STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

RICK SNYDER
GOVERNOR

DAN WYANT
DIRECTOR

Variance
Suspension of Enforcement of Rule 706
For New Pressurized Loading Facilities Loading Certain Organic Compounds

1. Suspension of Enforcement of Rule 706 and Granting of Variance to New Loading Facilities that Load Butane, Isobutane, Propane, Propylene, Butylene, C3-C4 Mixtures, and Mixtures of These Organic Compounds that Comply with the Specified Requirements

In accordance with the provisions of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), a variance is granted for a period of one year from the effective date of this document, suspending the requirements of Rule 706, promulgated pursuant to Act 451 (R 336.1706 *Loading delivery vessels with organic compounds having a true vapor pressure of more than 1.5 psia at new loading facilities handling 5,000,000 or more gallons of such compounds per year*) for each new loading facility that loads butane, isobutane, propane, propylene, butylene, C3-C4 mixtures, and mixtures of these organic compounds into delivery vessels and that complies with the following:

1. Utilizes a pressurized loading system that does not allow organic vapor to be discharged from the delivery vessel during loading.
2. Utilizes a device to ensure the loading line closes upon disconnection to prevent release of organic vapor.
3. All pressure-vacuum relief valves are vapor-tight and set to prevent the emission of organic vapor during the loading of the delivery vessel, except under emergency conditions.
4. All hatch openings are kept closed and vapor-tight during the loading of the delivery vessel.
5. Has written procedures for the operation of the loading device posted in an accessible, conspicuous location near the loading device.

This variance is limited to loading the listed organic compounds and mixtures of those compounds into delivery vessels only. The requirements of Rule 706 are not suspended for loading of any other organic compounds having a true vapor pressure of more than 1.5 psia into delivery vessels at new loading facilities handling 5,000,000 or more gallons of organic compounds per year.

2. Statutory and Regulatory Background

Part 55 of Act 451, along with rules promulgated pursuant to Act 451, regulates emissions of air pollutants to the ambient air.

Section 5535 (MCL 324.5535 *Suspension of enforcement; reasons; variance*) of Act 451, allows the Department of Environmental Quality (DEQ), to suspend enforcement of any rule that would be an unreasonable hardship upon the person, provided it is granted by variance and it does not violate the federal Clean Air Act (CAA), 42 USC 7401 *et. seq.*

Section 5536 (MCL 324.5536 *Variance; considerations effecting*), specifies factors the DEQ shall consider in granting any variance, and conditions and requirements the DEQ may establish.

Section 5538 (MCL 324.5538 *Variance; period granted; report; conditions),* specifies that any variance granted pursuant to Section 5535 shall be for a period of time specified by the DEQ at the time of granting, but not to exceed one year. However, any variance may be continued from year to year.

Rule 104(b) (R 336.2104(b), defines "Delivery vessel" as any tank truck, tank-equipped trailer, railroad tank car, or any similar vessel equipped with a storage tank used for the transport of a volatile organic compound from sources of supply to any stationary vessel.

Rule 115(e) (R 336.2115(e), defines "Organic compound" as any compound of carbon or mixture of such compounds, excluding all of the following: (i) Carbon monoxide, (ii) Carbon dioxide, (iii) Carbonic acid, (iv) Metallic carbides or carbonates, (v) Boron carbide, (vi) Silicon carbide, (vii) Ammonium carbonate, (viii) Ammonium bicarbonate, (ix) Methane, and (x) Ethane.

Rule 706 (*Loading delivery vessels with organic compounds having a true vapor pressure of more than 1.5 psia at new loading facilities handling 5,000,000 or more gallons of such compounds per year*), requires delivery vessels to be filled through a submerged fill pipe and controlled by a vapor recovery system that captures all displaced organic vapor and air and recovers the organic vapor such that emissions to the atmosphere do not exceed 0.7 pounds of organic vapor per 1,000 gallons of organic compounds loaded. Rule 706 also requires a vapor-tight collection line to be connected before any organic compound can be loaded and the vapor-tight collection line to close upon disconnection so as to prevent release of organic vapor.

3. Justification for the DEQ's Position

Part 7 of the Michigan Air Pollution Control Rules limits emissions of volatile organic compounds (VOCs) from new sources to control precursors of ground-level ozone.

Rule 706 is designed to limit VOC emissions displaced by loading delivery vessels with organic compounds by requiring that loading be done through a submerged fill pipe and that organic vapor and air displaced from the delivery vessel during loading be captured and controlled by a vapor recovery system such that emissions do not exceed 0.7 pounds of organic vapor per 1,000 gallons of organic compounds loaded.

Butane, isobutane, propane, propylene, butylene, C3-C4 mixtures, and mixtures of these organic compounds are stored and distributed in a pressurized manner.

Pressurized systems do not displace vapors into the air and therefore, do not use submerged fill pipes or vapor recovery systems.

Since pressurized loading systems do not displace vapors into the air, emissions from pressurized loading of delivery vessels will comply with the 0.7 pounds of organic vapor per 1,000 gallons of organic compounds loaded limit in Rule 706 without the use submerged fill pipes and vapor recovery systems.

The DEQ intends to pursue a rule change to allow pressurized loading of the listed organic compounds and mixtures of those compounds into delivery vessels without meeting the requirements of Rule 706.

Therefore, requiring loading of butane, isobutane, propane, propylene, butylene, C3-C4 mixtures, and mixtures of these organic compounds to comply with Rule 706 would create an unreasonable hardship.

Final Approval

For each new loading facility that loads butane, isobutane, propane, propylene, butylene, C3-C4 mixtures, and mixtures of these organic compounds into delivery vessels and that complies with the specified requirements, the DEQ hereby suspends enforcement of Rule 706 and grants a variance from the requirements of Rule 706. The duration of this variance is one year from the effective date set forth below. The Chief of the Air Quality Division has been delegated authority to suspend enforcement of rules and grant Part 55 variances by the Director of the DEQ.

This variance will not cause a violation of the CAA. This variance does not alter the obligation of affected facilities to comply with Part 55 and all other air rules, or the CAA and its regulations.

Lynn Fiedler, Chief
Air Quality Division
Michigan Department of Environmental Quality

Effective Date: November 10, 2015