

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

RECEIVED U.S. E.P.A.

2007 JUN 25 MM 11: 19

June 22, 2007

ENVIR. APPEALS BOARD REPLY TO THE ATTENTION OF:

Thomas J. Krueger Associate Regional Counsel krueger.thomas@epa.gov 312-886-0562

U.S. Environmental Protection Agency Ms. Eurika Durr, Clerk of the Board Environmental Appeals Board Colorado Building 1341 G Street, N.W. Suite 600 Washington, D.C. 20005

RE: PPG Industries, Inc. Petition for Review Permit No. RCRA OHD 004 304 689

Dear Ms. Durr:

Enclosed please find the original and five copies of the U.S. EPA response brief to the matter above, attachments, certified index of Administrative Record, and Certificate of Service.

Please contact me if any questions arise.

Sincerely,

Thomas J. Krueger

Enclosures

BEFORE THE ENVIRONMENTAL APPEALS BOARD UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In re: PPG Industries Ohio, Inc. PPG Industries, Inc. Permit No RCRA OHD 004 304 689

Appeal No. RCRA 07-01

I, Willie Harris, make the following declaration under penalty of perjury:

I am employed by the United States Environmental Protection Agency as Chief; Program Management Branch; Waste, Pesticides and Toxics Division; United States Environmental Protection Agency (U.S. EPA), Region 5. I have been employed in this capacity since 1995. In the ordinary course of the U.S. EPA's regularly conducted business, permit writers acting under my supervision prepare, compile and index the administrative records for permits issued under the Resource Conservation and Recovery Act, as amended (RCRA). Those administrative record indexes are intended to identify the documents considered by the Waste, Pesticides and Toxics Division, U.S. EPA, Region 5, in issuing RCRA permits.

2. To the best of my knowledge, the attached "Index to Administrative Record for RCRA Permit No. OHD 004 304 689," lists all the documents considered by the Waste, Pesticides and Toxics Division, U.S. EPA, Region 5, in issuing RCRA Permit No. OHD 004 304 689 on April 5, 2007, to PPG Industries Ohio, Inc. And PPG Industries, Inc.

Dated this 22nd day of June, 2007.

Willie Harris, Chief Program Management Branch Waste, Pesticides and Toxics Division United States Environmental Protection Agency Region 5

PPG INDUSTRIES OHIO, INC. Circleville, OHIO OHD 004 304 689

Page 1

Wen Huang

No.	Received/Dated	Description	Sec. No.
101	6/8/04 5/12/04	PPG to EPA: Part B Application for permit reissuance	Binder
102	6/22/04 6/18/04	PPG to OEPA: Responses to OEPA NODs dated 5/25/04	1-2
103	6/1/04 5/24/04	PPG to OEPA: Changes to RCRA permit	18
104	10/20/04 10/12/04	PPG to OEPA: Responses to NOD of 8/17/04	. 11
105	10/11/04 10/11/04	PPG: Notice for Class 1 permit modification	11
106	11/24/04 11/4/04	PPG to OEPA: Responses to OEPA NODs	n
107	1/20/05 1/10/05	OEPA to PPG: Additional NODs	u
108	2/7/05 1/26/05	PPG to OEPA: Class IA permit modification request	· n
109	2/14/05 2/7/05	PPG to OEPA: Class IA permit modification	n
110	- 2/22/05	EPA to PPG: Part B information request via e-mail	
111	3/4/05 2/24/05	PPG to OEPA: Class 1 permit modification request	15
112	3/25/05 3/18/05	OEPA to PPG: NODs	8
113	3/22/05 3/22/05	PPG: Notice for Class 1 permit mod.	
114	3/31/05 3/22/05	PPG to OEPA: Class 1 permit mod.	4
115	4/20/05 4/11/05	PPG to OEPA: Class IA permit mod.	- 11
116	5/10/05 4/22/05	PPG to OEPA: Responses to OEPA NODs 3/18/05	u .
117	5/5/05 5/5/05	PPG: Notice Class 1 permit mod.	
118	5/25/05 5/5/05	PPG to OEPA: Class 1 permit mod.	12
119	9/30/05 9/14/05	PPG to OEPA: Class 1 permit mod.	
120	11/21/05 11/14/05	PPG to EPA: Part B information on BB & CC	11
121	12/14/06 11/30/06	PPG to EPA: Additional P&Ds	Binder
122	4/4/06 3/27/06	PPG to EPA: Additional information requested by EPA	"
123	4/4/06 3/27/06	PPG to EPA: Updated closure, financial assurance, personnel change	2
124	4/10/06 3/27/06	PPG to EPA: Revision to Part B Application	n
125	4/18/06 4/14/06	PPG to EPA: "	10
126	6/7/06 5/31/06	PPG to EPA: Updated Part A Application	11
[•] 127	8/28/06 8/28/06	OEPA to EPA: Joint Fact Sheet	u
128	12/13/06 -	OEPA to EPA: Final Fact Sheet, PN, Radio Announcement	11
129	5/10/07 5/10/07	PPG to EPA: Permit Appeal	11
130	11/09/06	PPG to EPA: Comments on draft permit	ti

PPG INDUSTRIES OHIO, INC. Circleville, OHIO OHD 004 304 689

Page 2

133		
134		
135		
136		
137		
138		

0.00

File: PPG-Circleville-adm WHuang PPG Contact: Maura C. LaGreca (740) 420-6612

RECEIVED U.Ş. E.P.A.

BEFORE THE ENVIRONMENTAL APPEALS BOARD UNITED STATES ENVIRONMENTAL PROTECTION AGENCY JUN 25 AM 11: 19

ENVIR. APPEALS BOARD

In re: PPG Industries Ohio, Inc. PPG Industries, Inc.

Appeal No. RCRA 07-01

Permit No RCRA OHD 004 304 689

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 5 RESPONSE TO PETITION FOR REVIEW

)

I. BACKGROUND AND STANDARD FOR REVIEW

PPG Industries Ohio, Inc. and PPG Industries, Inc. (collectively "PPG") own and operate a paint resin manufacturing plant in Circleville, Ohio. The plant includes an energy recovery unit ("ERU") that is subject to the regulations for incinerators under the Resource Conservation and Recovery Act, as amended ("RCRA"). PPG now seeks review of six conditions in the Federal RCRA Permit No. OHD 004-304-689 (the "Permit") (Attachment A) issued by the United States Environmental Protection Agency, Region 5 ("U.S. EPA") on April 5, 2007. ¹

This Board will ordinarily not review a RCRA permit unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19. The preamble to section 124.19 states that "this power of review should only be sparingly exercised," and that "most permits

¹ U.S. EPA issued its draft permit containing these provisions on September 26, 2006, and provided a 45-day comment period running from September 27, 2006 through November 13, 2006. No public hearing was requested by any party, and the only written comments were provided by PPG on November 9, 2006. U.S. EPA issued a response to those comments, along with the final Permit, on April 5, 2007. PPG filed its petition for review on May 7, 2007.

should be finally determined at the Regional level * * *." 45 Fed. Reg. 33,412 (1980). See In re Rohm and Haas Company, 9 E.A.D. 499, 503-04 (EAB 2000).

The burden of proving that review is warranted falls on the petitioner. 40 C.F.R. § 124.19(a). <u>See also In re Johnson Atoll Chemical Agent Disposal System</u>, 6 E.A.D. 174, 178 (EAB 1995); <u>In re Rohm and Haas Company</u>, 9 E.A.D. at 504. The petitioner may only seek review of issues it raised with specificity during the public comment period. 40 C.F.R. § 124.19(a). <u>See also In re Carlota Copper Co.</u>, 11 E.A.D. 692, 778 (EAB 2004); <u>In re Steel</u> <u>Dynamics, Inc.</u>, 9 E.A.D. 165, 230-31 (EAB 2000); <u>In re Knauf Insulation, GmbH</u>, PSD Appeal Nos. 6-01 through 6-06, Order Denying Review at 3-4 (EAB Nov. 14, 2006).

In particular, PPG asserts that: (1) three conditions at issue, which rely on U.S. EPA's "Omnibus" authority to add necessary specifics to the Permit to assure protection of human health and the environment, present critical policy issues; and (2) the other three conditions at issue are based on either an abuse of discretion or on erroneous conclusions of fact or law.²

As described in more detail below, PPG has failed to meet its burden. The Omnibus permit conditions at issue are necessary and appropriate to assure proper operation and recordkeeping for the ERU so that it will meet the RCRA standards for air emissions from equipment leaks and from tanks. The remaining permit conditions are consistent with the requirements of RCRA, including 40 C.F.R. Part 264 Subparts BB and CC, and are based on factual and legal conclusions amply supported by the record.

² U.S. EPA, after evaluating PPG's petition, is withdrawing one of the challenged conditions. U.S. EPA will modify the Permit to withdraw language in Section III requiring annual certification to the Director regarding PPG's election of compliance under 40 C.F.R. § 264.1064(m). See Petition for Review at 3-4, 12-13.

II. DISCUSSION

A. <u>The Permit Conditions Included Under U.S. EPA's Omnibus Authority Are Necessary To</u> <u>Protect Human Health And The Environment By Assuring Proper Operation And</u> <u>Recordkeeping For The ERU So That It Will Meet The RCRA Standards For Air</u> <u>Emissions From Equipment Leaks And From Tanks.</u>

PPG seeks review of three conditions that add specific requirements to the Permit. The U.S. EPA added these three conditions under the Omnibus authority in 40 C.F.R. §270.32(b)(2), which reflects the statutory language of Section 3005(c)(2) of RCRA, 42 U.S.C. § 6925(c)(3). See Petition for Review at 6-8, 16-20. That authority recognizes that the general requirements of the Agency's permitting regulations will not anticipate all of the facility-specific issues that may have an impact on regulatory compliance and on protection of human health and the environment. See, e.g., In the Matter of GSX Services of South Carolina, Inc., 4 E.A.D. 451, 462-63 (EAB 1992).

This Board has declined to review the exercise of Omnibus authority when the record contains a properly supported finding that the permit condition is necessary to protect human health or the environment provided there is an adequate nexus to the hazardous waste management activities carried on at the facility. <u>See In re Caribe General Electric Products Inc.</u>, 8 E.A.D. 696, 707-08 (EAB 2000).

U.S. EPA's Response to Comments specifically finds that the permit conditions at issue are necessary to protect human health and the environment. Response to Comments at 5 (Attachment B). As described in more detail below, these conditions: (1) are a natural outgrowth of general permit conditions applicable to PPG's facility; (2) are necessary to ensure that the facility conducts its waste management activities under the Permit in accordance with the permit

3

application and with the regulatory requirements of 40 C.F.R. Parts 264 and 270; and (3) are amply supported by the record.

1. <u>Requiring temperature and pressure monitoring for waste storage tanks to avoid</u> <u>excessive temperature and pressure buildup assures proper operation and control</u> <u>of emissions, and is neither clearly erroneous nor an abuse of discretion.</u>

PPG's application indicates that it can monitor pressure and temperature of its Level 2 hazardous waste tanks. <u>See</u> page D-19, "Diagram of Piping, Instrumentation, and Process Flow" ("P&IDs"), of PPG's Part B permit application (Attachment C) submitted as part of its Part B Application. Section IV.C.2.b of the Permit therefore requires pressure and temperature monitoring for certain Level 2 hazardous waste tanks:

> Each hazardous waste storage tank equipped with an agitator (mixer) must be monitored for the temperature and pressure in the tank to avoid excessive temperature and/or pressure buildup inside the tank. Operation of the tanks shall in conformance with the tank design and operation criteria.

Permit, page 20.

Failure to monitor temperature and pressure of these tanks increases the risk of air releases from the tank through breach, rupture, or explosion. If pressure and temperature are not monitored and controlled, large releases with serious consequences – including release of pollutants into the environment in violation of 40 C.F.R Part 264, Subpart CC air emission standards – can result. <u>See, e.g.</u>, attached explosion report by Von Roll America, Inc. and its subsequent installation of extra external temperature sensors on tanks (Attachment D).

U.S. EPA therefore determined that pressure and temperature monitoring are part of the necessary and appropriate operation and maintenance of the equipment. Furthermore, the pressure and temperature monitoring assure control of air pollutant emissions from the tanks. As

4

such, they are an essential element to assure that the tanks are operated and maintained consistent with the application and the representations made therein, as provided in 40 CFR § 270.30(e).

See Response to Comments at 3, 5.

40 C.F.R. § 264.31 reinforces that:

Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

40 C.F.R. § 264.31. This is exactly what temperature and pressure monitoring will do, which is why such monitoring is common engineering design practice. Moreover, the condition imposes a minimal burden – merely requiring PPG to monitor the tanks to avoid excessive temperature or pressure buildup – to avoid potentially substantial problems affecting performance and regulatory compliance.

This Permit condition reinforces the importance of specific measures PPG can readily take to help assure compliance with its specific regulatory obligations. <u>See In re Chemical Waste</u> <u>Management of Indiana</u>, 6 E.A.D. 144, 165 (EAB 1995). These measures have a nexus to the potential release of ignitable regulated wastes in the tanks, ensure regulatory compliance, and are necessary to protect human health and the environment. U.S. EPA's response to comments provided sufficient findings to that effect.

2. <u>Including the Themal Oxidizer Unit operational parameters identified by PPG as</u> central to its compliance with emission control requirements is neither clearly erroneous nor an abuse of discretion.

The Thermal Oxidizer Unit ("TOU") is the combustion unit used to destroy organic

compounds emitted from PPG's tanks and related equipment. Section IV.C.3.b(2) of the Permit

incorporates the operating parameters outlined in the permit application that are used to assure that

the TOU meets regulatory requirements for treatment efficiency:

<u>Thermal Oxidizer Unit</u> (TOU) - The vent stream generated from the hazardous waste storage tanks serving the resin plant must be conveyed by an induced draft fan to the thermal oxidizer unit. The thermal oxidizer must have a design thermal capacity of 10.8 million Btu/hr, utilizing natural gas as fuel to maintain a minimum oxidizer outlet temperature of 1,200 ^oF. The combined flow from the vent streams and combustion air shall not exceed 7,000 standard cubic feet per minute (scfm).

The TOU must consist of a natural gas fired burner, combustion chamber, combustion air preheater, induced draft fan, flame management system, instrumentation and controls. The combustion chamber temperature of the TOU must be continuously monitored and recorded. Quench air to reduce the flue gas temperature for protection of the induced draft fan and associated equipment must be provided. ³

Permit, page 22.

These specific details are taken directly from Section M.4.4, "Closed Vent System and Control Devices," of PPG's Part B permit application (Attachment E). They are the operational conditions on which PPG has based its determination that the TOU meets the 95% organic destruction efficiency required by 40 C.F.R. § 264.1087 and 40 C.F.R. § 264.1033. These parameters therefore define the way in which PPG proposes to operate the unit to meet the regulatory standard.

³ It does not appear that any of PPG's concerns relate to the third paragraph of Section IV.C.3.b(2), which tracks specific requirements of 40 C.F.R. § 264.1087 and which is omitted here. To the extent PPG has concerns about the third paragraph, it has failed to identify them with any specificity in its comments on the draft permit and in its petition for review, and so has not preserved such issues for appeal under 40 C.F.R. § 124.19(a).

The regulations setting standards for control devices like the TOU emphasize the

importance of monitoring, operating, and maintaining the TOU to assure compliance with those

standards:

The owner or operator shall monitor and inspect each control device ... to ensure proper operation and maintenance of the control device by implementing the following requirements:

(1) Install, calibrate, maintain and operate according to the manufacturer's specifications a flow indicator....

