



AIR QUALITY CONTROL ADVISORY COUNCIL

AGENDA

January 31, 2014
8:15 a.m.

Montgomery Park
Aqua Conference Room, 1st Floor
1800 Washington Boulevard
Baltimore, Maryland 21230

8:15 a.m. Welcome and Introductions John Quinn, Advisory Council Chair
Tad Aburn, Air Director

8:20 a.m. Approval of Meeting Minutes John Quinn

Action Items for Discussion/Approval:

8:30 a.m. Gasoline and VOC Storage and Handling Husain Waheed
COMAR 26.11.13

Briefings:

9:00 a.m. Response to AQCAC Questions on Standards Husain Waheed
for Biomass Fuel Burning Equipment Carolyn Jones

9:30 a.m. RACT for coal-fired power plants Tad Aburn

10:00 a.m. Stage II Vapor Recovery Tad Aburn

10:30 a.m. Confirm Next Meeting Dates Members
March 31, 2014
May 19, 2014
September 8, 2014
December 8, 2014

10:35 a.m. Adjourn



Facts About...

Amendments to COMAR 26.11.13.04 and .05 Control of Gasoline and Volatile Organic Compound Storage and Handling

11/05/13

Purpose of New Regulation/Amendment

The primary purpose of this amendment is to provide an alternative equivalent vapor recovery method for the transfer of high vapor pressure materials and to amend incorrect references from regulations .04 and .05.

Submission to EPA as Revision to Maryland's SIP (or 111(d) Plan, or Title V Program)

This action will be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland's State Implementation Plan.

Background

COMAR 26.11.13.04 establishes requirements for the use of automatic disconnections for the transfer of gasoline and VOCs with a total vapor pressure greater than 1.5 psia. Automatic disconnections are typically referred to in the industry as dry disconnects. Affected sources in Maryland do use dry disconnects on transfer equipment used for the handling of gasoline and fuel grade ethanol products (which have vapor pressures of greater than 1.5 psia). These products are typically transported in tank trucks meeting the U.S. Department of Transportation (US DOT) specifications as a MC306 or MC406 type cargo tank. The fuel industry has adopted the use of dry disconnect fittings for loading and unloading hose applications. Affected sources are limited to using dry disconnects on these products to accommodate the tank truck connection fittings on the MC306/406 cargo tanks.

The handling of other flammable liquids in tank trucks is not so clearly defined for the loading connections. These products are handled in US DOT MC407 cargo tanks. The motor carrier and chemical industries do not have an industry standard for the hose connections and trailer fittings beyond regulated safety venting devices. Sources that transfer fuels and liquids do not operate the motor carrier fleets or direct or coordinate the tank truck set up or maintenance. As such affected sources are required to have a high degree of flexibility as to the product and vapor return connections necessary to safely transfer the ordered product. The daily variation for tank truck connection type and size make the development of a standard transfer hose connection challenging. Many motor carriers use a variation of a cam lock "quick connector" type fitting to allow them to meet the end receiver transfer connections. Affected sources in Maryland maintain an inventory of the most commonly used connections to meet daily operating conditions.

Affected sources in Maryland typically only transfer one product with a vapor pressure greater than 1.5 psia at a Baltimore facility. This product is hexane, for which typically approximately 1.5 million gallons are transferred annually. This product is transferred using vapor balance, which has an estimated combined capture and control efficiency of 98.7 percent using EPA AP-42 factors. The total volatile organic compounds (VOC) emissions associated with this transfer are estimated as approximately 114 pounds.

This transfer quantity equates to approximately 53 tank cars of material, and approximately 215 truckloads of material. The tank trucks that are used to transport this material are not equipped with fittings that will accommodate dry disconnects. Because these tank trucks are not owned or operated by transfer facilities, it is outside of affected sources control to equip the tank trucks with such fittings.

Sources Affected and Location

This amendment affects the TRANSFLO Terminal Services, Inc. facility located in Baltimore City.

Requirements

These amendments provide an alternative equivalent vapor recovery method for the transfer of high vapor pressure materials that must be approved by the Department and the EPA.

Expected Emissions Reductions

Air quality emission benefits will be achieved by providing an alternative to the use of dry disconnects for the transfer of high vapor pressure materials. The affected facility has developed a custom transloading operation for high vapor pressure materials such as hexane that involves an elevated platform, vapor balance and a “fail-closed” configuration which turns off the pump and ceases flow should there be a leaking connection, valve, or hose. Liquid pump(s) are used to empty the hoses upon completion of the transfer operation which minimizes releases to the environment (i.e., spills and evaporation).

Economic Impact on Affected Sources, the Department, other State Agencies, Local Government, other Industries or Trade Groups, the Public

The proposed amendment will not incur an economic impact on affected sources, the Department, trade association or the public.

Economic Impact on Small Businesses

The affected sources do not fit the definition of “small business.”

Is there an Equivalent Federal Standard to this Proposed Regulatory Action?

There is no corresponding federal standard to this proposed action.

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 13 Control of Gasoline and Volatile Organic Compound Storage and Handling

Authority: Environment Article, §§1-101, 1-404, 2-101—2-103, 2-301—2-303, 10-102, and 10-103,

Annotated Code of Maryland

.01 — .03 (text unchanged)

.04 Loading Operations.

A. Bulk Gasoline Terminals.

(1) — (2) (text unchanged)

(3) Test Procedures.

(a) Testing for leak-tight conditions, as required in §A(1)(b)(ii) of this regulation, shall be conducted as prescribed in Method 1008 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources" [(January 1991)], *as amended through Supplement 3 (October 1, 1997)*, which is incorporated by reference in COMAR 26.11.01.04C.

(b) The test procedures to determine mass emission rate compliance as required in §A(1)(a) of this regulation, shall be as prescribed in Method 1009 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources" [(January 1991)], *as amended through Supplement 3 (October 1, 1997)*, which is incorporated by reference in COMAR 26.11.01.04C.

B. — D. (text unchanged)

E. Alternative Compliance Procedures. In lieu of satisfying the requirements of §D(1), a person may instead utilize:

(a) An overhead loading rack installation which transfers VOC other than gasoline having a TVP of 1.5 psia (10.3 kilonewtons/square meter) from railroad tank car to tank trucks, or vice versa, using drip pans and other spill control equipment to limit the release of any product during post loading disconnections and any one of the following control practices or combination thereof:

(i) Walking the hose clear of fluids;

(ii) Running a pump to clear the line of fluids; and

(iii) Application of inert gas to clear the line of fluids; or

(b) An alternative equivalent vapor containment method approved by the Department and the EPA as a revision to the Maryland State Implementation Plan.

.05 Gasoline Leaks from Tank Trucks.

A. (text unchanged)

B. Method of Compliance. A person who owns or operates a gasoline tank truck subject to this regulation shall:

(1) (text unchanged)

(2) Use the certification test procedures as prescribed in Method 1007 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources" [(January 1991)], *as amended through Supplement 3 (October 1, 1997)*, which is incorporated by reference in COMAR 26.11.01.04C; and

(3) (text unchanged)

C. Determination of Compliance.

(1) (text unchanged)

(2) The Department may at any time monitor gasoline tank trucks for leak-tight conditions using the procedures described in Method 1008 of the Department's Technical Memorandum 91-01, "Test Methods and Equipment Specifications for Stationary Sources", *January 1991, as amended through Supplement 3 (October 1, 1997)*, which is incorporated by reference in COMAR 26.11.01.04C.

D. (text unchanged)

.06 — .08 (text unchanged)