



**Environmental
Protection Agency**

John R. Kasich, **Governor**
Mary Taylor, **Lt. Governor**
Scott J. Nally, **Director**

Re: Hancock County
The Dow Chemical Company
0332010121
Notice of Violation (NOV/non-HPV)

April 27, 2012

CERTIFIED MAIL

Mr. Todd Kindle
Site EH&S
The Dow Chemical Company
3441 North Main Street
Findlay, Ohio 45840

Dear Mr. Kindle:

This letter shall serve as a follow-up to the inspection conducted on April 18, 2012, of The Dow Chemical Company ("Dow") by Miranda Garlock, Jan Tredway, and Alyse Johnson of the Division of Air Pollution Control. As part of the Ohio EPA's program to reduce the Permit to Install/Operate (PTIO) backlog, the facility profile and permits have recently been reviewed. In an attempt to verify the accuracy of the Ohio EPA files and the facility's current emission units, the agency requested further information and clarification from Dow. Dow has been responsive in submitting additional information the agency has requested over several emails received March 30, 2012, April 13, 2012, and April 24, 2012, a faxed document on March 26, 2012, and a letter dated March 13, 2012. The purpose of the inspection was to view the facility's overall operations as they relate to possible air emissions and determine what emission units, currently in operation at the facility, would require permits.

1. The following emissions units (EUs) are currently permitted at the facility:

L007 (Cold Parts Cleaner/Safety Kleen Model 30); PTI 03-5639 issued March 20, 1991 and PTO issued February 21, 1992.

P005 (Polyethylene Films Manufacturer including extruders, dies, and winders); registration status issued 8/1/1977.

P010 (Plastic Film Extrusion Line/Line 15); PTI 03-13514 issued December 19, 2000.

P011 (Plastic Film Extrusion Line/Line 27); PTI 03-13514 issued December 19, 2000.

P012 (Plastic Film Extrusion Line/Line 29); PTI 03-13514 issued December 19, 2000.

P013 (Plastic Film Extrusion Line/Line 28); PTI 03-13514 issued December 19, 2000.

- a. Between communications with Dow and the Ohio EPA, it was discovered that Dow upgraded L007 to Model #81 from Model #30 which utilizes recycled non-hazardous 150 solvent. Upon the review of the manufacturers specifications and the facility inspection, this upgraded unit would be considered exempt from permitting based on Ohio Administrative Code (OAC) rule 3745-31-03(A)(1)(w) because it meets the provisions of OAC rule 3745-21-09(O) and has a liquid surface area less than or equal to ten square feet. In addition, during the inspection, this emission unit was found to be in compliance with OAC rule 3745-21-09(O) because the lid of the unit was closed during the idle time and operational instructions were posted.

It should be noted that since this unit was replaced by a different model, which now qualifies for an exemption, the emission code L007 associated with the former Model #30 will be permanently shut down and replaced by a new emission code under the facility profile that will be identified as permit exempt. This new emission code will be listed as L008 (Cold Parts Cleaner/Safety Kleen Model 81). The Ohio EPA requests that Dow provide the date when the model was upgraded so that this can be reflected in the corrected facility profile.

- b. Upon further review of PTI 03-13514, discussions with Dow, and the facility inspection, it was discovered that the ozone treaters associated with each plastic film extrusion line are not considered to be control equipment but rather are an inherent part of the design of each line. Calculations previously provided by the company indicate that emissions from these lines would qualify as "de minimis" under OAC 3745-15-05; therefore, the company may choose to revoke PTI 03-13514. The Ohio EPA requests that if Dow chooses to revoke PTI 03-13514, Dow provide a written request in writing to the agency.
- c. Upon discussions with Dow, emission unit P005 (Polyethylene Films Manufacturer including extruders, dies, and winders) is inclusive of five additional production lines including Lines 11, 14, 16, 25, and 41. Upon the facility inspection, it was discovered that the ozone treaters associated with each plastic film extrusion line are not considered to be control equipment but rather are an inherent part of the design of each line. Upon the review of calculations provided by Dow in a URS application PTI dated August 2000, emissions from these five lines would qualify as "de minimis" under OAC 3745-15-05. Based upon this information, the Ohio EPA will assign each of the five lines a separate emission code (P014 through P018) and invalidate emission code P005. Each new emission code for each line will be assigned an exemption status of "de minimis" under the facility profile.