(2) Install, calibrate, maintain and operate according to the manufacturer's specifications a device to continuously monitor control device operation....

(3) Inspect the readings from each monitoring device required by paragraphs (f)(1) and (f)(2) of this section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to assure the control device operates in compliance with the requirements of this section.

40 C.F.R. § 264.1033(f).

As such, the Permit provisions incorporating elements of the manufacturer's

specifications and the facility's operational parameters are essential elements to assure that the

TOU is operated safely consistent with the regulations, the permit application, and the

representations made therein, as provided in 40 C.F.R.§§ 270.30(e) and 264.1033(f). The

condition simply requires PPG to run the TOU as intended and thereby imposes no new burden

on PPG. The specific requirements are part of necessary and appropriate operation and

maintenance of the equipment to assure control of air pollutant emissions. See Response to

Comments at 3-5.

These detailed conditions reinforce the importance of operating the TOU as intended, to assure that PPG meets its specific regulatory obligations. See In re Chemical Waste

<u>Management of Indiana</u>, 6 E.A.D. 144, 165 (EAB 1995). These measures have a nexus to the regulated air emissions from organic wastes, ensure regulatory compliance, and are necessary to protect human health and the environment. U.S. EPA's response to comments provided sufficient findings to that effect.

3. <u>Including in the Permit the tank nitrogen blanketing system used by PPG to help assure</u> compliance with emission control requirements is neither clearly erroneous nor an abuse of discretion.

As indicated in its permit application, PPG uses a nitrogen blanketing system to help control the generation of organic vapors and reduce the potential for fire and explosion in its hazardous waste storage tanks. See Page D-26 of PPG's Part B permit application (Attachment F). Section IV.C.4 of the Permit incorporates that system:

IV.C.4 Tank Nitrogen Blanketing System

IV.C.4.a All hazardous waste storage tanks must be provided with a nitrogen blanketing system to reduce organic vapors in the tank head spaces. The nitrogen blanketing system must be properly maintained and be operational to prevent overloading of the control devices.

IV.C.4.b The nitrogen supply pressure and tank head space pressure must be maintained in accordance with the design settings to avoid excess release of VOs into the closed-vent system and the control devices.

IV.C.4.c In the event of system malfunction, a repair record must be maintained in the facility operating record.

Permit, page 23.

U.S. EPA added this requirement, which is consistent with common engineering design practice for storage of combustible materials in the chemical manufacturing industry, to assure that the TOU really would meet its 95% organic destruction efficiency requirement. Absent a nitrogen blanket, the organic vapors could accumulate in the tank headspace and elsewhere in the closed-vent system, thereby increasing the potential for overloading the TOU with organic vapors.

The nitrogen blanket also removes the atmospheric oxygen that would otherwise be present in the tanks. When a hazardous waste tank for ignitable waste is equipped with a mechanical mixer, the mixer provides mechanical energy to the waste that increases its temperature. The mixer also provides an ignition source for the waste, especially when oxygen is present. As temperature increases in a confined space, pressure increases as well. The combination of oxygen with organic vapors, pressure, and temperature at increasing levels in a confined space significantly increases the danger of fire and explosion. <u>See</u> National Fire Protection Association, <u>NFPA 69 – Standard on Explosion Prevention Systems</u> (NFPA, 2002) (Attachment G).

40 C.F.R. § 264.31 reinforces that:

Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

40 C.F.R. § 264.31. Facilities use nitrogen blanketing for exactly this purpose – it minimizes the risk of fire, explosion, and the release of hazardous waste or hazardous waste constitutents. As such, these specific operation and maintenance requirements are essential elements to assure that the tanks are operated consistent with the application and the representations made therein, as provided in 40 C.F.R.§ 270.30(e). See Response to Comments at 4-5.

9

These measures have a nexus to the regulated air emissions from organic wastes, ensure regulatory compliance, and are necessary to protect human health and the environment. U.S. EPA's response to comments provided sufficient findings to that effect.

B. <u>To The Extent They Are Validly Raised For Review, The Remaining Permit Conditions</u> <u>Are Supported By The Record And Are Neither Clearly Erroneous Nor An Abuse Of</u> <u>Discretion.</u>

PPG seeks review of two other conditions asserting that they are based on either an abuse of discretion or on erroneous conclusions of fact or law. However, PPG failed to specifically identify one of these issues during the public comment period and is therefore foreclosed from raising it at this date. Moreover, as described in detail below, these permit conditions are consistent with the requirements of RCRA, including 40 C.F.R. Part 264 Subparts BB and CC, and are based on factual and legal conclusions amply supported by the record.

1. <u>Requiring revised instrumentation and piping diagrams if PPG decides to make a</u> permit modification request to change its tank system is neither clearly erroneous nor an abuse of discretion.

Section IV.C.1.c of the Permit recognizes that in the future PPG may wish to modify the

Permit to reflect operation of its Level 1 hazardous waste tanks:

Revised instrumentation and piping diagrams must be submitted with the permit modification request if a tank is isolated from the closed-vent system and control devices for other purposes (e.g., closure, conversion to non-hazardous waste storage tank, Subpart CC exempt tank, Level 1 tank) which do not require a Level 2 tank control.

Permit, page 19.

PPG contends that because the Federal permit focuses only on air emissions from equipment leaks and tanks under 40 C.F.R. Part 264, Subparts BB and CC, PPG has only a limited obligation to provide documents to U.S. EPA. Specifically, PPG asserts that it need only submit documentation described in the regulations specific to Subparts BB and CC -- 40 C.F.R. § 270.25 and 40 C.F.R. § 270.27 and claims those regulations do not refer to or require Piping and Instrumentation Diagrams ("P&IDs").

The contested permit provision merely incorporates existing requirements contained in U.S. EPA regulations. All requests for permit modifications must contain the applicable information required by 40 C.F.R. §§ 270.13 through 270.21. 40 C.F.R. § 270.42(a)(i), (b)(iv), and (c)(iv). As U.S. EPA explained in its response to comments, 40 C.F.R. § 270.16(d) explicitly requires PPG to submit piping and instrumentation diagrams. <u>See</u> Response to Comments, pp. 2-3.

PPG's narrow interpretation would deprive U.S. EPA of the information necessary to understand the operations to be permitted and is inconsistent with the purpose and language of the RCRA regulations. The general documentation requirements for the underlying units (tanks in this case) are essential to understanding the permit applications and modifications, even if those units are governed primarily by the State permit. The permit application requirements for tanks in 40 CFR § 270.16 specifically *do* refer to and require P&IDs. Moreover, the requirements are broad in application beginning with the statement: "owners and operators of facilities that use tanks to store or treat hazardous waste must provide the following additional information." <u>See</u> Response to Comments, pp. 2-3.

The regulatory sections PPG refers to also seem to reinforce that the documentation requirements for Subparts BB and CC are *in addition to*, rather than instead of, the requirements explaining the underlying equipment. Both 40 C.F.R. § 270.25 and 40 C.F.R. § 270.27 begin by

11

stating that owners and operators of facilities that have equipment subject to Subparts BB and CC must "provide the following *additional* information" (emphasis added). The Subpart CC regulation applicable to tanks (40 C.F.R. § 264.1080) also reinforces the interconnection: "The requirements of this subpart apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to either subpart I, J, or K of this part...."⁴

Finally, U.S. EPA has the authority to request information from a permittee to assure that a requested permit modification package is complete. <u>See</u> 40 C.F.R. § 270.42. The Permit provision could therefore also be regarded as advance notice that such information will be required, because proposed changes in operation of the tank system cannot be fully understood without reference to the P&IDs that precisely describe the proposed changes and place them in context.

The requirement for P&IDs to accompany future permit modification requests for the Level 1 hazardous waste tanks is based on a reasonable interpretation of the regulations. As such, the permit condition is neither clearly erroneous nor an abuse of discretion.

⁴ Many pieces of information about the tank system are relevant to leaks and to control of air emissions, including tank controls and monitoring, safety devices, pressure relief. That information is necessary to fully understand information provided under 40 C.F.R. § 270.25 and 40 C.F.R. § 270.27.

2. U.S. EPA's determination that PPG's "overflow tanks" are subject to regulation was not appropriately raised for review by PPG, is not clearly erroneous, and is supported by the record.

Section IV.C.1 of the Permit lists the tanks that must meet Level 2 tank standards under the Permit. That list includes two tanks (T-1526 and T-1527) identified in PPG's application as "overflow tanks." Permit, page 20.

In its comments on the draft permit, PPG merely stated in passing that "the two overflow tanks indicated in the table are not regulated tanks, and should be removed as applicable sources." PPG Comments at 1 (Attachment H). Because PPG did not provide any basis for the cursory statement that these tanks are not regulated, it has failed to raise the issue with sufficient specificity or detail under 40 C.F.R. §124.19(a) and so has not preserved the issue for appeal.

Even assuming this condition is subject to review, simply calling the tanks "overflow tanks" does not make them so. The information submitted by PPG shows that these tanks are part of an interconnected closed-vent tank farm system. Thus, in addition to receiving emergency overflows, during normal operation, they also receive condensation from the vent streams that contain hazardous constituents. <u>See</u> Page D-18, "Two Overflow Tanks," of PPG's Part B permit application (Attachment I).

In supporting its claim, PPG now cites to the exemption for emergency response activities in 40 C.F.R. § 264.1(g)(8)(i) (and the parallel provisions of 40 C.F.R. § 265.1(c)(11)). Those narrow exemptions, however, apply only to:

a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a hazardous waste;

(B) An imminent and substantial threat of a discharge of hazardous waste;

(C) A discharge of a material which, when discharged, becomes a hazardous waste.

(D) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in 40 CFR 260.10.

40 C.F.R. § 264.1(g)(8)(i).

This exemption from regulation is carefully limited by 40 C.F.R. § 264.1(g)(8)(iii), which states:

Any person who is covered by paragraph (g)(8)(i) of this section and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this part and parts 122 through 124 of this chapter for those activities.

40 C.F.R. § 264.1(g)(8)(iii). As part of a closed-vent system, tanks T-1526 and T-1527 regularly contribute to the containment and treatment of hazardous waste independent of any immediate response. The tank system is designed so that condensation from the vent streams is commonly collected in tanks T-1526 and T-1527. Indeed, these tanks are built to operate as hazardous waste storage tanks and are equipped with temperature sensors and vents, nitrogen blanketing, level switches, analyzers, as well as a closed-vent header from the tank farm that conveys condensed liquid hazardous waste. See page D-19, "Diagram of Piping, Instrumentation, and Process Flow," of PPG's Part B permit application. Removal of these tanks from regulation under 40 C.F.R. Part 264, Subpart CC will effectively impair proper operations of the closed-vent system and the control devices.

14

Tanks T-1526 and T-1527 therefore fall well outside the limited exemption for emergency overflow tanks. PPG's "overflow" tanks are not used exclusively for emergency response and so are not exempt under 40 C.F.R. § 264.1(g)(8) and 40 C.F.R. § 265.1(c)(11). It is important that the tanks be regulated so they are managed and operated in conjunction with the rest of the closed vent system to assure safe and proper operations.

To the extent it is properly presented for review, U.S. EPA's factual determination (Response to Comments, p.2) that the "overflow" tanks are not used exclusively for emergency response and are not exempt from regulation is reasonable and is supported by the record. As such, the permit condition is neither clearly erroneous nor an abuse of discretion.

III. CONCLUSION

For the foregoing reasons, U.S. EPA respectfully requests that the Environmental Appeals Board deny PPG's petition for review. PPG has failed to establish any clearly erroneous findings of fact or conclusions of law, nor has it shown any abuses of discretion or significant policy issues. As described above, the Permit conditions cited by PPG are fully supported by the record in this matter.

Respectfully submitted,

Thomas J. Krueger Associate Regional Counsel United States Environmental Protection Agency Region 5 77 W. Jackson Blvd. Chicago, Illinois 60604

OF COUNSEL: Laurel Celeste Mary E. Gleaves Office of General Counsel United States Environmental Protection Agency

Attachment A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT

Name and Location:

PPG Industries Ohio, Inc. 559 Pittsburgh Road Circleville, Ohio 43113

Owner(s):

PPG Industries Ohio, Inc. 559 Pittsburgh Road Circleville, Ohio 43113

Operator(s):

PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272 and PPG Industries Ohio, Inc. 559 Pittsburgh Road Circleville, Ohio 43113

U.S. EPA Identification Number: OHD 004 304 689

Effective Date: April 5, 2007

Expiration Date: December 29, 2016

Authorized Activities:

The United States Environmental Protection Agency (U.S. EPA) hereby issues a Resource Conservation and Recovery Act (RCRA) permit (hereinafter referred to as the "permit") to **PPG Industries Ohio, Inc. (Owner** and **Operator)** and **PPG Industries, Inc. (Co-Operator)**(hereinafter referred to as the "Permittees" or addressed in the second person as "you") in connection with the hazardous waste treatment, storage, and disposal activities at the Circleville facility in Ohio.

This permit is issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 USC § 6901 *et seq.*) (collectively referred to as RCRA) and U.S. EPA's regulations promulgated thereunder (codified, and to be codified, in Title 40 of the Code of Federal Regulations (40 CFR)).

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after the U.S. EPA serves notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may file a petition for review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR § 124.19.

Effective Date:

This permit is effective as of <u>April 5, 2007</u> and will remain in effect until <u>December 29, 2016</u>, unless revoked and reissued under 40 CFR § 70.41, terminated under 40 CFR § 270.43, or continued in accordance with 40 CFR § 70.51(a).

iii

By: Margarer M. Guerriero, Director

Waste, Pesticide and Toxics Division

Date: 4/5/07

Specifically, this permit addresses: (1) air emission standards for equipment leaks (40 CFR Part 264, Subpart BB), tanks and containers (40 CFR Part 264, Subpart CC); and (2) other federal RCRA regulations for which the state has not yet been authorized. The RCRA permit is comprised of both this permit, which contains the effective federal RCRA permit conditions, and the effective state RCRA permit conditions issued by the State of Ohio's RCRA program authorized under 40 CFR Part 271 (hereinafter called the "state-issued portion of the RCRA permit"). Any hazardous waste activity which requires a RCRA permit and is not included in the RCRA permit is prohibited.

Permit Approval:

On June 30, 1989, the State of Ohio received final authorization pursuant to Section 3006 of RCRA, 42 USC § 6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. The State of Ohio has also received final authorization to administer certain additional RCRA requirements on several occasions since then. However, because the U.S. EPA has not yet authorized the State of Ohio to administer certain regulations, including the air emission standards for equipment leaks, tanks and containers handling hazardous wastes, the U.S. EPA Region 5 is issuing the RCRA permit requirements for operations at the Permittees' facility which fall under these regulations.

You must comply with all terms and conditions contained in this permit. This permit consists of all the conditions contained herein, all documents attached hereto and all documents listed or cross-referenced in these documents, approved submittals (including plans, schedules and other documents), and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 270, and applicable provisions of RCRA.

This permit is based on the assumptions that the information submitted in the Permittees' RCRA permit application dated <u>April 30, 2004</u>, and in any subsequent modifications to that application (hereinafter referred to as the "Application") is accurate, and that the facility is configured, operated and maintained as specified in the permit and as described in the Application.

Any inaccuracies in the submitted information may be grounds for the U.S. EPA to terminate, revoke and reissue, or modify this permit in accordance with 40 CFR §§ 270.41, 270.42 and 270.43; and for enforcement action. You must inform the U.S. EPA of any deviation from, or changes in, the information in the Application that might affect your ability to comply with the applicable regulations or conditions of this permit.

