



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCESwww.dnr.mo.gov**MAR 08 2016**

Mr. Curt Gardner
EHS Specialist, Senior II
BASF Corporation
3150 Highway JJ
Palmyra, MO 63461

RE: New Source Review Temporary Permit Request - Project Number: 2016-02-036
Installation ID Number: 127-0001
Expiration Date: March 1, 2018
Temporary Permit Number: **032016-002**

Dear Mr. Gardner:

The Missouri Department of Natural Resources' Air Pollution Control Program has completed a review of your request to vent uncontrolled PROWL process fumes to the atmosphere via the incineration bypass vent at BASF Corporation, located in Palmyra, Missouri. The Air Pollution Control Program is hereby granting your request to conduct this temporary operation at this location in accordance with Missouri State Rule 10 CSR 10-6.060(3).

Uncontrolled emissions consisting of permitted air contaminants as well as vinyl chloride and 1,2-dichloroethane occur as a result of opening the bypass vent on the PROWL process fume line. Normally the fumes from individual PROWL process vessels and tanks are collected and sent via this Process Fume Line to one of three available liquid waste incinerations that can also treat process fumes at 99.99% destruction and removal efficiency (DRE). Historically, the bypass vent is used when the incinerator receiving these fumes experiences a trip event that triggers a partial or complete shutoff of the incinerator waste feeds, and sometimes the process fume feeds as well. The fumes are vented via the bypass line until they can be safely re-introduced to an incinerator for treatment.

The PROWL process is regulated under 40 CFR part 63 Subpart MMM, National Emission Standards for Hazardous Air Pollutants from Pesticide Active Ingredient Facilities. This regulation requires 98% DRE for organic hazardous air pollutants (o-HAPs) and allowed monitored bypass events. Vinyl chloride and 1,2-dichloroethane are o-HAPs and are adequately treated when routed to incineration. These emissions were previously allowed under the Start-up, Shut-down, and Malfunction (SSM) provisions. However, following court action vacating the SSM allowance for NESHAP regulations, EPA removed the SSM allowance during the residual risk and technology review for this MACT (FR Vol 79, No. 59, pp. 17340-17382, March 27, 2014), therefore such bypass events may now result in failure to meet the emission standard.

During an unrelated BASF process safety internal investigation into waste stream composition, the presence of vinyl chloride and 1,2-dichloroethane were detected. During bypass events, the emission rate

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of vinyl chloride is estimated at 0.3 lb/minute and 2.8 lbs/minute for 1,2-dichloroethane, based on recent fume component analysis. The intent of this temporary permit is to allow BASF time to identify emission sources, and investigate source reductions. This temporary permit imposes the following voluntary special conditions:

Emission limitations:

1. BASF shall not emit more than 1.0 ton per month of 1,2-dichloroethane during bypass events.
2. BASF shall not emit more than 0.1 ton per month of vinyl chloride during bypass events.

Monitoring/Recordkeeping:

BASF shall monitor the emissions of vinyl chloride and 1,2-dichloroethane during bypass events. Compliance with the emission limitations shall be demonstrated on a monthly basis, using a mass balance approach and assuming 100% of the available pollutant is emitted. Emissions shall be reported under emission point PR-55. All records containing data used to demonstrate compliance with this special condition shall be kept for a minimum of five years.

Reporting:

BASF shall submit a report within 10 days of the end of the month, if the records indicate an exceedance of the emission limitations imposed by this temporary permit.

BASF has submitted a compliance plan and is proactively communicating with the Air Pollution Control Program to address the excess emissions and achieve compliance. As part of the compliance plan, BASF is required to submit a report on the 10th of each month for the preceding month to report excess emissions for purposes of MACT and Title V compliance. This is a separate requirement from the report required in the special condition above. To streamline reporting, these two reports may be combined into a single document.

You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations. A copy of this letter should be kept with the unit and be made available to Department of Natural Resources' personnel upon verbal request.

If you have any questions regarding this determination, please do not hesitate to contact Nicole Weidenbenner, P.E. at the Departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kyra L. Moore
Director

KLM:nwd

c: PAMS File: 2016-02-036
Northeast Regional Office