

December 11, 2008

**VIA HAND DELIVERY**

Mark Vickery, Executive Director  
Building F, 4th Floor  
Texas Commission on Environmental Quality  
12100 Park 35 Circle  
Austin, TX 78753

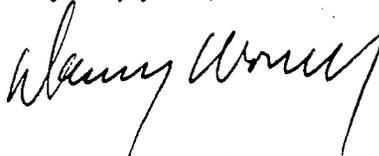
Re: Submittal of Petition for Rulemaking for 30 TAC § 117.403(a)(12)  
Elk Corporation of Texas  
CN600126858  
Ennis Manufacturing Facility  
RN100213479  
TCEQ Air Account No. ED0018M

Dear Mr. Vickery:

Elk Corporation of Texas ("Elk Corporation") hereby submits this Petition for Rulemaking for 30 TAC § 117.403(a)(12), in accordance with the requirements of 30 TAC § 20.15. Elk Corporation operates a manufacturing plant that is located at 202 Cedar Road, Ennis, Texas 75119.

If you have any questions regarding the Petition for Rulemaking, please do not hesitate to contact me.

Very truly yours,



Danny G. Worrell  
Attorney for Elk Corporation of Texas

Enclosure

cc: Ms. Ashley Forbes, MC 206  
TCEQ  
P.O. Box 13087  
Austin, Texas 78711-3087

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Ms. Jackie Frey  
Elk Corporation of Texas  
202 Cedar Road  
Ennis, Texas 75119

Mr. Fred Bright  
Director of Environmental Engineering  
GAF Materials Corporation  
1361 Alps Rd.  
Wayne, New Jersey 07470

Mr. Frank Boenning  
ISP Management Corp.  
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Wayne, New Jersey 07470

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PETITION FOR RULEMAKING §  
TO AMEND 30 TEX. ADMIN. §  
CODE § 117.403(a)(12) BY §  
ELK CORPORATION OF TEXAS §

BEFORE THE  
TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY

PETITION FOR RULEMAKING TO AMEND  
30 TEX. ADMIN. CODE § 117.403(a)(12)  
BY ELK CORPORATION OF TEXAS

TO THE HONORABLE COMMISSIONERS OF THE  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

**I. INTRODUCTION**

Pursuant to Texas Government Code Section 2001.021 and Texas Commission on Environmental Quality ("TCEQ" or the "Commission") Rule 30 Tex. Admin. Code § 20.15, Elk Corporation of Texas ("Elk" or "Petitioner") respectfully requests that the Commission institute a rulemaking proceeding pursuant to its authority under the Texas Administrative Procedure Act, Tex. Gov't Code §§ 2001.001—2001.902, to amend 30 Tex. Admin. Code ("TAC") § 117.403(a)(12), as described below.

**II. BACKGROUND**

Petitioner, Elk Corporation of Texas, is a duly formed Texas corporation in good standing. Petitioner operates a manufacturing plant in Ennis, Texas (TCEQ RN100213479, TCEQ Air Account No. ED0018M) that primarily manufactures asphalt shingles. Its address is: 202 Cedar Road, Ennis, Texas 75119. The facility is within the Dallas-Ft. Worth ("DFW") air quality 8-hour ozone nonattainment area and is subject to Commission rules setting NOx emission limits for combustion sources.

In the June 8, 2007, Texas Register, the Commission published notice of adopted changes to rule requirements for *combustion* control at major industrial, commercial, and institutional sources in the Dallas-Ft. Worth 8-hour ozone nonattainment area. 32 Tex. Reg. 3282 (June 8,

2007). The rule changes were effective June 14, 2007, and establish a nitrogen oxide ("NOx") emission limit of 0.036 pound NOx per MMBTU from certain combustion sources ("NOx Limits") in accordance with 30 TAC § 117.410. The Commission also provided certain exemptions from the NOx Limits specified at 30 TAC § 117.403.

This Petition seeks an amendment to the exemption from NOx Limits specified at 30 TAC § 117.403(a)(12), which provides an exemption for "curing ovens used in mineral wool-type fiberglass manufacturing in which nitrogen-bound chemical additives are used; . . ." The Commission provided this exemption pursuant to comments by Owens Corning. Owens Corning had commented that its mineral wool-type fiberglass manufacturing employs a curing process that uses a phenolic-based binder, the use of which results in NOx emissions when ammonia and other nitrogen-containing compounds in the binder evaporate and react with oxygen to form NOx. *See* 32 Tex. Reg. 3283 (June 8, 2007). Consequently, Owens Corning noted, a pound per MMBTU NOx standard set to ensure reasonably available control technology ("RACT") for combustion sources would essentially impose restrictions on the use of nitrogen-containing phenolic binders at its plant. *Id.* The Commission agreed that use of nitrogen-containing chemical additives makes the NOx emission specifications for curing and forming ovens technically infeasible, because non-combustion thermal NOx is unaffected by combustion control technologies, such as low-NOx burners and flue gas recirculation ("FGR"). *Id.* Selective catalytic reduction ("SCR") and selective non-catalytic reduction ("SNCR") are also ineffective combustion control technologies for these processes because of their low operating temperature. Consequently, the Commission provided the exemption in § 117.403(a)(12).