TABLE OF CONTENTS

SECT	TION I	STANDARD PERMIT CONDITIONS	
	I.A	EFFECT OF PERMIT	.1
	I.B	PERMIT ACTIONS	.1
•		I.B.1 Permit Review, Modification, Revocation and Reissuance, and	
· · ·		Termination	.1
		I.B.2 Permit Renewal	
	I.C	SEVERABILITY	
	I.D	DEFINITIONS	
	-1.E	DUTIES AND REQUIREMENTS	2
		I.E.1 Duty to Comply	.2
		I.E.2 Duty to Reapply	.3
		I.E.3 Permit Expiration	.3
		I.E.4 Need to Halt or Reduce Activity Not a Defense	.3
		I.E.5 Duty to Mitigate	3
		I.E.6 Proper Operation and Maintenance	3
		I.E.7 Duty to Provide Information	4
		I.E.8 Inspection and Entry	4
		I.E.9 Monitoring and Records	<u> </u>
		I.E.10 Reporting Planned Changes	
		LE 11 Departing Anticipated Nencompliance	5
		I.E.11 Reporting Anticipated Noncompliance	5
· .		I.E.12 Certification of Construction	.0 .2
		I.E.13 Transfer of Permits	.0
		I.E.14 Twenty-Four Hour Reporting	0.
		I.E.15 Other Noncompliance	.8 О
	. –	I.E.16 Other Information	8.
· · · · ·	I.F	SIGNATORY REQUIREMENT	.8
· ·	I.G	REPORTS, NOTIFICATIONS AND SUBMISSIONS TO THE DIRECTOR	8
·	I.H	CONFIDENTIAL INFORMATION	.9
•	1.1	DOCUMENTS TO BE MAINTAINED AT THE FACILITY	.9
		I.I.1 Operating Record	
		I.I.2 Notifications	.9
	• .	I.I.3 Copy of Permit	.9
	I.J	ATTACHMENTS AND DOCUMENTS INCORPORATED BY	
		REFERENCE	.9
	I.K	COORDINATION WITH THE CLEAN AIR ACT	0
SECT	-10N 11-	- OTHER FEDERAL RCRA REQUIREMENTS	10
	II.A	Additional Hazardous Waste Numbers	
	7 C 62 \		. 🖝
SECT	ION III	AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS	
	• .	(40 CFR Part 264, Subparts BB)	11.
	III.A	Waste Determination and Equipment	11

	III.B	Pumps in Light Liquid Service
	III.C	Pressure Relief Devices in Gas/Vapor Service
	III.D	Sampling Connection Systems
	III.E	Open-Ended Valves or Lines
	III.F	Valves in Gas/Vapor Service or in Light Liquid Service
·	111.G	Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in
		Light Liquid or Heavy Liquid Service, and Flanges and Other
		Connectors
	III.H	Delay of Repair14
	10.1	Closed-Vent Systems and Control Devices
	III.J	Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid
		Service; Percentage of Valves Allowed to Leak
	Ш.К	Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid
		Service: Skip Period Leak Detection and Repair
	III.L	Agitators
•	III.M	Test Methods and Procedures
	III.N	Recordkeeping and Reporting Requirements
SECT		AIR EMISSION STANDARDS FOR CONTAINERS AND TANKS
SECT	ION IV	AIR EMISSION STANDARDS FOR CONTAINERS AND TANKS (40 CFR Part 264, Subpart CC)
SECT	ION IV IV.A	(40 CEB Part 264, Subpart CC)
SECT		(40 CFR Part 264, Subpart CC) General
SECT		(40 CFR Part 264, Subpart CC) General
SECT	IV.A	(40 CFR Part 264, Subpart CC) General
SECT		(40 CFR Part 264, Subpart CC) General
SECT	IV.A	(40 CFR Part 264, Subpart CC) General
SECT	IV.A IV.B	(40 CFR Part 264, Subpart CC) General
SECT	IV.A IV.B	(40 CFR Part 264, Subpart CC) General
SECT	IV.A IV.B	(40 CFR Part 264, Subpart CC)GeneralIV.A.1 Waste Determination16IV.A.2 Applicable Requirements16Containers16IV.B.1 Requirements for Level 1 Containers16IV.B.2 Requirements for Level 2 Containers17IV.B.3 Requirements for Level 3 Containers18Tanks19
SECT	IV.A IV.B	(40 CFR Part 264, Subpart CC)GeneralIV.A.1Waste Determination16IV.A.2Applicable Requirements16Containers16IV.B.1Requirements for Level 1 Containers16IV.B.2Requirements for Level 2 Containers17IV.B.3Requirements for Level 3 Containers18Tanks19IV.C.1Hazardous Waste Storage Tanks19
SECT	IV.A IV.B	(40 CFR Part 264, Subpart CC)GeneralIV.A.1 Waste Determination16IV.A.2 Applicable Requirements16Containers16IV.B.1 Requirements for Level 1 Containers16IV.B.2 Requirements for Level 2 Containers17IV.B.3 Requirements for Level 3 Containers18Tanks19IV.C.1 Hazardous Waste Storage Tanks19IV.C.2 Requirements for Level 2 Tanks20
SECT	IV.A IV.B	(40 CFR Part 264, Subpart CC)GeneralIV.A.1 Waste DeterminationIV.A.2 Applicable RequirementsIV.A.2 Applicable RequirementsIV.A.2 Applicable RequirementsIV.B.1 Requirements for Level 1 ContainersIV.B.2 Requirements for Level 2 ContainersIV.B.3 Requirements for Level 3 ContainersIV.B.3 Requirements for Level 3 ContainersIV.C.1 Hazardous Waste Storage TanksIV.C.2 Requirements for Level 2 TanksIV.C.3 Closed-vent Systems and Control DevicesIV.C.3
SECT	IV.A IV.B IV.C	(40 CFR Part 264, Subpart CC)GeneralIV.A.1 Waste DeterminationIV.A.2 Applicable RequirementsIV.A.2 Applicable RequirementsIV.A.2 Applicable RequirementsIV.B.1 Requirements for Level 1 ContainersIV.B.2 Requirements for Level 2 ContainersIV.B.3 Requirements for Level 3 ContainersIV.B.3 Requirements for Level 3 ContainersIV.C.1 Hazardous Waste Storage TanksIV.C.2 Requirements for Level 2 TanksIV.C.3 Closed-vent Systems and Control DevicesIV.C.4 Tank Nitrogen Blanketing System23
SECT	IV.A IV.B	(40 CFR Part 264, Subpart CC)GeneralIV.A.1 Waste DeterminationIV.A.2 Applicable RequirementsIV.A.2 Applicable RequirementsIV.A.2 Applicable RequirementsIV.B.1 Requirements for Level 1 ContainersIV.B.2 Requirements for Level 2 ContainersIV.B.3 Requirements for Level 3 ContainersIV.B.3 Requirements for Level 3 ContainersIV.C.1 Hazardous Waste Storage TanksIV.C.2 Requirements for Level 2 TanksIV.C.3 Closed-vent Systems and Control DevicesIV.C.3

v

SECTION I – STANDARD PERMIT CONDITIONS

I.A EFFECT OF PERMIT

The RCRA permit is comprised of both this permit, which contains the effective federal RCRA permit conditions, and the effective state RCRA permit. You are hereby allowed to manage hazardous waste in accordance with this permit. Under this permit, the storage and treatment of RCRA hazardous waste must comply with all terms and conditions in this permit. Other aspects of the storage and treatment of RCRA hazardous wastes are subject to the conditions in the state-issued portion of the RCRA permit. Any hazardous waste activity, which requires a RCRA permit and is not included in the RCRA permit, is prohibited.

Subject to 40 CFR § 270.4, compliance with the RCRA permit during its term constitutes compliance for purposes of enforcement with Subtitle C of RCRA except for those requirements not included in the permit which: (1) become effective by statute; (2) are promulgated under part 40 CFR Part 268 restricting the placement of hazardous waste in or on the land; (3) are promulgated under 40 CFR Part 264 regarding leak detection systems; or (4) promulgated under subparts AA, BB, or CC of 40 CFR Part 265 limiting air emissions. (40 CFR § 270.4)

This permit does not: (1) convey any property rights or any exclusive privilege (40 CFR § 270.30(g)); (2) authorize any injury to persons or property, or invasion of other private rights; or (3) authorize any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued, or any action brought, under: (1) Section 3013 or 7003 of RCRA; (2) Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 USC §§ 9601 *et seq.* (commonly known as CERCLA); or (3) any other law protecting human health, welfare, or the environment.

I.B PERMIT ACTIONS

I.B.1 Permit Review, Modification, Revocation and Reissuance, and Termination

The U.S. EPA may review and modify, revoke and reissue, or terminate this permit for cause, as specified in 40 CFR § 270.41, § 270.42, and § 270.43. The U.S. EPA may also review and modify this permit, consistent with 40 CFR § 270.41, to include any terms and conditions it determines are necessary to protect human heaith and the environment under Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or

termination, or a notification of planned changes or anticipated noncompliance on your part will not stay the applicability or enforceability of any permit condition. (40 CFR § 270.30(f))

You may request a modification of this permit under the procedures specified in 40 CFR § 270.42. You must not perform any construction associated with a Class 3 permit modification request until such modification request is granted and the modification becomes effective. You may perform construction associated with a Class 2 permit modification request beginning 60 days after submission of the request unless the Director, Waste Pesticides and Toxics Division, U.S. EPA Region 5 (Director), establishes a later date. (40 CFR § 270.42(b)(8))

I.B.2 Permit Renewal

This permit may be renewed as specified in 40 CFR § 270.30(b) and Condition I.E.2 of this permit. In reviewing any application for a permit renewal, the U.S. EPA will consider improvements in the state of control and measurement technology, and changes in applicable regulations. (40 CFR § 270.30(b) and RCRA Section 3005(c)(3))

I.C SEVERABILITY

This permit's provisions are severable; if any permit provision, or the application of any permit provision to any circumstance, is held invalid, such provision's application to other circumstances and the remainder of this permit will not be affected. Invalidation of any statutory or regulatory provision on which any condition of this permit is based does not affect the validity of any other statutory or regulatory basis for that condition. (40 CFR § 124.16(a))

I.D DEFINITIONS

The terms used in this permit will have the same meaning as in 40 CFR Parts 124, 260 through 266, 268 and 270, unless this permit specifically provides otherwise. Where neither the regulations nor the permit define a term, the term's definition will be the standard dictionary definition or its generally accepted scientific or industrial meaning.

I.E DUTIES AND REQUIREMENTS

1.E.1 Duty to Comply

You must comply with all conditions of this permit, except to the extent and for

the duration for which an emergency permit authorizes such noncompliance (40 CFR § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of RCRA and will be grounds for: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (40 CFR § 270.30(a))

I.E.2 Duty to Reapply

If you wish to continue the permit regulated activities after the expiration date, you must apply for and obtain a new permit. You must submit a complete application for a new permit at least 180 days before the permit expiration date, unless the Director grants permission for a later submittal date. The Director will not grant permission to submit the complete application for a new permit later than the permit's expiration date. (40 CFR § 270.10(h) and § 270.30(b))

I.E.3 Permit Expiration

Unless revoked or terminated, this permit and all conditions herein will be effective for a fixed term not to exceed 10 years from this permit's effective date. This permit and all conditions herein will remain in effect beyond the permit's expiration date if you have submitted a timely, complete application (40 CFR § 270.10 and §§ 270.13 through 270.29), and, through no fault of your own, the Director has not made a final determination regarding permit reissuance. (40 CFR §§ 270.50 and 270.51)

I.E.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, you are not entitled to a defense that it would have been necessary to halt or reduce the permitted activity to maintain compliance with this permit. (40 CFR § 270.30(c))

I.E.5 Duty to Mitigate

In the event of noncompliance with this permit, you must take all reasonable steps to minimize releases to the environment resulting from the noncompliance and must implement all reasonable measures to prevent significant adverse impacts on human health or the environment. (40 CFR § 270.30(d))

I.E.6 Proper Operation and Maintenance

You must always properly operate and maintain all facilities and treatment and control systems (and related appurtenances) that you install or use to comply with this permit. Proper operation and maintenance includes effective

performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires you to operate back-up or auxiliary facilities or similar systems only when necessary to comply with this permit. (40 CFR § 270.30(e))

I.E.7 Duty to Provide Information

You must provide the Director, within a reasonable time, any relevant information that the Director requests to determine whether there is cause to modify, revoke and reissue, or terminate this permit, or to determine permit compliance. You must also provide the Director, upon request, with copies of any records this permit requires. The information you must maintain under this permit is not subject to the Paperwork Reduction Act of 1980, 44 USC §§ 3501 *et seq.* (40 CFR §§ 264.74(a) and 270.30(h))

I.E.8 Inspection and Entry

Upon the presentation of credentials and other legally required documents, you must allow the Director or an authorized representative to (40 CFR § 270.30(i)):

I.E.8.a Enter at reasonable times upon your premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

I.E.8.b Have access to and copy, at reasonable times, any records that you must keep under the conditions of this permit;

I.E.8.c Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.E.8.d Sample or monitor, at reasonable times, any substances at any location to ensure permit compliance or as RCRA otherwise authorizes.

Notwithstanding any provision of this permit, U.S. EPA retains the inspection and access authority which it has under RCRA and other applicable laws.

I.E.9 Monitoring and Records

I.E.9.a Samples and measurements taken for monitoring purposes must be representative of the monitored activity. The methods used to obtain a representative sample of the wastes, contaminated media,

treatment residue, or other waste to be analyzed must be the appropriate methods from Appendix I of 40 CFR Part 261, or the methods specified in the state-approved and/or U.S. EPA-approved waste analysis plan, or an equivalent method approved by the Director. Laboratory methods must be those specified in *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods* (SW-846, latest edition), *Methods for Chemical Analysis of Water and Wastes* (EPA 600/4-79-020), or an equivalent method, as specified in the referenced waste analysis plan. (40 CFR § 270.30(j)(1))

I.E.9.b You must retain all records as specified in 40 CFR § 264.74. The records must be made available within a reasonable time for inspection.

I.E.9.c You must submit all monitoring results at the intervals specified in this permit.

I.E.9.d You must retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records, or other documents, unless a different period is specified in this permit. The 3-year period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. (40 CFR §§ 270.30(j), 270.31, and 264.74(b))

I.E.10 Reporting Planned Changes

You must notify the Director as soon as possible of any planned physical alterations or additions to the permitted facility. (40 CFR § 270.30(l)(1))

I.E.11 Reporting Anticipated Noncompliance

You must notify the Director, in advance, of any planned changes in the permitted facility or activity that may result in permit noncompliance. Advance notice will not constitute a defense for any noncompliance. (40 CFR § 270.30(I)(2))

I.E.12 Certification of Construction

Subject to the requirements of 40 CFR § 270.32(b)(2) and § 270.42 Appendix I, you must not operate any RCRA air emission control devices completed after the effective date of this permit until you have submitted to the Director, by certified

mail or hand-delivery, a letter signed both by your authorized representative and by a registered professional engineer. That letter must state that the portions of the facility covered by this permit (including all air emission control devices required by this permit) have been constructed in compliance with the applicable conditions of this permit. In addition, you must not operate the permitted control devices until either:

I.E.12a The Director or his/her representative has inspected those portions of the facility and finds them in compliance with the conditions of the permit; or

I.E.12b The Director waives the inspection, if the inspection is not conducted within 30 days from the receipt of the certification.

