given refresher training annually.

D.1.4 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

(a) Compliance with the VOC emissions limit in Condition D.1.3 shall be determined by

using the following equation, which calculates tons of VOC emissions per month, and

adding the result to the calculated VOC emissions from the previous eleven months:

Total VOC Emissions (ton/month) = ED Coating, Unit 001 VOC + Sealing and PVC

Underbody Coating, Unit 002 VOC + Topcoat,

Unit 003 VOC + Intermediate Surfacer, Unit

004 VOC + Plastic Bumper (PBL), Unit 005

VOC + Anticorrosion Coating, Unit 006 VOC

Final Repait, Unit 007 VOC+Trim Line, Unit

010 VOC + Storage Tanks, Unit 011 VOC

+Purge Solvent usage and capture, Unit 012

VOC + Natural Gas Combustion VOC +

Insignificant VOC Sources

Where:

n

VOC emissions from each coating booth, Vb = Σ (Ci x Di x Wi) x (1-CE) x 1 ton/2000 lbs

i=1

Vb = VOC emissions from each coating booth, ton/month

Ci = usage of coating i in gallons per month;

Di = density of coating i in pounds per gallon;

Wi = weight percent organics from coatings i

CE = overall VOC control efficiency for each booth, when applicable.

Natural Gas Combustion VOC Emissions, tons/month = natural gas usage (MMCF/month) x

1020 MMBtu/1MMCF x 0.0054 lb VOC/MMBtu x 1 ton/2000 lbs

(b) Compliance with the particulate (PM/PM10) emission limit in Condition D.1.1(b) shall be

determined by using the following equation, which calculates pounds of particulate

emissions per month, and adding the result to the calculated particulate emissions from

the previous eleven months:

Total Particulate Emissions (lb/month) = PVC #1 Coating PM/PM10 + PVC #2

Coating PM/PM10 + Topcoat #1 Coating

PM/PM10 + Topcoat #2 Coating PM/PM10 +

Topcoat #3 Coating PM/PM10 + Intermediate

(Surfacer) Coating PM/PM10 + Plastic Bumper

Coating PM/PM10 + Black Coat and Wax

Coating PM/PM10 + Anticorrosion Coating

PM/PM10 + Touchup IPC Coating PM/PM10 +

Natural Gas Combustion PM/PM10 +

Insignificant PM/PM10 Sources

Where:

n

PM/PM10 emissions from each coating booth = Σ (Ci \* D i\* Si) \* (1-TE) \* (1-CE);

i=1

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Natural Gas Combustion PM/PM10 = natural gas usage (MMCF/month) \* 7.6 lb PM/MMCF;

Insignificant PM/PM10 Sources = PM/PM10 emissions in lb/month from insignificant

facilities that were permitted by the PSD (79) 1651 Revision;

Ci = usage of coating i in gallons per month;

Di = density of coating i in pounds per gallon;

Si = solids content of coating i, expressed as a decimal weight percent;

TE = solids transfer efficiency of the applicator for each booth, based on transfer

efficiency determination tests; and

CE = overall particulate control efficiency for each booth, based on manufacturer data.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.1.5 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1, D.1.2 and D.1.3, the

Permittee shall maintain records in accordance with (1) through (11) below. Records

maintained for (1) through (11) shall be taken as stated below and shall be complete

and sufficient to establish the compliance status with the particulate emission limit

established in Condition D.1.1(b), the natural gas combustion limit established in

Conditions D.1.1(c) and D.1.2 and the VOC emission limit established in Condition

D.1.3. Records necessary to demonstrate the compliance status shall be available not

later than 30 days after the end of each compliance period.

(1) The VOC content of each coating material and solvent (including purge

solvents and thinners) used less water.

(2) The amount of coating material and solvent (including purge solvents and

thinners) used on a daily or monthly basis, consistent with applicable limits in

other permit conditions.

(A) Records shall include purchase orders, invoices, and material safety

data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to

coatings and those used as cleanup solvent.

