

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners **Date:** January 9, 2009
Thru: LaDonna Castañuela
Chief Clerk
From: David C. Schanbacher, P.E.
Chief Engineer
Subject: Consideration of a Petition for Proposed Rulemaking
Docket No.: 2008-1914-RUL
Rule Project No. 2009-012-PET-NR

Who Submitted the Petition:

A petition was submitted by Brown McCarroll, L.L.P., on behalf of Elk Corporation of Texas. The petition was received on December 11, 2008.

What the Petitioner Requests:

The petitioner, Elk Corporation of Texas, is requesting an amendment to the exemption in 30 Texas Administrative Code (TAC) §117.403(a)(12). The current §117.403(a)(12) exempts from Chapter 117, Subchapter B, Division 4 "curing ovens used in mineral wool-type fiberglass manufacturing in which nitrogen-bound chemical additives are used." This exemption was granted in response to comments during 2007 rulemaking for Chapter 117, Subchapter B, Division 4. The commission included the exemption in the adopted §117.403(a)(12) because of technical feasibility issues with controlling nitrogen oxides (NO_x) emissions from curing ovens of this specific operation.

Elk Corporation of Texas operates an asphalt shingle manufacturing plant in Ennis, Texas. In the petitioner's manufacturing process a urea-formaldehyde resin binder is used with other nitrogen-containing compounds on a fiberglass substrate that is then passed through a drying and curing oven. This operation results in nitrogen-containing off-gas that is vented through incinerators and reacts with oxygen to form NO_x. The petitioner asserts that the manufacturing process itself with the associated emissions make compliance with the applicable NO_x emission specification in §117.410(b) of 0.036 pounds per million British thermal unit (lb/MMBtu) infeasible. The petitioner did not comment on this issue during the Chapter 117 rulemaking in 2007. The petitioner's proposed rule amendment for §117.403(a)(12) is as follows.

"(a) Units exempted from the provisions of this division (relating to Dallas-Fort Worth Eight-Hour Ozone Nonattainment Area Major Sources), except..., include the following:

(12) low temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing in which nitrogen-containing ~~bound chemical~~ resins, or other additives are used;"

The proposed amendment would extend the exemption from the rule to include low-temperature drying ovens and curing ovens used in wet-laid, non-woven fiber mat manufacturing as well as low temperature drying ovens used in mineral wool-type fiberglass manufacturing at major sources of NO_x in the Dallas-Fort Worth (DFW) eight-hour ozone nonattainment area. The proposed amendment would also revise the rule language "nitrogen-bound chemical additives" to "nitrogen-containing resins, or other additives." This

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proposed change is to clarify that nitrogen-containing resins would qualify for this exemption because resins might not always be considered an additive.

Recommended Action and Justification:

Air Quality Division staff support the petition and recommend that the petition be approved. While the type of manufacturing is different from that specified in the current rule exemption, the technical feasibility issue described by the petitioner is similar to the issue that is the basis of the current exemption in §117.403(a)(12). The 0.036 lb/MMBtu NO_x emission specification in §117.410(b) is not technically feasible for the drying and curing ovens described in the petition. The emission specification in §117.410(b)(11) is based on the application of low-NO_x burner technology. Because NO_x is formed during post-combustion chemical reactions in the processes described by the petitioner that use nitrogen-containing resins or other nitrogen-containing additives, low-NO_x burners will not enable the petitioner to achieve the emission specification in the rule.

Applicable Law:

Texas Government Code, §2001.021 establishes the procedures by which an interested person may petition a state agency for the adoption of a rule and 30 TAC §20.15 provides such procedures specific to the commission.

Other laws applicable to the rules the petition affects include Texas Water Code (TWC), §5.102, concerning General Powers, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; and Texas Health and Safety Code (THSC), §382.017, concerning Rules, which authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act; THSC, §382.002, concerning Policy and Purpose, which establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; and §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air.

Also, Texas Clean Air Act; §382.016, concerning Monitoring Requirements; Examination of Records, authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; and §382.021, concerning Sampling Methods and Procedures, authorizes the commission to prescribe the sampling methods and procedures.

Affected Public:

The proposed rule amendment would affect owners and operators of low temperature drying and curing ovens used in mineral wool-type fiberglass manufacturing and wet-laid, non-woven fiber mat manufacturing located at major sources in the DFW eight-hour ozone nonattainment area. In addition to the petitioner, one other major source in the DFW eight-hour ozone nonattainment area might also benefit from this revised exemption if the manufacturer uses nitrogen-containing resins or other nitrogen-containing additives. However, staff does not have specific information to determine whether the drying ovens located this site

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would also qualify for this revised exemption. The source categories affected by the petitioners request are required to comply with the Chapter 117 rule requirements by March 1, 2010.

Affected Agency Programs:

The Air Quality Division would be required to initiate the required rulemaking. If adopted, the change in the Chapter 117 rules would result in a loss of approximately 0.1 tons per day in the expected NO_x reductions for the DFW eight-hour ozone nonattainment area. The Air Quality Division would also be required to submit to EPA a demonstration of noninterference under the Federal Clean Air Act Section 110(l).

Agency Contacts:

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Attachment: Petition

cc: 5 copies to the Chief Clerk for distribution
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