I.E.13 Transfer of Permits

This permit is not transferable to any person, except after notice to the Director. You must inform the Director and obtain prior approval of the Director before transferring ownership or operational control of the facility (40 CFR § 270.42, Appendix I). Under 40 CFR § 270.40, the Director may require permit modification, or revocation and reissuance to change the Permittees' name and incorporate other RCRA requirements. Before transferring ownership or operation of the facility during its operating life, you must notify the Director and obtain prior approval and notify the new owner or operator in writing of the requirements of this permit and the requirements of 40 CFR Parts 264, 268, and 270. (40 CFR §§ 264.12(c), 270.30(I)(3), and 270.40(a))

I.E.14 Twenty-Four Hour Reporting

I.E.14.a You must report to the Director any noncompliance with this permit that may endanger human health or the environment. Any such information must be promptly reported orally, but no later than 24 hours after you become aware of the noncompliance.

I.E.14.b The oral report discussing the occurrence and its cause must include the following information (40 CFR §§ 270.30(I)(6) and 270.33): (1) release of any hazardous waste that may endanger public drinking water supplies; (2) release or discharge of hazardous waste; or (3) fire or explosion from the hazardous waste management facility. You must include the following information:

(1) Name, title and telephone number of the person making the report;
(2) Name, address and telephone number of the facility;

- (3) Name, address and telephone number of owner or operator;
- (4) Date, time and type of incident;
- (5) Location and cause of incident;
- (6) Identification and quantity of material(s) involved;
- (7) Extent of injuries, if any;
- (8) Assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;
- (9) Description of any emergency action taken to minimize the threat to human health and the environment; and
- (10) Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.14.c In addition to the oral notification required under Conditions I.E.14.a and I.E.14.b of this permit, a written report must also be provided within 5 calendar days after you become aware of the circumstances. The written report must include, but is not limited to, the following:

- (1) Name, address and telephone number of the person reporting;
- (2) Incident description (noncompliance including any release or discharge of hazardous waste), including cause, location, extent of injuries, if any, and an assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;
- (3) Period(s) in which the incident (noncompliance including any release or discharge of hazardous waste) occurred, including exact dates and times;
- (4) Whether the incident's results continue to threaten human health and the environment, which will depend on whether the noncompliance has been corrected and/or the release or discharge of hazardous waste has been adequately cleaned up; and
- (5) If the noncompliance has not been corrected, the anticipated period for which it is expected to continue, and the steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance.

The Director may waive the requirement that written notice be provided within 5 calendar days; however, you will then be required to submit a written report within 15 calendar days of the day on which you must provide oral notice, in accordance with Conditions I.E.14.a and I.E.14.b of this permit. (40 CFR § 270.30(1)(6))

OHD 004 304 689 Page 8 of 24

I.E.15 Other Noncompliance

You must report all instances of noncompliance not reported under Condition I.E.14 of this permit, when any other reports this permit requires are submitted. The reports must contain the information listed in Condition I.E.14. (40 CFR ' 270.30(I)(10))

I.E.16 Other Information

I.E.16.a Whenever you become aware that you failed to submit or otherwise omitted any relevant facts in the permit application or other submittal, or submitted incorrect information in the permit application or other submittal, you must promptly notify the Director of any incorrect information or previously omitted information, submit the correct facts or information, and explain in writing the circumstances of the incomplete or inaccurate submittal. (40 CFR ' 270.30(l)(11))

I.E.16.b All other requirements contained in 40 CFR • 270.30 not specifically described in this permit are incorporated into this permit and you must comply with all those requirements.

I.F. SIGNATORY REQUIREMENT

You must sign and certify all applications, reports, or information this permit requires, or which are otherwise submitted to the Director, in accordance with 40 CFR ' 270.11. (40 CFR ' 270.30(k))

I.G REPORTS, NOTIFICATIONS AND SUBMITTALS TO THE DIRECTOR

Except as otherwise specified in this permit, all reports, notifications, or other submittals that this permit requires to be submitted to the Director should be sent by certified mail, express mail, or hand-delivered to the U.S. Environmental Protection Agency, Region 5, at the following address:

Program Management Branch, DU-7J Waste, Pesticides and Toxics Division U.S. EPA Region 5 77 West Jackson Boulevard Chicago, Illinois 60604

I.H CONFIDENTIAL INFORMATION

In accordance with 40 CFR Part 2 Subpart B, you may claim any information this permit requires, or is otherwise submitted to the Director, as confidential. You must assert any such claim at the time of submittal in the manner prescribed on the application form or instructions, or, in the case of other submittals, by stamping the words "Confidential Business Information" on each page containing such information. If you made no claim at the time of submittal, the Director may make the information available to the public without further notice. If you assert a claim, the information will be treated in accordance with the procedures in 40 CFR Part 2. (40 CFR § 270.12)

I.I DOCUMENTS TO BE MAINTAINED AT THE FACILITY

You must maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and all amendments, revisions, and modifications to them.

I.I.1 Operating Record

You must maintain in the facility's operating record the documents required by this permit, and by the applicable portions of 40 CFR §§ 264.1035, 264.1064, 264.1084, 264.1088, 264.1089 and 40 CFR § 264.73 (as they apply to the equipment used to comply with this permit).

I.I.2 Notifications

If you receive hazardous waste(s) from off-site generator(s), you must maintain notifications from generators accompanying initial incoming shipment of wastes subject to 40 CFR Part 268 Subpart C, that specify treatment standards, as required by 40 CFR §§ 264.73, 268.7, and this permit.

I.I.3 Copy of Permit

You must keep a copy of this permit on site, including all the documents listed in any attachments, and you must update it as necessary to incorporate any official permit modifications.

I.J ATTACHMENTS AND DOCUMENTS INCORPORATED BY REFERENCE

I.J.1 All attachments and documents that this permit requires to be submitted, if any, including all plans and schedules are, upon the Director's approval,

incorporated into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject you to an enforcement action under Section 3008 of RCRA. This action may include fines, or permit suspension or revocation.

I.J.2 This permit also includes the documents attached hereto, all documents cross-referenced in these documents, and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 268, 270, and the applicable provisions of RCRA, all of which are incorporated herein by reference.

I.J.3 Any inconsistency or deviation from the approved designs, plans and schedules is a permit noncompliance. The Director may grant written requests for extensions of due dates for submittals required in this permit.

I.J.4 If the Director determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Director may modify this permit according to procedures in Condition I.B of this permit.

I.J.5 If any documents attached to this permit are found to conflict with any of the Conditions in this permit, the Condition will take precedence.

I.K COORDINATION WITH THE CLEAN AIR ACT

You must fully comply with all applicable Clean Air Act (CAA) and RCRA permit limits. Where two or more operating limitations apply, the most stringent operating limitations take precedence.

SECTION II – OTHER FEDERAL RCRA REQUIREMENTS

II.A ADDITIONAL HAZARDOUS WASTE NUMBERS

In addition to the hazardous waste numbers listed in the state-issued portion of the RCRA permit, you may handle the newly listed hazardous wastes, promulgated under the HSWA, at your facility only if you have processed a Class 1 and/or Class 2 permit modification in accordance with 40 CFR § 270.42(g). All handling of these wastes must comply with the applicable provisions of both the state-issued portion and the federally-issued portion of the RCRA permit.
SECTION III – AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS (40 CFR Part 264, Subpart BB)

In accordance with 40 CFR § 264.1064(m), if an equipment is subject to 40 CFR Part 264, Subpart BB and to regulations at 40 CFR Part 60, 61, or 63, the Permittees may elect to determine compliance with 40 CFR Part 264, Subpart BB either by documentation pursuant to 40 CFR § 264.1064 of this subpart, or by documentation of compliance with regulations at 40 CFR Part 60, 61, or 63. The documentation of compliance under regulations at 40 CFR Part 60, 61, or 63 shall be kept with or made readily available with the facility operating record.

Permittees must submit an annual certification to the Director indicating that the Permittees' election of compliance.

III.A WASTE DETERMINATION AND EQUIPMENT

The Permittees must determine each hazardous waste stream for which (1) the hazardous waste is *"In light liquid service"* as defined in 40 CFR § 264.1031 and (2) the hazardous waste has an organic concentration of at least 10 percent by weight.

You must comply with all applicable requirements of 40 CFR § 264.1050 through 40 CFR § 264.1065, regarding air emission standards for equipment leaks. The equipment includes, but is not limited to, (1) pumps, (2) piping system including valves and connectors, and (3) agitators installed in tanks.

III.B PUMPS IN LIGHT LIQUID SERVICE (40 CFR § 264.1052)

III.B.1 Each pump in light liquid service must be monitored monthly to detect leaks by the methods specified in 40 CFR § 264.1063(b), except: when each pump is (1) equipped with a dual mechanical seal system satisfying the requirements of 40 CFR 264.1052(d), (2) designated, as described in 40 CFR § 264.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and meeting the requirements of 40 CFR § 264.1052(e), or (3) equipped with a closed vent system complying with the requirements of 40 CFR § 264.1052(f).

III.B.2 Each pump shall be checked by visual inspection each calendar week for seal leaks.

III.B.3 A leak is detected if: (1) an instrument reading of 10,000 ppm or greater is measured, or (2) there is an indication of liquid dripping from the pump seal.

III.B.4 When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §264.1059 - Standards: Delay of repair. The first attempt at repair must be made no later than 5 calendar days after each leak is detected.

III.C PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE (40 CFR § 264.1054)

III.C.1 Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, based on the method specified in 40 CFR § 264.1063(c). (40 CFR § 264.1054(a))

III.C.2 After each pressure release, the pressure relief valve shall be returned to a condition of no detectable emissions (i.e., less than 500 ppm above background based on the method specified in 40 CFR § 264.1063(c)), as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR § 264.1059. (40 CFR § 1054(b)(1))

III.C.3 No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions. (40 CFR § 264.1054(b)(2))

III.C.4 Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR § 264.1060 is exempt from the requirements in Conditions III.C.1 through III.C.3.

III.D SAMPLING CONNECTION SYSTEMS (40 CFR § 264.1055)

Each sampling connection system, except *in-situ* sampling systems and sampling systems without purges, shall be equipped with a closed-purge, closed-loop, or closed-vent system which meets one of the following requirements as selected by the Permittees:

III.D.1 Return the purged process fluid directly to the process line;

III.D.2 Collect and recycle the purged process fluid; or

III.D.3 Be designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with applicable sections of 40 CFR § 264.1084 through § 264.1086 or a control device that complies with

40 CFR § 264.1060, Standards for Closed-Vent Systems and Control Devices.

III.E OPEN-ENDED VALVES OR LINES (40 CFR § 264.1056)

III.E.1 Each open-ended value or line must be equipped with a: (1) cap, (2) blind flange, (3) plug, or (4) second value, which seals the open end at all times except during operations requiring hazardous waste stream flow through the open-ended value or line.

III.E.2 When a double block and bleed system is used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall seal the open end at all other times.

III.F VALVES IN GAS/VAPOR SERVICE OR IN LIGHT LIQUID SERVICE (40 CFR § 264.1057)

III.F.1 Each valve shall be monitored monthly to detect leaks in accordance with 40 CFR § 264.1057(a) and (c), except as provided in 40 CFR §§ 264.1057(f), (g), and (h).

III.F.2 If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

III.G PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE, AND FLANGES AND OTHER CONNECTORS (40 CFR § 264.1058)

III.G.1 Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors must be monitored within 5 days by the method specified in 40 CFR § 264.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

III.G.2 When a leak is detected, you must repair the leak as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR § 264.1059. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

III.G.3 First attempts at repair include, but are limited to, the best practices described under 40 CFR § 264.1057(e).

III.H DELAY OF REPAIRS (40 CFR § 264.1059)

III.H.1 Delay of repair of equipment for which leaks have been detected will be allowed if: (1) the repair is technically infeasible without a hazardous waste management unit shutdown; or (2) the equipment is isolated from the hazardous waste management unit and does not continue to contain or contact hazardous waste with organic concentrations at least 10 % by weight .

III.H.2 Delay of repair for valves will be allowed if: (1) emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair; and (2) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR § 264.1060.

III.H.3 Delay of repair for pumps will be allowed if: (1) repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and (2) repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

III.H.4 Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve only if it meets the provisions of 40 CFR § 264.1059(e).

III.I CLOSED-VENT SYSTEMS AND CONTROL DEVICES (40 CFR § 264.1060)

Closed-vent systems and control devices shall comply with the provisions of 40 CFR §§ 264.1033 and 264.1060.

III.J ALTERNATIVE STANDARDS FOR VALVES IN GAS/VAPOR SERVICE OR IN LIGHT LIQUID SERVICE; PERCENTAGE OF VALVES ALLOWED TO LEAK (40 CFR § 264.1061)

You may elect to have all valves within a hazardous waste management unit comply with an alternative standard that allows no greater than 2 % of the valves to leak if the provisions of 40 CFR §§ 264. 1061(b) and (c) are met

III.K ALTERNATIVE STANDARDS FOR VALVES IN GAS/VAPOR SERVICE OR IN LIGHT LIQUID SERVICE; SKIP PERIOD LEAK DETECTION AND REPAIR (40 CFR § 264.1062)

You may elect for all valves, subject to the requirements of 40 CFR § 264.1057 within a hazardous waste management unit, to comply with one of the alternative work practices specified below.

III.K.1 After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 %, you may begin to skip one of the quarterly leak detection periods for the valves.

III.K.2 After 5 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 %, you may begin to skip 3 of the quarterly leak detection periods for the valves.

You must monitor valve leaks monthly in accordance with 40 CFR § 264.1057, if the percentage of valves leaking is greater than 2 %, but you may again elect to use the alternative standards after meeting the requirements of 40 CFR § 264.1057(c)(1).

III.L AGITATORS

All agitators mounted on the tanks must be such that no leaks should be detected during the operations of the mixers. Packing gland or seal for the mixer shaft must be periodically inspected to assure that there is no visible damages.

III.M TEST METHODS AND PROCEDURES (40 CFR § 264.1063)

The leak test methods and procedures must be as specified in 40 CFR § 264.1063.

III.N RECORDKEEPING AND REPORTING REQUIREMENTS (40 CFR §§ 264.1064 and 264.1065)

You must comply with the recordkeeping and reporting requirements of 40 CFR §§ 264.1064 and 264.106.

SECTION IV – AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS (40 CFR Part 264, Subpart CC)

IV.A GENERAL

IV.A.1 Waste Determination

In accordance with the procedure specified in 40 CFR § 264.1083, you must determine the average volatile organic (VO) concentration of: (1) generated hazardous waste at the point of origination, and (2) treated hazardous waste. You must determine the maximum organic vapor pressure of the hazardous waste.

IV.A.2 Applicable Requirements

If a container or tank handles generated hazardous waste with a VO concentration of 500 parts per million by weight (ppmw) or greater, or handles treated hazardous waste, you must comply with all applicable requirements of 40 CFR § 264.1090 regarding air emission standards for containers and tanks handling hazardous waste.

IV.B CONTAINERS

IV.B.1 Requirements for Level 1 Containers (40 CFR § 1086(c))

Level 1 standards apply to a container having a design capacity: (1) greater than 0.1 m^3 and less than or equal to 0.46 m^3 , or (2) greater than 0.46 m^3 that is not in light material service.

IV.B.1.a Unless all containers are treated as Level 2 or Level 3 containers, Level 1 containers must be stored in a separate area or you must clearly mark on the containers the required level of control to avoid potential mismanagement of the containers with respect to air emission control.

IV.B.1.b No waste treatment by waste stabilization process is allowed in a Level 1 container.

IV.B.1.c A Level 1 container must:

(1) meet the applicable U.S. Department of Transportation (DOT) regulations as specified in 40 CFR § 264.1086(f),

- (2) be equipped with a cover and closure devices that form a continuous barrier over the container openings in accordance with 40 CFR § 264.1086(c)(1)(ii), or
- (3) be an open-top container with organic vapor suppressing barrier to prevent hazardous waste from being exposed to the atmosphere as specified in 40 CFR § 264.1086(c)(1)(iii).