The same is essentially true for Elk's process at its Ennis Plant,<sup>1</sup> where it primarily manufactures fiberglass mat for use in asphalt shingle manufacturing.<sup>2</sup> Elk uses a urea-formaldehyde resin binder on the fiberglass mat, along with other nitrogen-containing compounds, in the forming process that is then passed through low temperature drying<sup>3</sup> and curing ovens. The urea-formaldehyde binder and the other nitrogen-containing compounds used in the forming process are similar to the Owens Corning binder in that they contain nitrogen. Elk's use of the urea-formaldehyde resin binder and the other nitrogen-containing compounds also result in nitrogen-containing off-gas, which reacts with oxygen to form NOx. These emissions make compliance with the NOx curing oven emission standard infeasible for exactly the same reasons the Commission accepted for the exemption established in § 117.403(a)(12). Elk has researched this technology and has found no advances that now make it feasible.

### III. TEXT OF PROPOSED RULE

Petitioner proposes that 30 TAC § 117.403(a)(12), be amended as follows:

#### § 117.403 **Exemptions**

(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; . . .

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<sup>1</sup> Elk did not comment in the rulemaking that promulgated the exemption for "curing ovens used in mineral wool-type fiberglass manufacturing in which nitrogen-bound chemical additives are used; . . .", because the emissions from Elk's drying and curing ovens vent directly to an incinerator, which is not covered by the rule. Accordingly, Elk did not believe that the proposed rule applied to its drying and curing ovens.

<sup>2</sup> In addition to manufacturing fiberglass mat for use in the manufacture of asphalt roofing shingles, Elk uses the wet-laid manufacturing process at this facility to produce other types of non-woven mat material, such as polyester, cellulose, and polypropylene mat, which is used in manufacturing processes to produce other types of products.

<sup>3</sup> The Elk Plant utilizes both low temperature drying and curing ovens in its wet-laid, non-woven fiber mat manufacturing process. These units are operated at temperatures below 650°F, significantly below the high temperatures associated with thermal NOx formation, which may range from 1,500 to 3,500° F. See North American Combustion Handbook Vol. II, 3rd Edition, North American Manufacturing Company, Cleveland, Ohio, 1997.

This amendment would authorize an exemption from the NOx combustion control requirements for the wet-laid, non-woven fiber mat manufacturing conducted at the Elk Plant.

#### **IV. STATEMENT OF STATUTORY AUTHORITY**

The Commission is authorized to promulgate this rule amendment pursuant to Texas Water Code § 5.103, which authorizes the TCEQ to adopt rules necessary to carry out its powers and duties; Texas Clean Air Act § 382.011, which establishes the TCEQ's jurisdiction over all aspects of air quality regulations; Texas Clean Air Act § 382.017, which provides the TCEQ with rulemaking authority; and Texas Clean Air Act § 382.0173, which authorizes the TCEQ to promulgate rules necessary to bring the State's air quality into compliance with federal Clean Air Act and EPA rules.

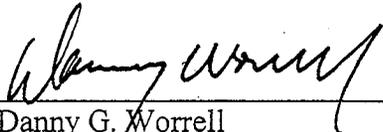
#### **V. INJURY FROM FAILURE TO ADOPT THIS RULE AMENDMENT**

Failure to adopt this proposed rule amendment would result in the Petitioner either violating the emissions standard if it continues to use a nitrogen-bound chemical additive for a binder or halt manufacture of wet-laid, non-woven fiber mat at the Elk Plant in Ennis, Texas. There are no other suitable types of chemical binders that are known at this time that would be an adequate replacement for nitrogen-containing chemical additives.

**VI. PRAYER**

For the foregoing reasons, Petitioner respectfully requests that the Commission initiate a rulemaking to promulgate an exemption from the NOx combustion control requirements for DFW to exempt wet-laid, non-woven fiber mat manufacturing in which nitrogen-bound chemical additives are used. Petitioner requests that TCEQ adopt the language proposed in Section III of this Petition for Rulemaking.

Respectfully submitted,

By:   
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