2. Dow provided information and calculations to the Ohio EPA on February 18, 2010, regarding the installation of Line N1. The Ohio EPA concurred that emissions from Line N1 would be considered "de minimis". The Ohio EPA will update the facility profile to incorporate an emission code for Line N1 (P019) and will assign it a "de minimis" exemption status.

3. Upon the inspection of the facility, it was discovered that the transferring and conveying operations of resin pellets from silos to weigh hoppers and to extruder bins and the offloading of resin pellets from rail cars are all a part of a pneumatic system. The facility includes eight outside silos and 42 inside silos which vent outside; however, all resin is transferred utilizing multiple dust collection systems which work under negative pressure to remove dust during transferring and all extruder bins and hoppers are vented inside via filtered vent material. These operations are included as part of operations associated with emission code P005. Calculations previously provided by Dow in a URS PTI application dated August 2000, indicated particulate emissions from these operations would qualify as "de minimis" under OAC 3745-15-05. However, calculations provided by URS in the same application indicate that gaseous VOC emissions would exceed the "de minimis" requirements and would therefore be permissible. However, upon further review of the transferring, conveying, and offloading processes during the facility inspection, the Ohio EPA feels that URS inaccurately calculated VOC emissions for these operations because no gaseous VOC emissions should be created from resin pellets until heat is applied which does not occur during these operations. Dow refers to the transferring, conveying, and offloading from railcars as inclusive of their "Feedstock operations". Therefore, the Ohio EPA will assign a new emission code (P020) to this process and invalidate emission code P005. The new emission code will be assigned an exemption status of "de minimis" under the facility profile.

As a requirement of OAC 3745-15-05(E), the "de minimis" exemptions discussed in 1)a., 1)b., 2) and 3) above, would require Dow to maintain records that show that emissions of any air contaminant from the source did not exceed ten pounds per day on each day the source emitted air contaminants, and that the source in any one year did not emit more than one ton of hazardous air pollutants as defined in division (1) of section 3704.03 of the Revised Code, and that the emissions from the source, in combination with similar air contaminant from the facility did not result in excess of 25 tons during the preceding calendar year.

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4. During the site visit on April 18, 2012, one additional emission unit, the Beringer burn off oven, was identified. After review of the facility's files, this emission unit is not currently permitted. Information supplied by Dow on this unit, indicates that the unit was installed in 1981 and that exhausting hydrocarbon gases generated by the polymer decomposition from this unit are controlled by the use of a water-vapor separator that is connected to a small diameter stove pipe which vents outdoors. Based on the information provided, it does appear that the water-vapor separator is being utilized as a control device associated with this unit and is not inherent to this units operation; therefore, the Ohio EPA, considers this to be a permissible emission unit.

The installation and operation of this emission unit is in direct violation of OAC rule 3745-31-02 and Ohio Revised Code 3704.05. Therefore, Dow is required to submit a PTIO application, EAC form, and a process flow diagram for this emissions unit in order to correct this administrative violation. This application will be treated as an initial installation and will be assessed applicable fees. A permit application and EAC form can be downloaded from the following link on Ohio EPA's website: <http://www.epa.ohio.gov/dapc/fops/eacforms.aspx>.

Dow is required to submit the information detailed above no later than May 15, 2012. Please be advised that the submission of the requested information to respond to this letter does not constitute waiver of the Ohio EPA's authority to seek civil penalties pursuant to ORC Section 3704.06. The Ohio EPA will make a decision on whether to pursue or decline to pursue such penalties regarding this matter at a later date.

Should you have any questions or comments concerning this letter, please feel free to contact me at (419) 373-3069 or electronically at Miranda.Garlock@epa.ohio.gov.

Sincerely,



Miranda R. Garlock
Division of Air Pollution Control

/llr

pc: DAPC-NWDO File
Certified Mail Receipt Number 7009 1410 0001 1843 8887

ec: Miranda Garlock, NWDO, DAPC
Julie McCarthy, NWDO, DAPC
Jan Tredway, NWDO, DAPC
Jennifer Jolliff, NWDO, DAPC
Tom Kalman, CO, DAPC