A container, which does not meet the DOT regulations as specified in 40 CFR § 264.1086(f), must be equipped with covers and enclosure devices that are constructed of suitable materials to minimize emissions to the atmosphere and to maintain the equipment integrity for the service life of the container. Any chemical used for vapor suppression must not generate heat and/or fumes and must be compatible with the hazardous waste in the container. Vapor suppression chemicals must act as an acceptable and stable barrier to the hazardous waste, thus preventing releases of VO into the environment. The barrier shall not chemically react to the hazardous waste. $(40 \text{ CFR } \S 264.1086(c)(2))$

IV.B.1.d All covers and closure devices must be in closed position whenever hazardous waste is in a container. Opening of a closure device or cover is allowed if it meets the purpose and operates as defined in $40 \text{ CFR} \S 264.1086(c)(3)(i)$ through (v).

IV.B.1.e You must inspect the containers and their covers and closure devices in accordance with 40 CFR § 264.1086(c)(4).

IV.B.2 Requirements for Level 2 Containers (40 CFR § 264.1086(d))

Containers with a design capacity greater than 0.46 m³ (122 gallons) and in light material service as defined in 40 CFR § 265.1081 must be managed in accordance with Container Level 2 standards as stipulated under 40 CFR § 264.1086(d). The Level 2 containers must meet the following requirements. No waste treatment by a waste stabilization process is allowed in a Level 2 container.

IV.B.2.a A Level 2 container must: (40 CFR § 264.1086(d)(1))

- (1) meet the applicable DOT regulations as specified in 40 CFR § 264.1086(f),
- (2) operate with no detectable organic emissions as defined in 40 CFR § 265.1081 and determined in accordance with the procedure

specified in 40 CFR § 264.1086(g), or

(3) be vapor tight within the preceding 12 months as demonstrated by using 40 CFR Part 60, Appendix A, Method 27.

IV.B.2.b Transfer of hazardous waste in or out of a container must be conducted using an engineered method generally accepted and practiced by the industry, or an equivalent method to minimize the exposure of organics to the atmosphere. (40 CFR § 264.1086(d)(2))

IV.B.2.c All covers and closure devices must be in closed position whenever hazardous waste is in a container. Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material in the manner defined in 40 CFR § 264.1086(d)(3)(i) through (v).

IV.B.2.d You must inspect the containers and their covers and closure devices in accordance with 40 CFR § 264.1086(d)(4).

IV.B.3 Requirements for Level 3 Containers (40 CFR § 264.1086(e))

Level 3 standards must be used for controlling air emissions if a container having a design capacity greater than 0.1 m^3 is used for treatment of hazardous waste by a waste stabilization process as defined in 40 CFR § 265.1081.

IV.B.3.a A container using Level 3 controls must meet the standards stipulated under 40 CFR § 264.1086(e) and must:

- (1) be vented directly through a closed-vent system to a control device, designed and operated in accordance with the requirements of 40 CFR § 264.1087, or
- (2) be vented inside an enclosure which is exhausted through a closed-vent system to a control device. The container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR § 52.741, appendix B. The control device shall be designed and operated in accordance with the requirements of 40 CFR § 264.1087.

IV.B.3.b The cover of the Level 3 container must remain closed and secured at all times except when the waste stabilization process is being

conducted.

IV.B.3.c The collected air stream from the organic capturing system or the closed-vent system shall be vented directly to the control device which must be designed and operated as specified in 40 CFR § 264.1087.

IV.B.3.d You must inspect and monitor the closed-vent system and the control device, as specified in 40 CFR § 264.1087.

IV.B.3.e You must prepare and maintain the records as specified in 40 CFR § 264.1089(d).

IV.B.3.f Transfer of hazardous waste in or out of a container must be conducted using an engineered method generally accepted and practiced by the industry, or its equivalent method to the extent practical, to minimize the exposure of organic pollutants to the atmosphere. (40 CFR § 264.1086(e)(6))

IV.C TANKS

IV.C.1 Hazardous Waste Storage Tanks

IV.C.1.a The following are permitted hazardous waste storage tanks which must meet Level 2 tank standards as stipulated under 40 CFR § 264.1084.

IV.C.1.b When there is a change in operations and/or waste characteristics in a tank which are required to meet tank Level 1 standards specified under 40 CFR § 264.1084(c), you must submit a Class 1 permit modification request.

IV.C.1.c Revised instrumentation and piping diagrams must be submitted with the permit modification request if a tank is isolated from the closed-vent system and control devices for other purposes (e.g., closure, conversion to non-hazardous waste storage tank, Subpart CC exempt tank, Level 1 tank) which do not require a Level 2 tank control.

Service Area	Description	Quan- tity	Tank Designation	Operating (Maximum) Gallons	Operations
Energy Recovery Unit (ERU) (23 Tanks)	Liquid Storage Tanks	12	1501 - 1506 1515 - 1520	15,000 (17,000)	Blending and storing organic and aqueous wastes (carbon steel)
		4	1511 - 1514	15,000 (17,000)	Blending and storing organic and aqueous wastes (stainless steel)
	Control Liquid Tanks	2	1521- 1522	2,100 (2,300)	High Btu waste to kiln
	Intermediate Tanks	3	1523 - 1525	1,500 (17,000)	Transfer of liquid waste from drums to tanks
	Overflow Tanks	2	1526 - 1527	5,000 (5,200)	Vent header condensate or overfill from tanks
Resin Plant (5 Tanks)	Storage Tanks	4	R1707 - 1710	5,000 (5,200)	Blending and storing prior to transfer to ERU (carbon steel)
		1	R1711	12,000 (12,086)	Accumulation of aqueous/organic by- product (stainless steel)

IV.C.2 Requirements for Level 2 Tanks

IV.C.2.a The hazardous waste storage tanks must be fixed roof design in accordance with industry standards. The vent pipe from each tank in the ERU area must be connected to a common pipe (header) and vented through a closed-vent system to the control devices (i.e., rotary kiln and afterburner system or carbon adsorption system). The vent piping from each tank in the resin plant must be vented to the thermal oxidizer (TOU).

IV.C.2.b Each hazardous waste storage tank equipped with an agitator (mixer) must be monitored for the temperature and pressure in the tank to avoid excessive temperature and/or pressure buildup inside the tank. Operation of the tanks shall in conformance with the tank design and operation criteria.

IV.C.2.c The hazardous waste in the tank should not be treated by any waste stabilization process as defined in 40 CFR § 265.1081.

IV.C.2.d The fixed roof tank shall be of butt and/or lap welded construction throughout that has been hydraulically and/or air tested to the maximum working pressure without leaks.

IV.C.2.e The tank closure devices and gaskets must be designed and constructed to form a continuous barrier over the entire surface area of the hazardous waste in the tank.

IV.C.2.f The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous waste is managed in the tank, except during periods when it is necessary to provide access to the tank for performing routine inspections, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

IV.C.2.g Whenever a hazardous waste is in the tank, all openings (e.g., manholes, instruments connections, pipe nozzles) must be securely closed to prevent releases of vapors into the atmosphere, except for routine inspection, maintenance, or other activities needed for normal operations, or to remove accumulated sludge or other residues from the bottom of the tank. (40 CFR § 264.1084(c)(3))

IV.C.2.h You must inspect, at least once per year, or retest the tanks to ascertain that the air emissions from the tank systems comply with the design and with the requirements stipulated in 40 CFR § 264.1084(g)(3). You must maintain a record of inspection in accordance with the requirements specified in 40 CFR § 264.1089(b).

IV.C.2.i In the event that a defect is detected during the inspection, you must repair the defect in accordance with the requirements of 40 CFR \S 264.1084(k).

IV.C.3 Closed-Vent System and Control Devices (40 CFR § 264.1087)

IV.C.3.a Closed-vent Systems

(1) Each closed-vent system, one each for the ERU tanks and the Resin Plant tanks, shall include an induced draft fan having a sufficient capacity to maintain a pressure below atmospheric pressure. A pressure measurement device must be installed in each closed-vent system at an accessible location to verify that a negative pressure is being maintained when the control device is operating. The closed-vent system shall meet the design requirements stipulated in 40 CFR § 264.1033(k).

(2) You must monitor and inspect each closed-vent system in accordance with 40 CFR § 264.1033(I).

(3) The combustible concentrations in the vent streams must be maintained at a safe level below the Lower Explosion Limit to prevent a fire or an explosion from occurring.

IV.C.3.b Control Devices

The control devices used for ERU tanks shall include: (1) the hazardous waste combustion rotary kiln system and (2) a back-up carbon activated carbon adsorption system. The control device for tanks located at the resin plant is the thermal oxidizer unit (TOU).

(1) <u>Rotary Kiln Combustion System</u> - The vent stream generated from the hazardous waste storage tanks serving the ERU system must be routed to the forced draft fan inlet which supplies combustion air to the rotary kiln combustor. When the rotary kiln system is down, the vent stream must be diverted to a carbon adsorption system equipped with activated carbon for organic removal. The carbon adsorption system must be maintained and routinely inspected to avoid a breakthrough. Such maintenance record must be maintained in the operating record of the facility.

(2) <u>Thermal Oxidizer Unit</u> (TOU) - The vent stream generated from the hazardous waste storage tanks serving the resin plant must be conveyed by an induced draft fan to the thermal oxidizer unit. The thermal oxidizer must have a design thermal capacity of 10.8 million Btu/hr, utilizing natural gas as fuel to maintain a minimum oxidizer outlet temperature of 1,200 $^{\circ}$ F. The combined flow from the vent streams and combustion air shall not exceed 7,000 standard cubic feet per minute (scfm).

The TOU must consist of a natural gas fired burner, combustion chamber, combustion air preheater, induced draft fan, flame management system, instrumentation and controls. The combustion chamber temperature of the TOU must be continuously monitored and recorded. Quench air to reduce the flue gas temperature for protection of the induced draft fan and associated equipment must be provided.

Periods of planned routine maintenance of the TOU, during which the control device does not meet the designed operating conditions, shall not exceed 240 hours/year as stipulated in 40 CFR § 264.1087(c)(2). You must correct TOU malfunctions as soon as practicable after their occurrence in

order to minimize excess emissions of air pollutants per 40 CFR § 264.1087(c)(2)(v). The operating and maintenance records for the thermal oxidizer must be maintained in the facility operating log.

(3) <u>Carbon Adsorption Systems</u> - Each carbon adsorption unit (bin) must meet the requirements of 40 CFR § 264.1087(c). Each carbon adsorption system must be monitored on a regular schedule, and the existing carbon must be replaced with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 % of the time required to consume the total carbon working capacity in accordance with 40 CFR § 264.1033(h).

(4) <u>TOU Performance Requirements</u> – You must submit documentation, within 6 months from the effective date of this permit, that the TOU can meet the requirements of 40 CFR § 264.1033(c), i.e., to reduce the organic emissions vented to the TOU by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 % oxygen; or to provide a minimum of 0.5 seconds at a minimum temperature of 760 ^oC. Such documentation must include test results, if available, manufacturer's certification, or approved engineering documents, e.g., certified heat and mass balance diagrams. Alternatively, you may propose a compliance test plan.

IV.C.4 Tank Nitrogen Blanketing System

IV.C.4.a All hazardous waste storage tanks must be provided with a nitrogen blanketing system to reduce organic vapors in the tank head spaces. The nitrogen blanketing system must be properly maintained and be operational to prevent overloading of the control devices.

IV.C.4.b The nitrogen supply pressure and tank head space pressure must be maintained in accordance with the design settings to avoid excess release of VOs into the closed-vent system and the control devices.

IV.C.4.c In the event of system malfunction, a repair record must be maintained in the facility operating record.

IV.D CONTAINERS AND TANKS EXEMPT FROM SUBPART CC CONTROL STANDARDS

IV.D.1 Under this permit, for each container or tank you claim to be exempt under 40 CFR Part 264, Subpart CC, you must demonstrate by direct measurement or

approved method that the average VO concentration for hazardous waste, determined in accordance with 40 CFR §§ 264.1083(a) and 265.1084(a)(2) and (3), is less than 500 ppmw.

IV.D.2 For each tank or container, you must review and update this determination in accordance with 40 CFR § 264.1082(c)(1) at least once every 12 months following the date of the initial determination. For each container or tank, you must prepare and maintain the records described in 40 CFR § 264.1089(f). These records must be maintained as part of the operating record.

IV.E RECORDKEEPING AND REPORTING REQUIREMENTS

The Permittees shall comply with all applicable recordkeeping and reporting requirements described in 40 CFR § 264.1089 and § 264.1090.

Attachment B

RESPONSE TO COMMENTS REGARDING THE FEDERAL RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMITS TO BE ISSUED TO PPG INDUSTRIES OHIO, INC. (OWNER & OPERATOR) AND PPG INDUSTRIES, INC. (CO-OPERATOR) CIRCLEVILLE, OHIO OHD 004 304 689

INTRODUCTION

This response is issued pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Section 124.17, which requires that any changes of draft permit conditions be specified along with the reason for the change; that all significant comments be described and responded to; and that any documents cited in the response be included in the administrative record. Comments were requested regarding the United States Environmental Protection Agency's (U.S. EPA) tentative determination to reissue a RCRA permit to the Permittees.

The 45-day public comment period commenced on September 27, 2006, with a public notice in the Circleville Herald and a radio announcement on a local radio station WHOK FM, CBS Radio. The termination date of this comment period was November 13, 2006. Comments were received from PPG Industries Ohio, Inc. (PPG)

Additionally, pertinent information and materials were available at the Pickaway County District Public Library, 1160 North Court Street, Circleville, OH 43113.

RESPONSE TO COMMENTS

a. PPG's Comments:

Page 11 section III should be revised to eliminate the requirements for annual submission of election of compliance. The requirement to notify the agency of the compliance election was eliminated from the rules in April 2006.

U.S. EPA's Response:

The annual certification required under Section III of this permit is based on 40 CFR § 264.1064(m), which is not affected by the U.S. EPA's April 4, 2006, amendment (FR Vol. 71, No. 64) to remove notification requirements under 40 CFR § 264.1061 and 264.1062.

Under 40 CFR § 264.1064(m), the Permittees may elect to determine compliance with 40 CFR Part 264, Subpart BB, by documentation as required under that subpart, or by documentation of compliance with the regulations at 40 CFR Part 60,

- 1 -

Part 61, or Part 63 when the Permittees are also subject to these regulations. Therefore, notification to the Director is necessary.

The April 4, 2006, amendment (FR/Vol. 71, No.64, page 16907), however, applies to Conditions III.J and III.K. Therefore, the references to notifying the Director for electing the alternative standards/work practices have been deleted from these positions of the draft permit.

b. <u>PPG's Comments</u>:

Page 20 item IV.C.1.a identifies the applicable tanks that comply with level 2 tank requirements defined in 264.1084. The tank capacities identified in the table are the operating capacities, and not the maximum capacity of the tanks identified in the Part A permit application to avoid confusion. Also, the two overflow tanks indicated in the table are not regulated tanks, and should be removed as applicable sources.

U.S. EPA's Response:

In order to avoid confusion as pointed out in PPG's comments, the table in Condition IV.C.1 has been revised to include: (1) the tank operating capacities and (2) the maximum tank capacities.

The overflow tanks are part of the tank farm system and are interconnected to the other hazardous waste storage tanks. Therefore, the U.S. EPA determined that they are hazardous waste storage tanks and not exempt tanks.

