

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Knead Dough Baking Company, Inc.  
Campagna-Turano Baking Co., Inc.  
Attn: Renato G. Turano  
6501 West Roosevelt Road  
Berwyn, Illinois 60402

Application No.: 94100116

I.D. No.: 031162ABY

Applicant's Designation:

Date Received: April 29, 1996

Subject: Bread Bakery

Date Issued:

Expiration Date:

Location: 555 South Joliet Road, Lemont

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of two flour storage silos with pneumatic conveyor and two scales controlled with baghouse; one sifter with filter; two mixers; three baking lines with pan cleaning stations controlled with cyclones/baghouse; one research and development rack oven; two natural gas fired boilers; and two air make-up units pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of Volatile Organic Material (VOM) from the source to less than major source thresholds (i.e., 25 tons/year for VOM). As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.
- 2a. Operation of equipment and VOM emissions shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Production Rate</u>		<u>Yeast</u>	<u>Ferm.</u>	<u>VOM Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>Content</u>	<u>Time</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
			<u>(Wt.%)</u>	<u>(Hr)</u>		
Baking Line #1	400	4,000	4	2.33	0.8	7.8
Baking Line #2	400	4,000	4	1.5	0.75	7.5

Baking Line #3	400	4,000	4	2.33	0.8	7.8
Research Oven	16	190	4	1.5	0.05	0.4

- b. These limits define the potential emissions of VOM from baking equipment and are based on the actual emissions determined from the maximum production capacity. VOM emissions shall be calculated using the following formula (ACT EPA 453/R-92-017):

EF -  $0.95Y_i + 0.19t_i - 0.51S - 0.86t_s + 1.90$ , where  
 EF - Emission Factor (pounds of VOM emissions per ton of baked product);  
 $Y_i$  - Initial Yeast Percentage;  
 $t_i$  - Total Fermentation Time (hours);  
 S - Second Yeast Percentage (if applicable);  
 $t_s$  - Fermentation Time for Second Yeast Percentage (if applicable).

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.

3a. Natural gas shall be the only fuel fired in combustion equipment.

b. Natural gas consumption and VOM emissions shall not exceed the following limits:

Gas Usage		Emission	VOM Emissions	
<u>(10<sup>6</sup> scf/Mo)</u>	<u>(10<sup>6</sup> scf/Yr)</u>	<u>Factor</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
		<u>(Lb/10<sup>6</sup> scf)</u>		
25	245	5.3	132.5	0.65

c. These limits define the potential emissions of VOM from natural gas combustion and are based on the actual emissions determined from maximum production capacity and standard emission factors.

d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.

4a. The Permittee shall keep records of the following items for each baking unit:

- i. Amount of product baked (Ton/Mo, Ton/Yr);
- ii. Percentage of yeast (initial and second);
- iii. Fermentation time (initial and second, hours);
- iv. VOM emissions calculations (Ton/Mo, Ton/Yr);
- v. Natural gas consumption (10<sup>6</sup> scf/Mo, 10<sup>6</sup> scf/Yr).

b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Agency and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable

of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Agency request for records during the course of a source inspection.

5. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Agency's Compliance Unit in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or violation and efforts to reduce emissions and future occurrences.

The following special conditions are not federally enforceable:

6. Emissions and operation of the fuel combustion equipment shall not exceed the following limits:

<u>Gas Usage</u>		<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
<u>(10<sup>6</sup> scf/Mo)</u>	<u>(10<sup>6</sup> scf/Yr)</u>		<u>Factor</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
25	245	Nitrogen Oxides (NO <sub>x</sub> )	100	1.3	12.3
		Carbon Monoxide (CO)	21	0.3	2.6
		Particulate Matter (PM)	13.7	0.2	1.7

7. This permit is issued based on negligible emissions of particulate matter from two flour storage silos, pneumatic conveyor and two scales (flour system baghouse), sifter (sifter filter), two mixers, three baking lines and pan cleaning stations (baking lines control systems). For this purpose emissions from each system or unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
8. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: annual bread production (tons) from the prior calendar year.

If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

9. All reports, notifications, etc., required by this permit shall be sent to:

Illinois Environmental Protection Agency  
 Bureau of Air  
 Compliance Unit (#40)  
 P.O. Box 19276  
 Springfield, Illinois 62794-9276

and

Illinois Environmental Protection Agency  
 Division of Air Pollution Control - Regional Office

Eisenhower Tower  
1701 First Avenue  
Maywood, Illinois 60153

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10. The following standard conditions are not federally enforceable:  
Standard Conditions 3(a), 8, 9, 10, and 11.

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:VJB:jar

Attachment

cc: IEPA, FOS Region 1  
IEPA, Compliance Unit  
USEPA

Attachment A - Emission Summary

This attachment provides a summary of the maximum emission from the Bread Bakery operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. This is production of 12,190 tons of bread per year. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

1. VOM Emissions from the baking operations:

<u>Item of Equipment</u>	<u>Production Rate</u>		<u>Yeast Content (Wt.%)</u>	<u>Ferm. Time (Hr)</u>	<u>VOM Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>			<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Baking Line #1	400	4,000	4	2.33	0.8	7.8
Baking Line #2	400	4,000	4	1.5	0.75	7.5
Baking Line #3	400	4,000	4	2.33	0.8	7.8
Research Oven	16	190	4	1.5	0.05	<u>0.4</u>
					Total	23.5

This table defines the potential emission of VOM from the baking operations and is based on the maximum production rate and emission factor calculated using the following formula (ACT EPA 453/R-92-017):

EF -  $0.95Y_i + 0.19t_i - 0.51S - 0.86t_s + 1.90$ , where  
 EF - Emission Factor (pounds of VOM emissions per ton of baked product);  
 $Y_i$  - Initial Yeast Percentage;  
 $t_i$  - Total Fermentation Time (hours);  
 S - Second Yeast Percentage (if applicable);  
 $t_s$  - Fermentation Time for Second Yeast Percentage (if applicable).

2. Emissions from the fuel combustion equipment shall not exceed the following limits:

<u>Gas Usage</u> <u>(10<sup>6</sup> scf/Mo)(10<sup>6</sup> scf/Yr)</u>	<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
		<u>Factor</u> <u>(Lb/10<sup>6</sup> scf)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
25	Nitrogen Oxides (NO <sub>x</sub> )	100	1.3	12.3
	Carbon Monoxide (CO)	21	0.3	2.6
	Particulate Matter (PM)	13.7	0.2	1.7

This table defines the potential emissions from the fuel combustion units and is based on the maximum operating rate and standard emission factors for natural gas combustion.

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