(3) The total VOC emissions from coatings and solvents (including purge solvents

and thinners) for each day.

(4) The amount of coating material and solvent (including purge solvents and

thinners) transferred off-site for disposal or recycling for each day.

(5) The density of each coating.

(6) The solids content of each coating, expressed as a decimal weight percent.

(7) The particulate transfer efficiency and particulate control efficiency for each

surface coating booth, kept on a monthly basis, and an explanation of how

these figures were determined.

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(8) The process weight rate of the insignificant robotic welding, brazing equipment,

cutting torches, soldering equipment, grinding equipment, and machining

equipment.

(9) Any process information necessary to calculate particulate (PM/PM10)

emissions from other insignificant operations described in Section D.8 (e.g.,

deburring, buffing, polishing, abrasive blasting activities, pneumatic conveying,

woodworking operations, etc.).

(10) A log of the dates of use.

(11) The plant-wide metered natural gas usage for each month.

(b) To document the compliance status with Condition D.1.1(a), the Permittee shall

maintain records of monthly vehicle production.

(c) To document the compliance status with the Condition D.1.3, the Permittee shall

monitor and record the post-change annual VOC emissions from the existing emission

units that could result in a significant emissions increase as a result of the project

described in SSM 157-22702-00050.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligations with

regard to the records required by this condition.

D.1.6 Reporting Requirements

(a) Reports of monthly production totals to demonstrate the compliance status with Condition

D.1.1(a), shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days

after the end of the quarter being reported. Section C - General Reporting contains the

Permittee’s obligation with regard to the reporting required by this condition. The report

submitted by the Permittee does require a certification that meets the requirements of 326

IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1(35).

(b) Based on records required by Condition D.1.5(a), and to demonstrate the compliance status

with Condition D.1.1(b), reports of monthly particulate (PM/PM10) emissions shall be

submitted to IDEM, OAQ on a quarterly basis, not later than thirty (30) days after the end of

the quarter being reported. Section C - General Reporting contains the Permittee’s obligation

with regard to the reporting required by this condition. The report submitted by the Permittee

does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible

official,” as defined by 326 IAC 2-7-1(35).

(c) Reports of monthly natural gas usage to demonstrate the compliance status with Conditions

D.1.1(c) and D.1.2 shall be submitted to IDEM, OAQ on a quarterly basis, not later than thirty

(30) days after the end of the quarter being reported. Section C - General Reporting contains

the Permittee’s obligation with regard to the reporting required by this condition. The report

submitted by the Permittee does require a certification that meets the requirements of 326

IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1(35).

(d) Based on records required by Condition D.1.5(a) to demonstrate the compliance status with

Condition D.1.3, reports of monthly VOC emissions from surface coating operations and

associated purge solvent operations and storage shall be submitted to IDEM, OAQ on a

quarterly basis not later than thirty (30) days after the end of the quarter being reported.

Section C - General Reporting contains the Permittee’s obligation with regard to the reporting

required by this condition. The report submitted by the Permittee does require a certification

that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326

IAC 2-7-1(35).

D.2.13 Record Keeping Requirements

(a) To document the compliance status with Conditions D.2.1, the Permittee shall maintain

records in accordance with (1) through (4) below. Records maintained for (1) through

(4) shall be taken as stated below and shall be complete and sufficient to establish

compliance with the VOC emission limits established in Condition D.2.1. Records

necessary to demonstrate the compliance status shall be available not later than 30

days of after the end of each compliance period.

(1) The VOC content of each coating material (as applied) and the VOC content of

each solvent (including purge solvents and thinners) used less water.

(2) The solids content of each coating material used (as applied).

(3) The amount of coating material and solvent (including purge solvents and

thinners) used on a daily basis.

(A) Records shall include purchase orders, invoices, and material

safety data sheets (MSDS) necessary to verify the type and

amount used.

(B) Solvent usage records shall differentiate between those added

to coatings and those used as cleanup solvent.

(4) The volume weighted average VOC content of the coatings used (as applied)

for each day.