No change to the permit condition is necessary based on this comment.

c. <u>PPG's Comments:</u>

Page 20 item IV.C.2.c should be removed as process and instrumentation diagrams are not required per 264.1084. In addition, exempt tanks would not be regulated under the rule.

U.S. EPA's Response:

Based on the information contained in the Part B Application, including the P&ID diagrams, no waste stabilization process is performed in the listed tanks. Therefore, this Condition IV.C.2.c reflects the current operations of the tanks for which the permit is sought.

The requirements of submitting P&ID diagrams are stipulated in 40 CFR § 270.16-Specific part B information requirements for tank systems. The overflow tanks are part of the tank system and are not exempted from 40 CFR Part 264, Subpart CC regulations. Therefore, must be included in the scope of the permit. See U.S. EPA's response to comments under Item (b).

No change to the permit condition is necessary based on this comment.

d. <u>PPG's Comments</u>:

Page 20 of 23 item IV.C.2.b should remove the requirement to monitor the temperature and pressure of each tank. This is not required by rule.

U.S. EPA's Response:

Condition IV.C.3.b is necessary and appropriate to assure compliance with 40CFR § 264 Subpart CC standards requiring that the facility control air pollutant emissions from the tanks.

In addition 40 CFR § 270.30(e) requires that the Permittees must at all times properly operate and maintain all facilities and systems of control (and related appurtenances).

It is a general industrial tank design practice for a hazardous waste (flammable and/or combustible liquid) storage tank equipped with a mechanical agitator/mixer to monitor the temperature and pressure inside the tank to reduce the potential of tank failure and explosion/fire hazards. Therefore, the temperature and pressure monitoring system is essential in providing safe operation of these tanks and in controlling air pollutant emission from these tanks.

Page ii of the permit application signature page states: "....Permittees' RCRA permit application is accurate, and that the facility is configured, operated and maintained as specified in the permit and as described in the Application." The information contained in the Part B Application shows that temperatures and pressure inside the tank can be monitored as part of the operation and maintenance of the tanks.

As 40 CFR § 270.32(b)(2) states: "Each permit issued under section 3005 of this act shall contain terms and conditions as the Administrator or State Director determines necessary to protect human health and the environment." The condition simply outlines and specifies pressures needed for appropriate emission control, operation and maintenance under the RCRA rules.

No change to the permit condition is necessary based on this comment.

PPG's Comments:

e.

f.

Page 22 item IV.C.3.b should remove specifications of the thermal oxidizer. This information is not required by rule.

U.S. EPA's Response:

This condition outlines the required capacities and proper operations of the thermal oxidizer unit to assure safe and proper functioning for emission control, as described in the additional information received by the U.S. EPA as part of the Part B Application which is a central basis for the condition of the permit.

See U.S. EPA's response provided under item (d) above.

No change to the permit condition is necessary based on this comment.

PPG's Comments:

Page 23 item IV.C.4 should remove the requirement for hazardous waste tank blanketing with nitrogen. This is not required by rule.

U.S. EPA's Response:

See U.S. EPA's response provided under item (d) above. Nitrogen blanketing reduces the potential of fire/explosion and is a standard industrial practice for safe operations of flammable/combustible liquids. Also, application of nitrogen blanketing would reduce the organic emissions from the tanks, thus reducing the potential overloading of the thermal oxidizer.

The Permittees may propose to test the thermal oxidizer without the nitrogen blanketing. When the test results demonstrate compliance with the requirements of Condition IV.C.3.b, the Permittees may process a permit modification to eliminate the nitrogen blanketing requirements under Condition IV.C.4.

CHANGES TO THE DRAFT PERMIT

1. Pages 14 and 15 of 24, Conditions III.J and III.K

Condition III.J - The last sentence "If you decide to discontinue the election of the alternative standards, you must notify the Director in writing that the work......" has been deleted from the draft permit.

Condition III.K - Last sentence of first paragraph, "You must notify the Director before implementing one of the alternative work practice." has been deleted from the draft permit.

The reason of this change is described in U.S. EPA's response to PPG's comments under Item (a).

2. Page 20 of 24, Condition IV.C.1

5th column of the tank table has been revised to include the operating and maximum tank capacities. The reason for this change is described in U.S. EPA's response to PPG's comment under Item (b).

3. Page 19 of 24, Condition IV.C.1 Hazardous Waste Storage Tanks

Conditions IV.C.2.b and IV.C.2.c in the draft permit have been redesignated as IV.C.1.b and IV.C.1.c, respectively, due to typographic errors.

4. Page 7 of 24, Condition IG Reports, Notifications and Submittals to the Director

Since the reorganization at Region 5 is still in progress, the current RCRA permitting program remains in the Program Management Branch. Therefore, the "RCRA Branch, DW-8J" in the draft permit has been changed to reflect the current organizational structure.

DETERMINATION

Based on a full review of all relevant data provided to the U.S. EPA, the U.S. EPA has determined that the final permit contains such terms and conditions necessary to protect human health and the environment.

Attachment C

if a tank temperature exceeds a preset value, in practice this will be 120°F, but may be varied to suit specific wastes.

D-2a(3) Diagram of Piping, Instrumentation and Process Flow:

40 CFR 270.16(d)

Drawings CV-8104-L141 through 153 plus 160 and 161 are Process and Instrumentation Diagrams for the incineration train of the Energy Recovery Unit. Minor revisions may be made to details of the drawings as engineering reviews are conducted, but will not affect provisions for full compliance with regulatory requirements. These drawings can be found in Appendix 1 to section D (Confidential Section of the Permit); Process Information section 1A-b (Waste Processing and Instrumentation Diagrams).

The following drawing, CV-94-022-P1, is a Process and Instrumentation drawing for the resin plant waste storage tanks. Drawings CV-8104-L-501 through CV-8104-L-510 are Process and Instrumentation Diagrams for the waste processing facilities at the Energy Recovery unit and can be found in this section (Section D).

D-2a(4) Ignitable. Reactive. and Incompatible Wastes:

40 CFR 270.16(j)

40 CFR 264.17(b)

40 CFR 264.198

40 CFR 264.199

Bulk organic and aqueous liquid wastes received at the Energy Recovery unit will be handled and controlled in such a manner as to insure against incompatible materials being placed in the same tanks. Details of these precautions are given in section F-5, "Prevention of Reaction of Ignitable, Reactive, or Incompatible Wastes".

The Energy Recovery Unit manages ignitable wastes in the bulk storage tanks, intermediate tanks, control liquid tanks, and the overflow tanks. All tanks mentioned above are protected by maintaining an inert (nitrogen) atmosphere in the tank vapor space,

OCTOBER 2005 SUBMITTAL Page D-19 Revised 12/05

Attachment D

Setting Tomorrow's Standards Today ISO 9001 ISO 14001

Von Roll America, Inc.

1250 St. George Street East Liverpool, Ohio 43920-3400

Telephone 330-385-7336 Telefax 330-385-7813

July 17, 2006 VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Joseph Koncelik Ohio EPA Lazarus Government Center P.O. Box 1049 Columbus, OH 43216-1049

15

Mr. Frank Popotnik Ohio EPA - NEDO 2110 E. Aurora Road Twinsburg, OH 44087-1969

Dear Gentlemen:

At approximately 10:45 pm on July 7, 2006, an explosion occurred in the vapor recovery system at the Von Roll America (VRA) Facility in East Liverpool, Ohio. The explosion occurred in the vapor recovery system as a result of a chemical reaction inside one of the facility's pump-out tanks (PT-4). The purpose of this letter is to notify the Ohio EPA of the incident, which follows the required reporting criteria, according to OAC 3745-54-56(J).

(1) Name, address, and telephone number of the operator.

Von Roll America, Inc. 1250 St. George Street East Liverpool, OH 43920 (330) 385-7337

(2) Name, address, and telephone number of the facility.

Von Roll America, Inc. 1250 St. George Street East Liverpool, OH 43920 (330) 385-7337

\sim (3) Date, time, and type of incident (e.g. fire explosion).

On Wednesday, July 5, 2006 approximately 40 containers of a waste stream containing oil over magnesium finds were pumped into waste storage tank PT-2 for processing. On Friday, July 7, 2006 at approximately 3:30 pm the material from waste storage tank PT-2 was transferred to a waste feed tank PT-4. Half of the material in PT-4 (approximately 1,000 gallons) was processed just before 10:45 pm.

At approximately 10:45 pm on July 7, 2006, an explosion occurred in the vapor recovery system causing damage to 3 vapor recovery fans and housings. The explosion occurred from the ignition of flammable vapors within the vapor recovery ductwork. The source of the ignition is unknown. Flammable vapors were collected in the vapor recovery ductwork from a chemical reaction that took place in pump-out tank PT-4. The chemical reaction caused the rupture disk of the tank and vapor recovery system to blow filling the vapor recovery system with flammable vapors.

(4) Name and quantity of material(s) involved.

There was no hazardous waste involved in the explosion. The incident involved flammable vapors in the vapor recovery system. The flammable vapors resulted from a chemical reaction in a pump-out tank containing oil with magnesium finds.

(5) The extent of injuries, if any.

There were no injuries associated with this incident.

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable.

The explosion consisted of a loud noise with percussion felt throughout the plant, little visible emissions and no fire. When the incident occurred, VonRoll America, Inc. discontinued all hazardous waste processing and hazardous waste activities. VonRoll remained on fuel oil and natural gas throughout the recovery phase. Because all hazardous waste activities were discontinued and the bulk solid pits were nearly empty (only containing residuals of non-hazardous material and spent carbon from a recent carbon box change-out) there would have been no impact on human health or the environment.

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

Any material generated from the repair of the vapor recovery ductwork and fans will be re-used, recycled or disposed of in an appropriate manner.

(8) Any other information as the director may require.

Under normal conditions, the vapor recovery system operates with a ventilation header blower which discharges to the incinerator and/or the carbon adsorption system. The ventilation header blower is the fan that services all of the collection points on the vapor recovery system. The ventilation header blower then discharges to the incinerator via the primary air fan and/or the carbon adsorption system via the carbon vent blowers.

Due to this incident, the ventilation header blower and the carbon vent blowers are no longer serviceable. As a temporary solution, in order to return the vapor recovery system to an operational status, the ventilation header blower and the carbon vent blowers have been either removed or isolated from the vapor recovery system and the vapor recovery piping has been ducted directly to the primary air fan. The primary air fan now directly services all of the vapor recovery collection points with the incinerator as the only control device.

The original vendor is repairing the damaged fans and we expect to have the vapor recovery fans in place within two to three weeks.

Ohio EPA on-site inspectors have requested additional information, which will be provided.

If you have any questions, please contact me at 330.386.2125.

Sincerely,

cc:

Allison Knowles Environmental, Health and Safety Manager

5 gg

Patricia Natali - OEPA/DHWM/NEDO (hand deliver) Michelle Tarka - OEPA/DHWM/NEDO (hand deliver) Pam Korenewych – OEPA/DAPC/NEDO Wen Huang – USEPA/Region V Gerald Barkus - ELFD



Von Roll America, Inc.

1250 St. George Street East Liverpool, Ohio 43920-3400

Telephone 330-385-7336 Telefax 330-385-7813

November 13, 2006 VIA PRIORITY MAIL RETURN RECEIPT REQUESTED

Pam Allen OEPA-DHWM-CO P.O. Box 1049 Columbus, OH 43216-0149

Dear Ms. Allen:

Please consider this letter a notification of a Class 1 permit modification pursuant to Ohio Administrative Code Chapter 3745-50-51 (D)(1)(a)(i). This modification is covered under (B)(4)(a) of the Appendix to Rule 3745-50-51.

Von Roll America, Inc.(VRA) has installed external temperature-sensing devices on all of the waste storage tanks within the Organic Waste Tank Farm. These temperaturesensing devices are a secondary / redundant method in determining temperature changes within the individual waste storage tanks. Since these devices are redundant, VRA will use the information on an as needed basis and can discontinue their use at VRA's discretion. The primary method for determining temperature change or potential temperature changes is the internal thermocouples, which are located inside the waste storage tanks. The external temperature-sensing devices will offer confirmatory data regarding temperature changes within the waste storage tanks. Due to the thickness of the waste storage tanks, the external temperature-sensing devices will have a lag time in determining temperature or potential changes in temperature of material stored in the waste tanks. Therefore, VRA will continue to rely on the information gathered from the internal thermocouple.

The external temperature-sensing devices are connected to VRA's electronic control system (Bailey) in the same manner as the internal thermocouples. Therefore, the VRA will have the ability to monitor the external devices in the same manner as the internal devices. A significant temperature change will trigger an alarm, which is routed through the Control Room as it does for the original internal thermocouples.

The external temperature-sensing devices were installed on waste storage tanks only. Tanks T-1 (Fuel Oil), T-3 (overflow), and T-18 (overflow) are not equipped with the external temperature-sensing devices. Please replace/insert all of the following attached pages for this modification.

<u>Section D – Process Description</u>

Replace cover page – New revision and revision date Replace Attachment Cover Page D.16 with Revision 19, November 13, 2006 Replace the following P & IDs – Shows the addition of the external temperature-sensing device on the waste storage tanks:

Tank	<u>P & ID No.</u>	<u>New Revision No.</u>	
T-2	I-04-1-00012	7	
T-4	I-04-1-00015	7	
T-5	I-04-1-00016	7	
T-6	I-04-1-00013	9	
T-7	I-04-1-00014	7	
T-8	I-04-1-00002	9	
T-9	I-04-1-00003	8	
T-10	I-04-1-00007	8	
T-1 1	I-04-1-00006	8	
T-12	I-04-1-00010	8	
T-13	I-04-1-00011	8	
T-14	I-04-1-00005	8/9C	
T-15	I-04-1-00004	8/8C	
T-16	I-04-1-00008	9/9C	
T-17	I-04-1-00009	11	

VRA has included two copies of each P & ID. One copy has the change noted by a bubble. The other copy is unmarked or a 'clean' copy. The copy that has the change noted by the bubble is not part of the Part B permit application. It is only included as a reference tool. The 'clean' copy is the P & ID that is to be included in the Part B permit application.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquire of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are certain penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. Thank you, and if you have any questions regarding this letter, please feel free to contact me at the number above.

10 10 M

Sincerely,

Allison Knowles Environmental, Health, & Safety Manager Von Roll America, Inc.

cc: Frank Popotnik, OEPA – NEDO - DHWM Patricia Natali, OEPA – NEDO - DHWM Michelle Tarka, OEPA – NEDO - DHWM Wen Huang, US EPA – Region V

Attachment E

Storage containers with a capacity of less than 0.46 m3 (121 gallons) utilized at the resin manufacturing facility and the ERU meet the container level one standards as outlined in 264.1086(c)(i), meeting applicable DOT regulations on packaging hazardous materials.

Containers of size greater than 0.46m3, primarily intermediate bulk containers (IBCs) and tank wagons, are used to move hazardous waste within the property from the resin manufacturing facility to the ERU. Applicable containers meet level 2 standards. They are operated with no detectable emissions as specified in 264.1086(d)(ii) and monitored annually by Method 21. Tank wagon loading at the resin manufacturing facility is vented to the TOU combustion header. Tank wagon unloading at the ERU is vented to an activated carbon bin.

All containers and closure devices are inspected at the time waste is first placed in the container. The ERU accepts containers in which wastes are already placed. These containers are inspected upon receipt for integrity of the cover and closure devices before the container is accepted at the facility. If a defect is detected, the first attempt at repair shall occur within 24 hours, and final correction shall be completed within 5 days. For repairs that may not be completed within this time frame, depending upon container type, the containers are either repackaged, placed into over-pack containers that meet DOT requirements, or the waste is removed until the defect is repaired. No containers are stored for more than one year.

