

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

A403336449

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|--|-------------------------------|---------------------------|
| FACILITY: The Dow Chemical Company U.S.A., Midland | | SRN / ID: A4033 |
| LOCATION: 1790 Building, MIDLAND | | DISTRICT: Saginaw Bay |
| CITY: MIDLAND | | COUNTY: MIDLAND |
| CONTACT: Kayla Peacock, Environmental Specialist | | ACTIVITY DATE: 09/07/2016 |
| STAFF: Kathy Brewer | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MEGASITE |
| SUBJECT: Building 934 R290 | | |
| RESOLVED COMPLAINTS: | | |

9-7-2016 Compliance evaluation for FGRULE290 Building 934, Dow Chemical Company

Kayla Peacock (Dow Chemical, Air Delivery Specialist)
Kathy Brewer (MDEQ-AQD, EQA)

The inspection covered FGRULE290-S1 emissions from the Building 934 Dursban formulation and handling activities. The emission unit air contaminants are exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

The compliance evaluation included a tour of the Dursban formulation area, product and raw material tanks, loading truck rack, product drum and tote packaging area, operator control room, on site records review, and AQD Saginaw Bay district file review. No noncompliance issues were found.

Attachments

List of materials tracked by ITSL and screening level
2016 formulation emissions by month
2016 packaging emissions by month
2016 emissions for emissions >2.0 ug/m3 ITSL
2016 emissions for emissions 2.0 >0.04 ug/m3 ITSL or IRSL >0.04 ug/m3

AQD file review

2015 Annual and Semi Annual ROP Deviation Reports
Jan – June 2016 Semi Annual ROP Deviation Reports
2014 -2015 Dow Chemical release reports

DESCRIPTION

The Building 934 Dursban activities include formulation of water based and organic based product. The facility makes and packages six different products. Three raw material tanks, three premix tanks, and four product tanks vent to 858 TOX. Some emissions are vented to atmosphere. During the inspection the facility was drumming Dursban. No formulation was occurring.

EMISSION LIMITS

The applicable Rule 290 exemptions are R 336.1290(a)(i)

Any emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials that are listed in R 336.1122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively.

And R 336.1290(a)(ii)(A):

For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials that are listed in R 336.1122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the total uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively.

On site records review found the following maximum emissions:

| Month | Lbs.month emitted ITSL >2 ug/m3 | Lbs.month emitted ITSL >2 ug/m3 | Rule 290 limit (lbs) |
|-----------|---------------------------------|---------------------------------|----------------------|
| June 2016 | 123.6 | | 500 |
| May 2016 | | 1.35 | 10 |

Each product has blend information, formulation filling losses, and packaging filling losses. The emissions are the sum of all emissions from component specific physical property data, activity formulation emissions, and product volume composition. Control device efficiency is used where appropriate.

MONITORING/RECORDKEEPING

All required monitoring and recordkeeping appeared to be complete.

REPORTING

A review of the Dow Chemical reported releases found a November 18, 2014 release of chlorpyrifos of <0.05 lbs from a pin hole leak in a drum that had just been filled. Leaked material was absorbed and packaged for disposal.

The ROP deviation reports include a list of processes where the emissions reported in 2014 MAERS did not precisely match the emissions recorded determining compliance. The plant site emission calculations using chemical specific physical properties, production information, and activity based emissions are used for compliance determinations. The MAERS reporting tool changes did not result in any changes to emission calculations use for R290 evaluations.

NAME 

DATE 5/7/2017 SUPERVISOR 