(b) To document the compliance status with Conditions D.2.10 and D.2.11, the Permittee

shall maintain the following records:

(1) Continuous temperature records (on a three-hour average basis) for the

thermal incinerator and the three-hour average temperature used to

demonstrate compliance during the most recent compliant stack test.

(2) Records of the thermal incinerator shutdowns due to duct pressure or fan

amperage deviations.

(3) Daily records of the duct pressure or fan amperage.

(c) To document the compliance status with Condition D.2.9, the Permittee shall maintain

copies of the training program, and the list of trained operators. Training records shall

be maintained on site or available not later than 1 hour for inspection by IDEM.

(d) To document the compliance status with Condition D.2.12, the Permittee shall maintain

records of daily visual inspection of the water wash system, dates of any water wash

warning system going off and corrective actions taken and log of semi-annual

inspections of the PBL booth's stacks.

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(e) To document the compliance status with Condition D.2.2(b) and (c), the Permittee shall

maintain records of the vendor design guarantees for the two (2) 2.5 MMBtu/hr PBL Flash

Zone Heaters.

(f) Section C - General Record Keeping Requirement

D.2.14 Reporting Requirements

A monthly summary of the daily VOC content of the coatings used, based on a volume weighted

average from the PBL Coating Booth, including the following information to document the

compliance status with Condition D.2.1, shall be submitted not later than thirty (30) days after the

end of the quarter being reported. Section C - General Reporting contains the Permittee’s obligation

with regard to the reporting required by this condition. The report submitted by the Permittee does

require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as

defined by 326 IAC 2-7-1(35). The reports shall contain the following data for each operation, based

on actual daily coating usage:

(1) Average coating VOC content in kg VOC/liter coating as applied;

(2) Average coating volume % solids as applied;

(3) Average actual solids transfer efficiency;

(4) Overall thermal incinerator control efficiency, reflecting capture and destruction efficiency;

(5) Average kg VOC/liter of applied solids, based on actual transfer efficiency; and

(6) Coating usage in liters.

When more than one coating has been averaged for compliance purposes, the average shall be

determined on a weighted average by volume basis. All data necessary to verify weighted averages

shall be included in the report.

D.3.1.1 Prevention of Significant Deterioration BACT [326 IAC 2-2] [326 IAC 8-1-6]

Pursuant to 326 IAC 2-2-3 Best Available Control Technology (PSD BACT), for Unit 005B once non-

Subaru bumpers ceases production shall be the following:

(a) The VOC emissions from Unit 018 of Section D.10(f) and Unit 005B of this section, as a daily

volume weighted average of all primer coatings used shall not exceed 0.71 pounds per

gallon.

(b) The VOC emissions from Unit 018 of Section D.10(f) and Unit 005B of this section, as a daily

volume weighted average of all basecoat coatings shall not exceed 1.38 pounds per gallon.

(c) The VOC emissions from Unit 018 ofSection D.10(f) and Unit 005B of this section, as a daily

volume weighted average of all clearcoat coatings shall not exceed 4.09 pounds per gallon.

(d) Good work practices which includes the following:

(1) The use of robotic automatic spray applicators to minimize

paint usage.

(2) The use of waterbased coatings for the primer, and basecoat applications.

(3) All paint mixing containers, other than day tanks equipped with continuous agitation

systems, which contain organic VOC containing coatings and other materials shall

have a cover with no visible gaps in place at all times except when material is being

added to or removed from a container, or when mixing or pumping equipment is

being placed in or removed from a container.

(4) Solvent-borne purge materials sprayed during paint line cleaning and color changes

shall be directed into solvent collection containers. Documentation shall be

maintained on-site to demonstrate how these materials are being directed and

collected for both the solvent-borne and water-borne purge materials.

(5) Solvent collection containers shall be kept closed when not in use.

(6) Clean-up rags with solvent shall be stored in closed containers.

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(7) VOC emissions shall be minimized during cleaning of storage, mixing, and

conveying equipment.