M.4.3 Negative Declarations

264.1085 The facility does not manages waste in surface impoundments

M.4.4 Closed Vent System and Control Devices

The resin tanks are vented to the plant thermal oxidizer unit (TOU) which reduces the organic content of the inlet stream by at least 95% by weight. The control equipment is designed and operated as specified in 264.1033(k). The system is designed with an induced draft fan rated at negative ten inches water column, operating at a pressure below atmospheric. The TOU is equipped with a temperature monitoring device with a continuous recorder. The system is inspected once a year, and any points of detectable emissions are repaired initially within five days, and final repair is completed within fifteen days.

The TOU consists of two vent lines, a natural gas thermal oxidizer and related process control devices. The combustion header vents vapor streams from open process operation and is maintained below the lower flammable limit to prevent ignition. The inert header vents vapor streams from closed process operations and is maintained oxygen deficient to prevent ignition. The resin tanks are controlled by way of the inert header. The TOU is rated at 10.8 million btu per hour and maximum combustion air requirements is 3,000 scfm. The stack outlet temperature ranges from 550 to 650 degrees Farenheit.

Source operation while the TOU is shutdown is conducted as required by State of Ohio regulations.

The ERU tanks are vented to one of the two overflow tanks that are vented to the incinerator kiln which reduces the organic content of the inlet stream by at least 95% by weight. The control equipment is designed and operated as specified in 264.1033(k). The system is designed with an induced draft fan and operates at a pressure below atmospheric. The ERU is equipped with a temperature monitoring device with a continuous recorder. The systems are inspected once a year, and any points of detectable emissions are repaired initially within five days, and final repair is completed within fifteen days.

The rotary kiln is a large, cylindrical, refractory-lined chamber that rotates slowly to tumble the wastes as they are burned. A secondary chamber is a stationary, refractory-lined chamber that provides sufficient residence time, turbulence and excess air to insure positive destruction of particulates in the flue gas. The incinerator system has a design capacity of 57.3 million btu per hour. The tonnage capacity will vary according to the heat value of the wastes.

During shutdown of the kiln, the overflow tanks are provided secondary control by way of a 2,000 pound activated carbon bin which reduces the organic content of the inlet stream by at least 95% by weight. The control equipment is designed and operated as specified in 264.1033(k). The system is designed with an induced draft and operates at a pressure below atmospheric. The carbon bed is tested monthly using a threshold limit value (TLV) monitor, testing the inlet and outlet concentration to determine organic reduction efficiency. The system is inspected once a year, and any points of detectable emissions are repaired initially within five days, and final repair is completed within fifteen days.

M.4.5 Test Methods and Procedures

Leak detection monitoring shall meet the requirements of 264.1088 and Reference Method 21 in 40 CFR Part 60. For equipment that is designated for no detectable emissions, the background level shall be determined as set forth in the method, and the difference between the equipment concentration and the background shall be used to determine leak level versus 500 ppm.

M.4.6 Recordkeeping Requirements

The following information is recorded in the facility operating record for applicable equipment:

- (a) equipment identification number
- (b) date of inspection
- (c) defect information

The following information is recorded in the facility operating record for applicable control equipment:

3000

- (a) equipment performance tests
- (b) planned maintenance
- (c) maintenance records
- (d) equipment malfunctions

M.4.7 Reporting Requirements

The facility shall submit semiannual reports designated in 264.1065 as required.

Attachment F

D-2a(4) Ignitable. Reactive. and Incompatible Wastes:

40 CFR 270.16(j) 40 CFR 264.17(b) 40 CFR 264.198 40 CFR 264.199

Bulk organic and aqueous liquid wastes received at the Energy Recovery unit will be handled and controlled in such a manner as to insure against incompatible materials being placed in the same tanks. Details of these precautions are given in section F-5, "Prevention of Reaction of Ignitable, Reactive, or Incompatible Wastes".

The Energy Recovery Unit manages ignitable wastes in the bulk storage tanks, intermediate tanks, control liquid tanks, and the overflow tanks. All tanks mentioned above are protected by maintaining an inert (nitrogen) atmosphere in the tank vapor space, monitoring the tank for the oxygen content, and utilizing only explosion-proof or intrinsically safe electrical equipment on the tanks (e.g. the agitator motor) and surrounding areas. The tanks are also equipped with conservation vents that vent into the ventilation header that is equipped with a flame arrestor. The tanks operate at atmospheric pressure and within a temperature range of 50 - 120°F.

The waste storage tank locations conform to NFPA requirements for tanks, requiring

MAY, 2004 SUBMITTAL

Page D-26

Attachment G

NFPA 69

Standard on Explosion Prevention Systems

2002 Edition



NFPA, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101 An International Codes and Standards Organization

NFPA License Agreement

This document is copyrighted by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269-9101 USA. All rights reserved.

NFPA grants you a license as follows: The right to download an electronic file of this NFPA document for temporary storage on one computer for purposes of viewing and/or printing one copy of the NFPA document for individual use. Neither the electronic file nor the hard copy print may be reproduced in any way. In addition, the electronic file may not be distributed elsewhere over computer networks or otherwise. The hard copy print may only be used personally or distributed to other employees for their internal use within your organization.

> Licensee=Chicago Public Library/1003200100 Not for Resale, 06/20/2007 12:17:32 MDT

Copyright National Fire Protection Association Provided by IHS under license with NFPA No reproduction or networking permitted without license from IHS lence, the equipment geometry, and the fundamental burning velocity. [68:3.3]

3.3.17* Flammable Limits. The minimum and maximum concentrations of a combustible material in a homogeneous mixture with a gaseous oxidizer that will propagate a flame.

3.3.17.1 Lower Flammable Limit (LFL). The lower flammable limit is the lowest concentration of a combustible substance in an oxidizing medium that will propagate a flame.

3.3.17.2 Upper Flammable Limit (UFL). The upper flammable limit is the highest concentration of a combustible substance in an oxidizing medium that will propagate a flame.

3.3.18 Flammable Range. The range of concentrations between the lower and upper flammable limits. **[68:3.3]**

3.3.19 Gas. The state of matter characterized by complete molecular mobility and unlimited expansion; used synonymously with the term *vapor*. [68:3.3]

3.3.19.1 Inert Gas. A gas that is noncombustible and nonreactive.

3.3.19.2 Purge Gas. An inert or a combustible gas that is continuously or intermittently added to a system to render the atmosphere nonignitible.

3.3.20 Hybrid Mixture. A mixture of a flammable gas with either a combustible dust or combustible mist. **[68**:3.3]

3.3.21 Inerting. A technique by which a combustible mixture is rendered nonignitible by adding an inert gas or a noncombustible dust. (*See also Blanketing.*)

3.3.22* Isolation. A means of preventing certain stream properties from being conveyed past a predefined point.

3.3.22.1 Chemical Isolation. A means of preventing flame front and ignition from being conveyed past a predetermined point by injection of a chemical suppressant.

3.3.22.2 Deflagration Isolation. A method employing equipment and procedures that interrupts the propagation of a deflagration flame front past a predetermined point.

3.3.22.3 Flow Isolation. A method employing equipment and procedures that interrupts flow and prevents pressure rise beyond a predetermined point.

3.3.22.4 Ignition Source Isolation. A method employing equipment and procedures that interrupts the propagation of an igniting medium past a predetermined point.

3.3.23* Limiting Oxidant Concentration (LOC). The concentration of oxidant below which a deflagration cannot occur. Materials other than oxygen can act as the oxidants. **[86**:2.2]

3.3.24 Liquid Seal. A device that prevents the passage of flame by passing the gas mixture through a noncombustible liquid.

3.3.25 Maximum Pressure (P_{max}). The maximum pressure developed in a contained deflagration for an optimum mixture. [68:3.3]

3.3.26 Mist. A dispersion of fine liquid droplets in a gaseous medium. [68:3.3]

3.3.27 Oxidant. Any gaseous material that can react with a fuel (either gas, dust, or mist) to produce combustion. Oxygen in air is the most common oxidant. [68:3.3]

3.3.28 Padding. See 3.3.1.

2002 Edition

Copyright National Fire Protection Association Provided by IHS under license with NFPA No reproduction or networking permitted without license from IHS **3.3.29 Pressure Piling.** A condition during deflagration in which pressure increases in the unreacted medium ahead of the propagating combustion zone.

3.3.30 Spark Extinguishing System. An extinguishing system in which the radiant energy of a spark or an ember is detected and the spark or ember is quenched.

3.3.31 Suppressant. The chemical agent used in a deflagration suppression system to extinguish the deflagration.

3.3.32 Vapor. See 3.3.19.

3.3.33 Ventilation. The changing of an atmosphere of any space by natural or mechanical means.

Chapter 4 General Requirements

4.1* Methods. The methods recognized in this standard shall be grouped based on the prevention of combustion or on the prevention or limitation of damage after combustion occurs.

4.1.1 Methods Based on the Prevention of Combustion. The following shall be considered methods based on preventing combustion:

(1) Oxidant concentration reduction

(2) Combustible concentration reduction

4.1.2 Methods Based on the Prevention or Limitation of Damage. The following shall be considered methods based on preventing or limiting damage:

(1) Spark extinguishing systems

- (2) Deflagration suppression
- (3) Isolation methods
- (4) Deflagration pressure containment

4.2 Limitations. The limitations specific to each method shall be considered and are specified in the corresponding chapter for each method.

4.3 Factors to Be Considered. The following factors shall be considered in the selection of one of the methods and the design of the system:

- (1) Effectiveness of each method
- (2) Reliability of the system
- (3) Personnel hazards inherent in each method

4.3.1 The reliability of the system chosen shall be assessed using the following factors:

- (1) System design basis
- (2) Possibility of electrical and mechanical malfunction
- (3) Dependence on sophisticated activating systems
- (4) Need for special installation, training, operating, testing, and maintenance procedures
- (5) Further limitations as presented in each chapter

4.3.2 In general, explosion prevention systems shall be used to protect processing, storage, and materials handling equipment.

4.3.3 When explosion prevention techniques are applied to rooms, buildings, or other enclosures where personnel are present, consideration shall be given to the safety of the personnel.

4.4 Plans.

Licensee=Chicago Public Library/1003200100 Not for Resale, 06/20/2007 12:17:32 MDT

4.4.1 Plans, system specifications, and manufacturer's recommendations for testing and maintenance shall contain

69--6



information that enables the authority having jurisdiction to evaluate the explosion hazard and the effectiveness of the system.

4.4.2 Details of the plans shall include the following:

- (1) Pertinent chemical and physical characteristics of the materials involved
- (2) Location of hazards
- (3) Enclosures or limits and isolation of the hazards
- (4) Exposures to the hazards

4.5 Acceptance Test. All new system installations and modifications shall be tested or otherwise evaluated to confirm the operational integrity of the system.

4.5.1 Tests shall be in accordance with the manufacturer's recommendations.

4.5.2 A written report of the tests shall be provided to the users.

4.6* Inspection and Maintenance.

4.6.1* All systems shall be inspected for operability in accordance with the manufacturer's recommendations.

4.6.2 An inspection and preventive maintenance schedule shall be established in accordance with the manufacturer's recommendations.

Chapter 5 Deflagration Prevention by Oxidant Concentration Reduction

5.1 Application. The technique for oxidant concentration reduction for deflagration prevention shall be permitted to be considered where a mixture of oxidant and flammable material is confined to an enclosure within which the oxidant concentration can be controlled.

5.1.1* The system shall be maintained at an oxidant concentration that is low enough to prevent a deflagration.

5.1.2 Oxidant concentration reduction shall be permitted to be applied to rooms or buildings, but one of the following shall apply, since oxygen-deficient atmospheres cannot sustain life:

- (1) Operations in such areas shall be remotely controlled.
- (2) Operating personnel shall be provided with breathing apparatus, as well as other safeguards.

5.2 Design and Operating Requirements.

5.2.1* Design Considerations. The following factors shall be considered in the design of a system intended to reduce the oxidant concentration:

- (1) Required reduction in oxidant concentration
- (2) Variations in the process, process temperature and pressure, and materials being processed
- (3) Source purge gas supply and equipment installation
- (4) Compatibility of the purge gas with the process
- (5) Operating controls
- (6) Maintenance, inspection, and testing
- (7) Leakage of purge gas to surrounding areas
- (8) Need for breathing apparatus by personnel

5.2.2 Limiting Oxidant Concentrations (LOC).

5.2.2.1* Table C.1(a), Table C.1(b), and Table C.1(c) shall be permitted to be used as a basis for determining limiting oxi-

dant concentrations of flammable gases or suspensions of combustible dusts.

5.2.2.2 For fuel/inert/oxidant combinations not listed in Table C.1(a), Table C.1(b), and Table C.1(c) or for situations when the process conditions differ from the conditions under which the existing data were obtained, the test methods described in ASTM E 2079, Standard Test Method for Limiting Oxygen (Oxidant) Concentration for Gases and Vapors, shall be permitted to be used.

5.2.2.3 The extent of oxidant reduction shall be determined by testing where conditions vary significantly from the test conditions under which the data were obtained.

5.2.3 Use of Purge Gas Systems.

5.2.3.1 An additional backflash prevention or protection system shall be installed if a purge gas system is used for lines collecting flammable mixtures and the collection system terminates at a flare or incinerator.

5.2.3.2 Hard-piped vapor control systems shall not require flame arresters at each source connection to the system, provided that the system is designed to operate outside the flammable range.

5.2.3.3 Systems requiring hookups prior to vapor transfer, such as vapor collection from mobile vehicles, shall be purged to a level below the LOC prior to transfer, or backflash protection shall be provided near the point of connection.

5.2.3.4* Where oxygen-deficient atmospheres are maintained in equipment operating under conditions that might form pyrophoric iron sulfides or other pyrophoric materials, a procedure shall be developed to prevent uncontrolled oxidation of the sulfides or other pyrophoric materials.

5.3 Purge Gas Sources.

5.3.1 The purge gas shall be obtained from a source that is capable of continuously supplying the required amount of purge gas to maintain the necessary degree of oxidant deficiency.

5.3.2 Possible sources of purge gas shall include, but shall not be limited to, the following:

- (1) Commercially available inert gas, such as nitrogen, carbon dioxide, argon, or helium, supplied from high-
- pressure tanks or cylinders or from air separation plants
- (2) Înert gas supplied from a gas generator that burns or catalytically oxidizes a hydrocarbon to produce an oxygendeficient purge gas
- (3) Products of combustion from process furnaces or boiler furnaces for which purification or cooling could be necessary to avoid contamination
- (4)*Steam, if it can be supplied at a rate that raises and maintains the protected vessel or system at a temperature high enough to prevent condensation of the steam
- (5) High-purity nitrogen supplied by air oxidation of ammonia
- (6) Inert gas supplied by removal of oxygen from air by absorption, adsorption, chemical reaction, or membrane permeation
- (7) Fuel gases such as methane or natural gas

5.4 Purge Gas Conditioning.

5.4.1 Purge gas shall be conditioned to minimize contaminants that might be harmful to the gas distribution system or that might interfere with the operation of the system.

Copyright National Fire Protection Association Provided by IHS under license with NFPA No reproduction or networking permitted without license from IHS

Licensee=Chicago Public Library/1003200100 Not for Resale, 06/20/2007 12:17:32 MDT 2002 Edition

5.4.2 Before introduction, the purge gas shall be at a temperature compatible with the process being protected to minimize the chance of thermal ignition or condensation.

5.4.3 Purge gas that is distributed in a system subject to freezing temperatures shall have a dew point such that water condensation cannot occur at the minimum ambient temperature to which the system will be exposed.

