

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
Ello Furniture Manufacturing Company for a
Federally Enforceable State Operating Permit (FESOP) for
1350 Preston Street
Rockford, Illinois 61102

Site Identification No.: 201030AZD
Application No.: 05120065

Illinois EPA Contacts

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I. INTRODUCTION

Ello Furniture Manufacturing Company has applied for a Federally Enforceable State Operating Permit (FESOP) for its manufacturing plant at 1350 Preston Street in Rockford. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of permit that it would propose to issue for the plant. However, before issuing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Ello Furniture Manufacturing Company is a small household and office furniture manufacturer. It includes baghouse controlled woodworking operations that became permit-exempt when the 201.146 list was expanded in June 1997. Plant employees total around 80, with average plant production totaling 1680 hours per year. The estimated maximum plant production would total 3600 hours per year.

Ello Furniture has twelve identical spray booths for laminating and painting particle board, glass and anodized aluminum. All coatings and glues are applied in spray booths and air-dried. There are no cure ovens on site. There are no "open" coating processes at the plant; all emissions are vented to the atmosphere through spray booths. Coatings are applied with conventional air-driven spray guns. Each spray booth is equipped with a dry polyester-type filter to capture particulate matter before it enters the exhaust air. Spray booths 1 through 6 (S-1 to S-6) are exhausted along the south side of the building; spray booths 7 through 12 (S-7 to S-12) are exhausted at the roof of the building. These coating booths are used intermittently; therefore inventoried amounts of coating products were used to estimate air emissions. In 2004, 6,933 gallons of surface coatings were used.

The largest source of air pollutants from this source is generated from coating. The coatings and solvents contain organic solvents which are emitted to the atmosphere during the coating process as VOM. These materials also contain components that are considered hazardous air pollutants.

Two 12 mmBtu/hour natural gas-fired boilers serve space heat only. The boilers are identical, with the second boiler serving as standby. The average operation of the running boiler is 680 hours/year with 80% of the heat input occurring between September and February. Roughly 117,734 ft² of natural gas is consumed annually. The boilers are exhausted to the rear of the building.

The principal air contaminant emitted from fuel combustion is nitrogen oxides. Nitrogen oxides are formed thermally by a combination of oxygen and nitrogen in the air at a temperature at which fuel is burned. In addition, sulfur dioxides (SO₂), carbon monoxide (CO), particulate matter (PM) and volatile organic material (VOM) are

emissions formed by combustion processes. CO is formed by the incomplete combustion of fuel. SO₂ emissions are mostly generated during the combustion of fuel oil.

III. GENERAL DISCUSSION

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source is seeking a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need not obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for VOM, 10 tons for an individual HAP and 25 tons for combined HAPs.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. The Illinois Pollution Control Board has specific standards for units emitting volatile organic material. The specific standards for this company are 35 Ill. Adm. Code 215 Subpart F Regulations for Coating Operations. These regulations limit the amount of VOM that may be in the coatings used. The specific regulation is 35 Ill. Adm. Code 218.204(1) wood furniture coating. There is a National Emission Standard for Hazardous Air Pollutants (NESHAP) for wood furniture manufacturing operation (40 CFR 63, Subpart JJ). This source is an area source for the purposes of 40 CFR 63 Subpart JJ. The application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

V. CONTENTS OF THE PERMIT

This permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for VOM, 10 tons for an individual HAP and 25 tons for combined HAPs. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit conditions require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

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