(e) The VOC emissions from Plastic Bumper Coating Line, Unit 005B burner shall

not exceed 0.0054 pound per million British thermal units (lb/MMBtu) and shall

only combust natural gas.

D.3.6 Volatile Organic Compounds (VOC)

(a) Compliance with the VOC content and usage limitations contained in Conditions D.3.1 and

D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) using formulation data supplied

by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance

using Method 24 in conjunction with the analytical procedure specified in 326 IAC 8-1-4.

(b) In addition to the procedure in section (a) of this condition, compliance with the VOC limit for

the solvent purging operation in Conditions D.3.1(b) and D.3.2 shall be determined through

the following:

(1) Purge solvent usage and collection shall be monitored separately for the primer

coating operations and clearcoat operations. For each of the primer and clearcoat

coating systems, the Permittee shall install flow meters to monitor the volume of

purge solvent delivered to the spray applicators, and the volume of the purge

materials collected for recycling or disposal. The purge material collection/capture,

as a percentage of purge solvent usage shall be determined on a monthly basis as

follows:

Purge Solvent Collection/Capture Efficiency = Sc - Rcs

Pu

Where:

Rcs = Residual coating solids in the spray applicator;

Sc = Purge material collected (paint solids + solvent); and

Pu = Purge solvent usage.

(c) Compliance with Condition D.3.1(a), the capture efficiency shall be determined using the

“Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile

and Light-Duty Truck Topcoat Operations,” EPA–450/3–88–018 (Docket ID No. OAR–2002–

0093 and Docket ID No. A–2001–22) or guidelines in 40 CFR § 63.3165.

(2) Fascia Paint Line VOC =

n

Σ (Booths Ci x S x C x P) + (Oven Ci x (1-S) x Ci x P x (1-DE)) + (Pu x Pc x P x (1-cw))

i=1

Where:

Ci is coating (i) usage in gallon per unit from each booth in the Fascia Line;

S is the percentage booth split with oven (see spreadsheet page 2 of 12);

C is the coating (i) VOC content in pound per gallon;

P is the production in units per month;

Pu is the purge solvent usage in gallon per unit;

Pc is the purge VOC content in pound per gallon;

DE is the destruction efficiency of the oxidizer; and

Pcw is the percent purge materials collected/captured for waste recycle

(b) Compliance with the VOC emissions rate in Condition D.3.2 which applies after controls to

emissions from the fascia paint line shall be determined by using the following equation:

n

VOC emissions (lb VOC/gal) =[ Σ (Ci)(Ui) ] x [1 - (Overall CE)]

i = 1

Where:

i = 1 to n

Ci is the VOC content of each individual coating (i) of a coating type (Primer, Basecoat or

Clearcoat) in pounds of VOC per day, as applied;

Ui is the usage rate of each individual coating (i) of a coating type (Primer, Basecoat or

Clearcoat) in gallons per day;

n is the number of individual coatings of a particular coating type (Primer, Basecoat or

Clearcoat); and

Overall CE is the overall control efficiency (capture efficiency x destruction efficiency) of the

incinerator required in Condition D.3.1(a)

**Subaru Bumpers:**

D.3.7.1 Prevention of Significant Deterioration (PSD) VOC BACT Limits [326 IAC 2-2]

[326 IAC 8-1-6]

(a) Compliance with the VOC content and usage limitations contained in Conditions D.3.1.1

shall be determined pursuant to 326 IAC 8-1-4(a)(3) using formulation data supplied by the

coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using

Method 24 in conjunction with the analytical procedure specified in 326 IAC 8-1-4.