5.5 Piping Systems. Purge gas distribution systems shall be designed and installed in accordance with recognized engineering practices.

5.5.1 Where purge gas exceeds a gauge pressure of 15 psi (103 kPa), the piping system shall be designed in accordance with ANSI/ASME B31.3, *Process Piping*.

5.5.2 Where required, piping systems shall be provided with filters, screens, or other means of preventing foreign material from entering critical parts of the system, such as pressure regulators, valves, and instrumentation.

5.5.3 Where required, moisture traps shall be provided and lines shall drain toward the traps.

5.5.3.1 Blowdown connections for moisture traps shall be provided.

5.5.3.2 Moisture traps shall be protected from freezing.

5.5.4 When flue gas or combustion gas is used, means shall be provided to prevent propagation of flame into the system being protected.

5.5.5* Manual shutoff valves shall be provided at each major division point in the distribution system.

5.5.6 The inert gas distribution system shall be designed to prevent contamination by hazardous process materials.

5.5.6.1 Where required, check valves or other design features shall be incorporated to prevent the potential for contamination due to loss of purgé gas supply or to excessive pressure in the process unit being protected.

5.5.6.2 A single check valve shall not be considered a positive backflow connection.

5.5.7* Cross-connections between the purge gas distribution system and any other system shall be prohibited unless one of the following criteria is met:

- (1) Positive measures shall be taken to prevent backflow from the other system into the purge gas system.
- (2) Cross-connections to backup purge gas systems shall be permitted without backflow prevention unless backflow could create a hazard.

5.5.8 The entire distribution system shall be cleaned and functionally tested prior to being placed in service.

5.5.9 The gases from an enclosure or vessel being purged shall be vented to a safe location.

5.6 Application of Purge Gas at Points of Use. Purge gas shall be introduced and exhausted so that distribution is ensured and the desired reduction in oxidant concentration is maintained throughout the system being protected.

5.6.1 Multiple inlets and outlets shall be permitted.

5.6.2 Connections between the purge gas distribution piping and the protected enclosure or system shall be designed for maximum purge gas pressure.

2002 Edition

5.7 Instrumentation.

5.7.1* General. Instrumentation shall be provided to monitor the purge gas being supplied to the distribution system.

5.7.1.1 Instrumentation shall be calibrated at scheduled intervals.

5.7.1.2 When the conditions being measured are critical to the safety of personnel, alarms shall be provided to indicate abnormal operation of the system.

5.7.2 Systems Operated Below the Limiting Oxidant Concentration (LOC).

5.7.2.1* Instrumentation shall be installed in as many points as necessary to ensure the desired oxidant concentration reduction within the protected system.

5.7.2.2 The determination of the LOC for the system shall be based on the worst credible case gas mixture yielding the smallest LOC.

5.7.2.3 Asafety margin shall be maintained between the LOC and the normal working concentration in the system.

5.7.2.4* The safety margin shall take into account all of the following:

- (1) Fluctuations occurring in the system
- (2) Sensitivity and reliability of monitoring and control equipment
- (3) Probability and consequences of an explosion

5.7.2.5 One of the following requirements shall be met where the oxygen concentration is continually monitored:

- (1) A safety margin of at least 2 volume percent below the worst credible case LOC shall be maintained.
- (2) The LOC shall be less than 5 percent, in which case, the equipment shall be operated at no more than 60 percent of the LOC.

5.7.2.6 The requirement of 5.7.2.5 shall not apply to partial oxidation processes.

5.7.2.7 Where the oxygen concentration is not continuously monitored, all of the following requirements shall be met:

- (1) The oxygen concentration shall be designed to operate at no more than 60 percent of the LOC, or 40 percent of the LOC if the LOC is below 5 percent.
- (2) The oxygen concentration shall be checked on a regularly scheduled basis.

5.7.2¹⁷.1* The vapor space in low-pressure field storage tanks that have padding shall not require checking of the oxygen concentration.

5.7.2.7.2 The procedure of pulling a partial vacuum and then breaking the vacuum with inert gas shall be permitted without measuring the oxygen concentration if all of the following apply:

- (1) The vacuum condition is held for a time to check for leakage.
- (2) The vacuum level is monitored.
- (3) The vacuum-creating medium is compatible with the process chemistry.
- (4) The residual oxygen partial pressure is calculated or demonstrated by test to be at least 40 percent below the LOC.

5.7.3 Systems Operated Above the Upper Flammable Limit (UFL).

5.7.3.1* Systems operating above the UFL shall be permitted to be used, and the UFL shall be determined at the conditions applicable to the system.

Copyright National Fire Protection Association Provided by IHS under license with NFPA No reproduction or networking permitted without license from IHS

Licensee=Chicago Public Library/1003200100 Not for Resale, 06/20/2007 12:17:32 MDT **5.7.3.2** Vent headers operated near atmospheric pressure shall be permitted to be rendered nonflammable by the addition of at least 25 volume percent of natural gas or methane where both of the following criteria are met:

- (1) The vent headers shall not contain any vapor with a UFL greater than that of hydrogen in air (75 percent).
- (2) The vent headers shall not contain oxygen in concentrations greater than can be derived from ambient air.

5.7.3.3 Instrumentation to control methane flow shall be acceptable to the authority having jurisdiction.

Chapter 6 Deflagration Prevention by Combustible Concentration Reduction

6.1* Application. The technique for combustible concentration reduction shall be permitted to be considered where a mixture of a combustible material and an oxidant is confined to an enclosure and where the concentration of the combustible can be maintained below the lower flammable limit (LFL).

6.2 Basic Design Considerations.

6.2.1 All of the following factors shall be considered in the design of a system intended to reduce the combustible concentration below the lower flammable limit (LFL):

- (1) Required reduction in combustible concentration
- (2) Variations in the process, process temperature and pressure, and materials being processed
- (3) Operating controls
- (4) Maintenance, inspection, and testing

6.2.2* The lower flammable limits of the combustible components shall be determined at all operating conditions, including startup and shutdown.

6.3 Design and Operating Requirements.

6.3.1 Combustible Concentration Limit. The combustible concentration shall be maintained at or below 25 percent of the lower flammable limit (LFL), unless the following conditions apply:

- (1) Where automatic instrumentation with safety interlocks is provided, the combustible concentration shall be permitted to be maintained at or below 60 percent of the lower flammable limit.
- (2) Aluminum powder production systems designed and operated in accordance with NFPA 651, Standard for the Mathining and Finishing of Aluminum and the Production and Handling of Aluminum Powders, shall be permitted to be maintained at or below 50 percent of the lower flammable limit.

6.3.2* Catalytic Oxidation. Where catalytic oxidation is used for combustible concentration reduction, flame arresters shall be provided and the following requirements shall apply:

- (1) Flame arresters shall be provided in all inlets to the catalytic oxidation unit.
- (2) Flame arresters shall be periodically inspected and maintained.

6.3.3 Ventilation or Air Dilution.

6.3.3.1 If ventilation is used, the outlets from the protected enclosures shall be located so that hazardous concentrations of the exhausted air cannot enter or be drawn into the fresh air intakes of environmental air-handling systems.

6.3.3.2 Air intakes shall meet one of the following requirements:

- (1) They shall be located so that combustible material cannot enter the air-handling system, even in the event of spills or leaks.
- (2) They shall be provided with gas detectors that automatically interlock to stop air intake.

6.3.3.3 Filters, dryers, or precipitators in the air intakes shall be located such that they are accessible for cleaning and maintenance.

6.4 Instrumentation.

6.4.1 Instrumentation shall be provided to monitor the control of the concentration of combustible components.

6.4.2 Instrumentation shall be calibrated at scheduled intervals.

6.4.3 Where the enclosure being protected presents a personnel hazard, alarms shall be provided to indicate abnormal operation of the system.

Chapter 7 Deflagration Prevention by Hot Particle Detection and Intervention Systems

7.1 Application. Spark extinguishing systems shall be permitted to be considered for reducing the frequency of deflagrations in transport and receiving systems that handle combustible particulate solids.

7.1.1 Spark detection and extinguishing shall be used in conjunction with other explosion prevention or explosion protection measures, such as deflagration suppression or deflagration venting, for those systems posing a dust explosion hazard.

7.1.2 Spark extinguishing systems shall be used for the detection and extinguishment of sparks or embers as they pass through ducts that transport combustible dusts or solids.

7.1.3 The spark extinguishing system shall operate by means of detectors that sense the radiation from a hot or glowing particle and actuate a special extinguishing system that quenches the particle.

7.1.4 Because the detection is by means of radiation, spark detection systems shall not be used in duct systems that have openings through which incident light could affect the detectors, unless the detectors are designed to be insensitive to visible light.

7.2 Limitations.

7.2.1 Spark extinguishing systems shall not be used for ducts designed to transport flammable gases.

72.2 Spark extinguishing systems shall not be used where the extinguishing agent creates a hazard.

7.2.3* Spark detection and spark extinguishing systems shall be limited to the detection and extinguishment of sparks or embers traveling at the system transport velocity.

7.2.4 Spark detection and spark extinguishing systems shall not be used in extinguishing deflagration flame fronts or flow isolation.

7.3 Spark Detection and Spark Extinguishing System Design Considerations.

7.3.1* General. Spark detection and spark extinguishing systems shall be listed or approved.

2002 Edition

Copyright National Fire Protection Association Provided by IHS under license with NFPA No reproduction or networking permitted without license from IHS

Licensee=Chicago Public Library/1003200100 Not for Resale, 06/20/2007 12:17:32 MDT

Attachment H



Maura LaGreca, Manager EHS PPG Industries 559 Pittsburgh Road Circleville, Ohio 43113 (740) 420-6612

November 9, 2006

Waste Management Branch DW-8J Waste, Pesticides and Toxic Division United States Environmental Protection Agency USEPA, Region 5 77 West Jackson Boulevard Chicago, Illinois 60604 Attention Mr. Wen Huang, PE Certified Mail 7003 1680 0000 5471 0842

Ohio EPA Division of Waste Management Attention Regulatory and Information Services Box 1049 Columbus, Ohio 43216-1049 Certified Mail 7003 1680 0000 5471 0859

Subject: PPG Industries Ohio, Inc. Draft Ohio RCRA Permit Number 01-65-0641 Draft USEPA RCRA Identification Number OHD004304689

PPG Industries Ohio, Inc. (PPG) owns and operates the Energy Recovery Unit (ERU) pursuant to Ohio RCRA Permit Number 01-65-0641. PPG applied to renew its RCRA permit and has received and reviewed the draft federal and state RCRA permits mailed on September 26, 2006. PPG respectfully submits the following comments to specific terms and conditions in the draft permits:

Draft USEPA RCRA Identification Number OHD004304689

- a. Page 11 section III should be revised to eliminate the requirement for annual submission of election of compliance. The requirement to notify the agency of the compliance election was eliminated from the rules in April 2006.
- b. Page 20 item IV.C.1.a identifies the applicable tanks that comply with level 2 tank requirements defined in 264.1084. The tank capacities identified in the table are the operating capacities, and not the maximum capacity of the tanks identified in the Part A permit renewal application. The table should be updated with those capacities identified for each tank in the Part A permit application to avoid confusion. Also, the two overflow tanks indicated in the table are not regulated tanks, and should be removed as applicable sources.
- c. Page 20 item IV.C.2.c should be removed as process and instrumentation diagrams are not required per 264.1084. In addition, exempt tanks would not be regulated under the rule.
- d. Page 20 of 23 item IV.C.2.b should remove the requirement to monitor the temperature and pressure of each tank. This is not required by rule.
- e. Page 22 item IV.C.3.b (2) should remove specifications of the thermal oxidizer. This information is not required by rule.
- f. Page 23 item IV.C.4 should remove the requirement for hazardous waste tank blanketing with nitrogen. This is not required by rule.

Draft Ohio RCRA Permit Number 01-65-0641

- g. Page 31 item D. second to last paragraph states that a flow meter is provided at the discharge end of the aqueous waste line, and this is monitored in the ERU control room. This information should be corrected to indicate the transfer of aqueous waste is monitored by the ERU tank weight in the ERU control room.
- h Page 31 item D. last paragraph states that the resin plant waste tanks are equipped with nitrogen to control pressure. This should be eliminated or corrected as nitrogen is provided to reduce ignition potential for flammable liquids as well as minimize air emissions.
- i. Page 44 references NFPA codes. The most recent version of NFPA 30 is 2003. This should be updated from the current 2000 citation, along with the proper designation to the tables in the current version as tables 4.3.2.1.1(a), (b), 4.3.2.1.2, 4.3.2.1.3 and 4.3.2.1.4.
- j. Page 57 item I fifth paragraph PPG requests the elimination of dates and a more general statement indicating the facility's compliance with MACT requirements demonstrated by way of performance testing. This would aid in maintaining the document in current reference over the ten year period of the permit.
- k. Page 58 item I.1.a PPG requests clarifying language to the statement so as to not imply a restriction allowing only hazardous waste for incineration. Such a restriction would eliminate the ability to incinerate nonhazardous wastes or utilize alternative fuels.

Thank you, and please call if you have any questions.

Maura C. Latreca

Maura C. LaGreca Manager EHS



Attachment I

Storage location will be based on compatibility with the wastes already in the tank as well as the material of construction of the tank itself. Twelve of the tanks are carbon steel and can accommodate all wastes except acidic liquids. The remaining four tanks are stainless steel and can accept all wastes.

- b. Three (3) Intermediate Tanks (drum pumpout) are designated for liquids pumped from waste drums. These wastes are accumulated in quantities up to 1500 gallons and then analyzed for physical and chemical characteristics. If the contents are compatible with the contents of a bulk storage tank, the wastes will be transferred to storage. If not, the contents will be pumped directly to an incinerator feed lance.
- c. Two (2) Control Liquid tanks of 2100 gallons capacity are included to provide a high-BTU waste liquid to the kiln. The liquid will be continuously circulated through the piping to the kiln front wall and back in order to keep solid particles in suspension. The modulating control lance will draw from this loop as necessary to maintain a constant kiln temperature. Designated wastes will be pumped to these tanks through the manifold.
- d. Two (2) Overflow Tanks. The vent headers from the bulk storage tanks are connected to one of two Overflow Tanks. These 5,000-gallon tanks will collect any condensed vapors or overfill of liquid from the waste tanks. They are equipped with a level indicator and alarm. The tanks are vented through conservation vents to the incinerator or to carbon filters if the kiln is not operating. Flame arrestors are installed in the duct leading to the combustion air inlet or the incinerator to provide flashback protection.
- e. Five (5) waste tanks are maintained at the Circleville resin plant for blending and

Page D-18

CERTIFICATE OF SERVICE

I hereby certify that I delivered a copy of the foregoing EPA response brief, certified index of Administrative Record, and Certificate of Service to the persons designated below, on the date below, by postage prepaid first class mail, in envelopes addressed to:

Robert J. Schmidt Porter, Wright, Morris, & Arthur 41 South High Street Columbus, OH 43215

Joseph M. Kara PPG Industries, Inc. 39 South, One PPG Place Pittsburgh, PA 15272

Counsel for PPG Industries, Inc.

I have also filed the EPA response brief, certified index of Administrative Record, and Certificate of Service with the Clerk of the Environmental Appeals Board, on the date below, by FedEx, in an envelope addressed to:

U.S. Environmental Protection Agency Clerk of the Board Environmental Appeals Board Colorado Building 1341 G Street, N.W. Suite 600 Washington, D.C. 20005

Dated this 22nd day of June, 2007.

Thomas J. Krueger Associate Regional Counsel Office of Regional Counsel U.S. EPA, Region 5