Texas Natural Resource Conservation Commission

INTEROFFICE MEMORANDUM

To: Commissioners Date: July 3, 1997

Thru: Eugenia Brumm, Ph.D.,
Chief Clerk

From: Beverly Hartsock, Deputy Director
Office of Policy and Regulatory Development

Subject: **Docket No. 97-0624-RUL**. Consideration of a petition for rulemaking, filed by The Coastal Corporation (Coastal), to adopt amendments to 30 TAC Chapter 115, Section 115.211(a)(1), concerning Emission Specifications. Coastal proposes to relax the emission standard for vapor control devices at gasoline terminals located in the ozone nonattainment counties. Staff recommends denial of this petition. (Beecher Cameron) (Rule Log No. 97160-115-AI)

What the Proposed Rule Would Do:

Coastal's petition asks for a relaxation in the emission standard for vapor recovery system vents at gasoline loading terminals.

Applicable Law:

Section 115.211(a)(1) of the undesignated head, Loading and Unloading of Volatile Organic Compounds (VOC), requires VOC emission control for gasoline terminals in the 16 counties comprising the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston ozone nonattainment areas. Vapor control rules for VOC loading were initially adopted in 1972 to meet 1970 Federal Clean Air Act (FCAA) requirements for control of ozone. In November 1993, the agency lowered the emission standard for vapor control system vents at gasoline terminals to its current level. The compliance date was November 15, 1996. The reduced emission limit allowed the agency to establish credits toward the 15% Rate-of-Progress reduction requirements, included in Section 182(b)(1)(A) of the 1990 Amendments to the FCAA. Section 115.211(a)(1) says:

> Volatile organic compound (VOC) emissions from gasoline terminals shall be reduced to a level not to exceed 0.09 pound of VOC from the vapor recovery system vent per 1000 gallons (10.8 mg/liter) of gasoline loaded into transport vessels.

Recommendation:

The staff recommends denial for the following reasons:

- The staff believes that Coastal has not shown that the §115.211(a)(1) emission limit is unreasonable. Coastal uses hypothetical calculations to indicate a compliance problem with a flare used to comply with the §115.211(a)(1) limit. However, rule compliance is not determined by calculation. The specified test method is the federal New Source Performance Standard (NSPS) test for gasoline terminal vapor control systems, which requires measuring actual emissions over a period of six hours of terminal operation. The instantaneous, worst-case vapor loading suggested by Coastal's AP-42 calculations does not occur over six hours of actual operation. Additionally, studies have shown that flares can achieve more than the 98% control efficiency that Coastal assumed.

- The staff has shown that the limit is reasonable. The agency proposed the 10.8 mg/liter limit after review of emissions tests of control system vents at gasoline terminals and consideration of equipment vendor control guarantees. Staff reviewed a lengthy list of summarized test report data from the Houston and Dallas areas, which showed that the adopted standard could be met by all but a few facilities, which had correctable operating problems. In 1994, the Environmental Protection Agency (EPA) adopted the gasoline distribution industry maximum achievable control technology (MACT) rule, setting a VOC limit of 10 mg/liter of gasoline loaded from vapor collection systems. EPA reviewed an extensive set of test data, which showed that 70% of the control systems regulated by the 35 mg/liter New Source Performance Standard also met a 10 mg/liter standard.

The staff also recommends initiating rulemaking to address an issue related to the petition. After discussing the matter with Coastal and representatives of the Texas Mid-Continent Oil & Gas Association's Distribution and Pipe Line Environmental Subcommittee, the staff believes that Coastal has identified a legitimate issue with how emission compliance is established for elevated flares. It is impractical to determine the emission rate for elevated flares, since the emissions are not confined in a stack where they can be easily measured. The rule does not address how compliance should be determined for elevated flares. Section 115.215 references the NSPS gasoline terminal test procedures at 40 CFR §60.503. These NSPS procedures do not address compliance for flares. However, the test procedures for the most recent EPA rules for gasoline terminals, the MACT test procedures, at 40 CFR §63.425 say:

> Each owner or operator…shall conduct a performance test on the vapor processing system according to the test methods and procedures in §60.503…If a flare is used to control emissions, and emissions from this device cannot be measured using these methods and procedures, the provisions of §63.11 shall apply.

The procedures of §63.11(b) are identical to the NSPS flare provisions at §60.18, which set design and operational requirements for flares. There are no requirements to calculate an emission rate based on an assumed control efficiency of 98%.

The staff recommends denial of the petition to relax the standard for the stated reasons, but also recommends initiating rulemaking to address how compliance is established for elevated flares, along the lines of §63.425.

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