(b) Compliance with the VOC limit in Condition D.3.1.1 shall be determined using the following

equation:

n

VOC emissions (lb VOC/gal) =[ Σ (Ci)(Ui)]

i = 1

Where:

i = 1 ton

Ci is the VOC content of each individual coating (i) of a coating type (Primer, Basecoat or

Clearcoat) in pounds of VOC per day, as applied;

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Ui is the usage rate of each individual coating (i) of a coating type (Primer, basecoat or

clearcoat) in gallons per day;

n is the number of individual coatings of a particular coating type (Primer, Basecoat or

Clearcoat)

D.4.9 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 2-2]

(a) Compliance with the VOC emission limits in Conditions D.4.1, D.4.4 and D.4.5 shall be

determined with the following equations (as applicable):

n n

VOC emissions (lb VOC/gal applied solids) = [ Σ (Ci x Ui) / Σ (Si x TE)] x [1 - (CE x DE)]

i = 1 i = 1

Where:

C**i** is the VOC content of the coating (i) in pounds of VOC per gallon of coating, as applied;

U**i** is the usage rate of the coating (i) in gallons per day;

Si is the usage rate of coating (i) solids in gallons per day;

TE is the transfer efficiency of the applicator;

CE is the minimum capture efficiency of the incinerator; and

DE is the minimum destruction efficiency of the incinerator required in Condition D.4.1(b).

Or, if the emission limit is in units of pounds of VOC per gallon of coating less water:

n n

VOC emissions (lb VOC/gal coating less water) =[ Σ (Ci x Ui) / Σ U] x [1 - (CE x DE)]

i = 1 i = 1

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Where:

Ci is the VOC content of the coating (i) in pounds of VOC per gallon of coating less water, as

applied;

Ui is the usage rate of the coating (i) in gallons per day;

U total usage rate from all coatings (from 1 to n)

CE is the minimum capture efficiency of the incinerator; and

DE is the minimum destruction efficiency of the incinerator required in Condition D.4.1(b).

(b) Compliance with the VOC limit in Condition D.4.6 shall be determined by using the following

equation, which calculates the tons of VOC emissions per month, and adding the result to

the calculated VOC emissions from the previous eleven months:

Topcoat VOC = (U x C) x (1-(CE x DE))

Where:

U is the coating usage in tons/month;

C is the VOC content of the coating;

CE is the minimum capture efficiency of the incinerator; and

DE is the minimum destruction efficiency of the oxidizer required in D.4.1(b).

(c) Compliance with Condition D.4.1(b) the capture efficiency for the ED Coating Line shall be

determined using the procedure in 40 CFR Subpart MM – NSPS for Automobile and Light-

Duty Truck Surface Coating Operations.

D.4.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology for Volatile

Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to PSD (79) 1651, issued July 30, 1987 and revised July 26, 1989, PSD/SSM No.

157-29566-00050, 326 IAC 2-2-3, BACT for VOC for the facilities described in this section is the

following:

(a) The daily VOC emissions from each facility shall be limited to less than the

corresponding limits in the following table. Compliance with these limits shall be

demonstrated pursuant to Condition D.4.9:

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Facility lb VOC/gal

applied solids

kg VOC/liter

applied solids

ED Body Coating Line (ED

Dip/Rinse Tanks and Curing Oven)

0.40a 0.062a

Topcoat booths (Topcoat #1

Booth, Topcoat #2 Booth)

12.3b 1.47b

Topcoat Booth #3 10.6c 1.27c

Intermediate Coating Booth 8.76d 1.05d

a Coatings used at the ED Coating Line on a daily basis

b.Volume Weighted average of all Topcoat coatings used in Booths #1 and #2.

c.Volume Weighted average of all Topcoat coatings used in Booth #3.

d Volume Weighted average of all Intermediate coatings.

(b) The incinerator used to control VOC emissions from the Intermediate Coating Oven

shall achieve a minimum VOC destruction efficiency of 90%.

The VOC emissions from the Topcoat #1, Topcoat #2 and Topcoat #3 Ovens shall be

vented to the regenerative thermal oxidizer (RTO-TC123) with a minimum VOC destruction

efficiency of 90 percent.

The VOC emissions from the ED Curing Oven shall be vented to the existing Catalytic

Incinerator with a VOC destruction efficiency of 90 percent, and a minimum capture

efficiency of 70% for the entire ED Coating Line (ED Dip/Rinse Tanks and Curing Oven).

