

Illinois Environmental Protection Agency  
Bureau of Air, Permit Section  
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Project Summary for an Application from  
Knead Dough Baking Company Inc. for a Federally Enforceable  
State Operating Permit (FESOP) RENEWAL for  
Bolingbrook, Illinois 60440

Site Identification No.: 197415AAH  
Application No.: 94100116

Illinois EPA Contacts

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## **I. INTRODUCTION**

Knead Dough Baking Company Inc. currently operates under a federally enforceable state operating permit (FESOP). The company requested a FESOP renewal to continue to operate as a non-major source for the purposes of the Clean Air Act Permit Program (CAAPP). Production and emission limitations, as well as monitoring and recordkeeping conditions contained in the FESOP have prevented the facility from being a major source and will assure this status in the future. These conditions would be enforceable by both the State of Illinois and USEPA.

## **II. SOURCE DESCRIPTION**

Knead Dough Baking Company produces bread dough products. The dough is prepared by mixing flour, water, yeast and sugar. The dough is automatically shaped and then goes to proof boxes for leavening, i.e., the yeast causes the dough to rise. The dough is then baked in the gas fired ovens, packaged and shipped. Knead Dough operates four conveyORIZED ovens and one rack for research and development of product. All flour handling processes are controlled with various types of control equipment: baghouses, filters and cyclones.

The principal air contaminant emitted from the facility is volatile organic material (VOM) from ethanol, which is generated during the dough leavening and then emitted during baking. The rate of ethanol emission depends on the amount of leavening, which is a function of dough temperature, percentage of yeast and fermentation time. The secondary air contaminants emitted during the baking process is particulate matter (PM), which is released during flour handling operations, and products of natural gas combustion in boilers and ovens: nitrogen oxides (NOx) and carbon monoxide (CO).

## **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 has been operating this plant under 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, 100 tons for particulate matter less than 10 microns in diameter, 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 application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

**V. CONTENTS OF THE PERMIT**

The permits that the Illinois EPA is proposing to issue would continue to 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. These limitations are consistent with the historical operation of emission units at the plant.

The permit conditions would also continue to 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 revision of its permit. The Illinois EPA is therefore proposing to revise 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.