(c) The following good operating practices shall be observed to minimize VOC emissions from

the Topcoat Booth #3:

(1) Minimization of spillage of coating materials,

(2) Minimization of major paint repairs,

(3) Cleanup rags saturated with solvent shall be stored, transported and disposed in

containers that are tightly closed, and

(4) Storage containers used to store VOC- and/or HAP- containing materials shall be

kept covered when not in use.

(d) Pretreatment Cleaning shall utilize only VOC free detergents, conditioners, and rinses

in the body pre-treatment cleaning operations.

(e) Pertaining to purge solvent use:

(1) Purge solvent capture systems will be utilized each time that any coating

application equipment is purged. The purge solvent capture systems shall

have a minimum overall capture efficiency of at least eighty percent (80%).

Collected purge solvent shall be retained in closed conveyances to the

Permittee’s spent purge solvent storage tank or in closed containers until such

time as they are shipped offsite for disposal or recycling.

(2) Block painting will be utilized whenever possible to minimize color changes and

the resulting purge.

D.4.13 Regenerative Thermal Oxidizer and Catalytic Incinerators Temperature [326 IAC 2-7-5(3)] [40

CFR 64]

a) A continuous monitoring system shall be calibrated, maintained, and operated for measuring

the temperature at the inlet to the catalyst bed of the catalytic incinerator whenever any of

the ED Body Oven and Intermediate Coating Oven is in operation to control the VOC

emissions from the ED Body Oven and Intermediate Coating Oven. For the purpose of this

condition, continuous means no less than once per minute. The output of this system shall

be recorded as a three (3) hour average. Whenever the three (3) hour average inlet

temperature to the catalyst bed of each catalytic incinerator is below the three (3) hour

average temperature established during the latest stack test that demonstrated compliance,

the Permittee shall take reasonable response. Section C - Response to Excursions or

Exceedances contains the Permittee’s obligation with regard to the reasonable response

steps required by this condition. Failure to take response steps shall be considered a

deviation from this permit.

(b) A continuous monitoring system shall be calibrated, maintained, and operated for measuring

the operating temperature of the regenerative thermal oxidizer (RTO-TC123) whenever any

of the Topcoat #1 Oven, Topcoat #2 Oven, or Topcoat #3 Oven, is in operation to control

VOC emissions from these ovens. For the purpose of this condition, continuous means no

less than once per minute. The output of this system shall be recorded as a three (3) hour

average. Whenever the three (3) hour average operating temperature of this RTO is below

the three (3) hour average temperature established during the latest stack test that

demonstrated compliance, the Permittee shall take reasonable response. Section C -

Response to Excursions or Exceedances contains the Permittee’s obligation with regard to

the reasonable response steps required by this condition. Failure to take response steps

shall be considered a deviation from this permit.

(c) The Permittee shall determine the three (3) hour average temperature at the inlet to the

catalyst beds of each catalytic incinerator (B-ED and SUR) and the three (3) hour average

operating temperature of the regenerative thermal oxidizer (RTO-TC123) from the most

recent valid performance test that demonstrates compliance with the limits in Conditions

D.4.1, and D.4.4 as approved by IDEM.

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Permit Reviewer: Aida De Guzman

The instruments used for determining the temperature shall comply with Section C – Instrument

Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or

replaced at least once every six (6) months.

D.4.14 Parametric Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage for each

catalytic incinerator (B-ED and SUR) and regenerative thermal oxidizer (RTO-TC123) from

the most recent valid stack test that demonstrates compliance with the permit limits for VOC

destruction efficiency and control efficiency as approved by IDEM.

(b) The duct pressure or fan amperage, whichever is monitored by the Permittee under this

condition, shall be observed at least once per day when the thermal or catalytic incinerator is

in operation. On and after the date the approved stack test results are available, the duct

pressure or fan amperage shall be maintained within the normal range as established in

most recent compliant stack test.

D.4.15 Water Wash Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

(a) Daily visual inspections shall be made on each water wash flood pans and water circulation

associated with the Topcoat #1 Booth, exhausting to nine (9) stacks, identified as TC1-1

through TC1-10; Topcoat #2 Booth, exhausting to ten (10) stacks, identified as TC2-1

through TC2-10 and Topcoat #3 Booth, exhausting to five (5) stacks, identified as TUT1

through TUT-5 to verify the control system proper operation. A warning system shall be

installed and operated to ensure that the water circulation pump is operational at all times

when any of the following emission units are in operation: Topcoat #1 Booth, Topcoat #2

Booth, and Topcoat #3 Booth. In addition, a red strobe light shall automatically be activated

whenever the water circulation pump is down and once a day visual observation of the

warning system shall be conducted. When a system warning is received, the Permittee shall

take reasonable response steps. Section C - Response to Excursions or Exceedances

contains the Permittee’s obligation with regard to the reasonable response steps required by

this condition. Failure to take response steps shall be considered a deviation from this

permit.

(b) Semi-annual inspections shall be performed of the coating emissions from the Topcoat #1

Booth stacks, identified as TC1-1 through TC1-10; Topcoat #2 Booth stacks, identified as

TC2-1 through TC2-10 and Topcoat #3 Booth stacks, identified as TUT1 through TUT-5 and

the presence of overspray on the rooftops and the nearby ground. When there is a

noticeable change in overspray emissions or when evidence of overspray emission is

observed, the Permittee shall take reasonable response steps. Section C - Response to

Excursions or Exceedances contains the Permittee’s obligation with regard to the

reasonable response steps required by this condition. Failure to take response steps shall

be considered a deviation from this permit.

D.5.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC emission limits in Conditions D.5.1 and D.5.2 shall be determined

with the following equation:

n n

VOC emissions (lb VOC/gal coating less water) = [ Σ (Ci x Ui) / Σ U]

i = 1 i = 1

Where:

Ci is the VOC content of the coating (i) in pounds of VOC per gallon of coating less water, as

applied; and

Ui is the usage rate of the coating (i) in gallons per day.

U total usage rate from all coatings (from 1 to n)

D.6.10 Dry Filters Monitoring [326 IAC 2-7-5(3)] [40 CFR 64]

Dry filters shall be operated whenever the PVC Coating Booth #1 and PVC Coating Booth #2, Black

and Wax coating Booth and Anticorrosion Coating Booth are in operation and shall be maintained in

accordance with manufacturer's specification. Filters shall be changed on a monthly basis.

Magnehelic pressure gauges shall be installed for continuous pressure monitoring and to detect

whether filters need to be changed more frequently due to abnormal overspray loading. When the

gauges indicate that a problem exists for a dry filter, the Permittee shall take reasonable response

steps. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with

regard to the reasonable response steps required by this condition. Failure to take response steps

shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C – Instrument

Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or

replaced at least once every six (6) months.

E.1.1 General Provisions Relating to NESHAP IIII [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.3101, the Permittee shall comply with the provisions of 40 CFR Part 63,

Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified

in Table 2 of 40 CFR Part 63, Subpart IIII in accordance with schedule in 40 CFR 63 Subpart IIII.

E.1.2 Surface Coating of Plastic Parts and Products NESHAP [40 CFR Part 63, Subpart PPPP]

The Permittee which engages in surface coating of plastic parts and products shall comply with the

provisions of 40 CFR Part 63, Subpart IIII, in order to comply with 40 CFR Part 63, Subpart PPPP.

E.1.3 Surface Coating of Miscellaneous Metal Parts and Products NESHAP [40 CFR Part 63, Subpart

MMMM]

The Permittee which engages in surface coating of miscellaneous metal parts and products shall

comply with the provisions of 40 CFR Part 63, Subpart IIII, in order to demonstrate compliance with

40 CFR Part 63, Subpart MMMM.

E.1.4 Automobiles and Light-Duty Trucks NESHAP [40 CFR Part 63, Subpart IIII]

The Permittee which engages in automobiles and light duty trucks production shall comply with the

provisions of 40 CFR Part 63, Subpart IIII, as follows: