

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

ACH Food Companies, Inc.
Attn: Dick Clark
710 North Mattis Avenue
Champaign, Illinois 61821

<u>Application No.:</u> 96030172	<u>I.D. No.:</u> 019802AAI
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 8, 1996
<u>Operation of:</u> Vegetable Oil Refining & Coffee Creamer Production	
<u>Date Issued:</u>	<u>Expiration Date</u> ² :
<u>Source Location:</u> 710 North Mattis Avenue, Champaign, Champaign County	
<u>Responsible Official:</u> Ray Scott	

This permit is hereby granted to the above-designated Permittee to operate Vegetable Oil Refining & Coffee Creamer Production Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Mangu Patel at 217/782-2113.

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

DES:MJP:psj

cc: Illinois EPA, FOS, Region 3

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 SOURCE IDENTIFICATION	4
1.1 Source	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	6
3.0 INSIGNIFICANT ACTIVITIES	8
3.1 Identification of Insignificant Activities	
3.2 Compliance with Applicable Requirements	
3.3 Addition of Insignificant Activities	
4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE	11
5.0 OVERALL SOURCE CONDITIONS	12
5.1 Source Description	
5.2 Applicable Regulations	
5.3 Non-Applicability of Regulations of Concern	
5.4 Source-Wide Operational and Production Limits and Work Practices	
5.5 Source-Wide Emission Limitations	
5.6 General Recordkeeping Requirements	
5.7 General Reporting Requirements	
5.8 General Operational Flexibility/Anticipated Operating Scenarios	
5.9 General Compliance Procedures	
5.10 Special Permit Shield	
6.0 NOT APPLICABLE TO THIS PERMIT	18
7.0 UNIT SPECIFIC CONDITIONS	19
7.1 Unit 01: Process emission sources	
7.2 Unit 02: Package Boilers	
7.3 Unit 03: Other fuel combustion emission units	
8.0 GENERAL PERMIT CONDITIONS	40
8.1 Permit Shield	
8.2 Applicability of Title IV Requirements	
8.3 Emissions Trading Programs	

PAGE

8.4	Operational Flexibility/Anticipated Operating Scenarios	
8.5	Testing Procedures	
8.6	Reporting Requirements	
8.7	Obligation to Comply with Title I Requirements	
9.0	STANDARD PERMIT CONDITIONS	46
9.1	Effect of Permit	
9.2	General Obligations of Permittee	
9.3	Obligation to Allow Illinois EPA Surveillance	
9.4	Obligation to Comply with Other Requirements	
9.5	Liability	
9.6	Recordkeeping	
9.7	Annual Emissions Report	
9.8	Requirements for Compliance Certification	
9.9	Certification	
9.10	Defense to Enforcement Actions	
9.11	Permanent Shutdown	
9.12	Reopening and Reissuing Permit for Cause	
9.13	Severability Clause	
9.14	Permit Expiration and Renewal	
10.0	ATTACHMENTS	
10.1	Attachment 1 - Emissions of Particulate Matter from New Process Emission Units	1-1
10.2	Attachment 2 - Emissions of Particulate Matter from Existing Process Emission Units	2-1
10.3	Attachment 3 - Example Certification by a Responsible Official	3-1
10.4	Attachment 4 - Guidance on Revising This Permit	4-1
10.5	Attachment 5 - Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)	5-1
10.6	Attachment 6 - Guidance on Renewing This Permit	6-1

1.0 SOURCE IDENTIFICATION

1.1 ACH Food Companies, Inc.

ACH Food Companies, Inc.
710 North Mattis Avenue
Champaign, Illinois 61821
217/356-7213

I.D. No.: 019802AAI
Standard Industrial Classification: 2079, Food and Kindred
Products

1.2 Owner/Parent Company

ABF North America
7171 Goodlet Farms Parkway
Memphis, Tennessee 38018

1.3 Operator

ACH Food Companies, Inc.
710 North Mattis Avenue
Champaign, Illinois 61821

Dick Clark
217/403-2238

1.4 General Source Description

ACH Food Companies, Inc. ("ACH"), Champaign Plant is located at, 710 North Mattis Avenue, Champaign, Illinois. The facility manufactures edible oil and coffee creamer.

ACH produces two food products at their Champaign facility: edible oil and coffee creamer. ACH receives either refined & bleached vegetable oil or refined, bleached & deodorized vegetable oil and further refines it into various edible oil products. Some of the product is packaged in containers and labeled for retail sale while the rest is shipped in bulk quantities to be used as an ingredient in other food products. The creamer lines receive both wet and dry ingredients for blending into a creamer product. The creamer is processed and packaged as required by the customer.

Support facilities at the ACH facility include a gas plant to generate hydrogen for use in the production facility. Additionally, the facility operates nine boilers. Five of the boilers are used to produce steam for use in various locations

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

throughout the plant while the remaining four boilers produce steam to be used in the deodorization process. ACH additionally, operates four contact cooling towers, a waste water treatment plant, one air make up heater and three storage silos storing clay, trisyl, and lime.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CPM	Condensible Particulate Matter
CPM-IOR	Inorganic Condensible Particulate Matter
CPM-ORG	Organic Condensible Particulate Matter
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatts
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
m ²	Square meter
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T	tons
T1	Title I - identifies Title I conditions that have been carried over from an existing permit

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VMT	Vehicle miles traveled
VOM	Volatile Organic Material

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Ink usage for container labeling
Creamer Filling Lines 5 and 6 Transfer Systems and corresponding Baghouses
Creamer Processing Collection Systems

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Creamer Vacuum System
Spent Clay Storage
Hydrogenation Unit Catalyst Mix Tank

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35

IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Vacuum Dryer (OP-01)	1990	
	4 Deodorizers (OP-02, 03, 04, 05)	1983	Scrubber/ Condenser/Trap Tank
	Creamer 108 Line (CL-01)	1972, modified 1988	Wet Scrubber
	Creamer 120 Line (CL-02)	1972, modified 1988	Wet Scrubber
	Creamer 132 Line (CL-03)	1981	Wet Scrubber
	4 Contact Cooling Towers (CT-01, 02, 03, 04)	-	---
	Waste Water Treatment	-	---
	Trisyl Storage Silo (SS-01)	1994	Baghouse
	Clay Storage Silo (SS-02)	1994	Baghouse
	Lime Storage Silo (SS-03)	1988	Baghouse
	Diatomaceous earth silo & conveying system		Baghouse
02	1 primary boiler (#5), Heat input 155 mmBtu/hr, natural gas or fuel oil	1967	---
	1 secondary boiler (#1), Heat input 50 mmBtu/hr, natural gas or fuel oil	1958, modified in 1978	---
	3 Boilers (#2, #3, #4) each 83 mmBtu/hr Natural Gas Fired with Residual Fuel Backup	Before 1989	---
03	Creamer Line Dryer 108 (7.5 mmBtu/hr), Dryer 120 (8.0 mmBtu/hr), Dryer 132 (7.0 mmBtu/hr)	1988	---
	4 Boilers, each 7.2 mmBtu/hr (OP-08, 09, 10, 11)	1992	---
	Hydrogen Reformer Burner, 26 mmBtu/hr (GP-01)	---	---
	Hastings Make-up air heater 3.5 mmBtu/hr (AH-01)	1972	---

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO₂, NO_x and HAP emissions.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

- a. This stationary source, as defined in 40 CFR Section 68.3, is subject to 40 CFR Part 68, the Accidental Release Prevention regulations [40 CFR 68.215(a)(1)].
- b. The owner or operator of a stationary source shall revise and update the RMP submitted, as specified in 40 CFR 68.190.

5.2.5 a. Should this stationary source become subject to a

regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow

alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of

this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	101.41
Sulfur Dioxide (SO ₂)	982.12
Particulate Matter (PM)	144.57
Nitrogen Oxides (NO _x)	457.13
HAP, not included in VOM or PM	-----
Total	1,685.23

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for HAP Emissions

- a. Total annual emissions of each individual HAP and of total HAPs on a calendar year basis for the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.
- b. Total monthly and running 12 month total HAP emissions for the whole source based on the applicable emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.3 Records for Operating Scenarios

N/A

5.6.4 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Process emission sources

7.1.1 Description

Vegetable Oil Refining Process

Refined & Bleached (RB) Vegetable oil or Refined Bleached & Deodorized (RBD) Vegetable oil is received by tank truck or railroad car and unloaded into storage tanks. The RB & RBD vegetable oil contains hexane in varying amounts. Some of the inbound RB oil has to be re-bleached. In this process, clay is added to the bleaching tanks to absorb impurities in the oil. The slurry is then transferred to the vacuum dryer where moisture is removed. The oil is then run through the filter presses where the clay is filtered back out of the oil stream. This oil is then routed to deodorization or to hardening or winterization (which both include deodorization).

The purpose of the hardening plant is to hydrogenate the oil. Vegetable oil is passed through a nickel catalyst converter along with water, hydrogen and steam to preserve the oil and allow for a longer shelf life. The oil then passes through filter presses where the nickel catalyst is removed/filtered from the oil. Oil is then routed to various downstream processes. Some of the hardened oil is sent to the ammonia-cooled votators. The votated material is shipped to bulk as liquid shortening or transferred to the packing lines to be packaged as liquid shortening in 400 lb drums or 2,000 lb gaylord boxes.

The winterization process is a cleaning process. Vegetable oil is received into the grainers, which are ammonia cooled. The oil is then passed through a vacuum filter where the waxes that were formed during cooling are separated from the oil. The waxes from canola and corn oil are properly disposed of. Soybean oil waxes are sterates, which are used in other oil blends.

The deodorization process begins with oil entering the deodorizers. Steam is introduced to heat the oil and drive off the free fatty acids. The oil then exits the deodorizer and passes through an ammonia chiller and on to product storage and packaging. The gas from the deodorizers passes through a scrubber and a contact condenser before discharge to the atmosphere. Water from the condenser is transferred to a trap tank before it is

sent to one of the contact cooling towers. The trap tank collects a material that is dried in one of two thin film dryers and sold as industrial grease.

Creamer Facilities Process

ACH operates three lines, which produce non-dairy coffee creamer. The lines are identified by the dryer associated with each line (108, 120 and 132 dryer). Creamer ingredients are blended and then fed into the creamer spray dryer. The three dryers (one for each line) are fueled by natural gas. Propane is used as a backup fuel supply. The creamer is discharged from the spray dryer to a vibrating fluid bed, then augured to a sifter and into either 1,000-2,000 lb totes, 39-66 lb bags or 1,000 lb super sacks. Emissions of particulate matter from the dryer are controlled by a scrubber. Emissions from the fluidizer are controlled by a smaller cyclone followed by the same scrubber. Creamer collected by the cyclones is recycled back into the spray dryer.

The creamer from the totes is repackaged into small containers for retail sale.

Additionally, a creamer vacuum system is present to vacuum any creamer that may be left over in the tote or for creamer that does not meet specifications and must be reblended. The creamer is drawn through a suction line into the vacuum receiver. The vacuum receiver has a filtering system to filter the creamer powder. The creamer powder is dropped into a container for reprocessing. The filtering system serves to collect creamer for reprocessing and is, therefore, considered process equipment rather than control equipment. The uncontrolled emissions from this operation are less than 0.44 TPY and qualify the activity as insignificant.

Cooling Towers:

ACH operates a total of nine (9) cooling towers at the Champaign facility. Four of these towers are considered dirty towers or towers which receive water that has been in direct contact with process streams. The five non-contact cooling towers do not have any significant air emissions.

The dirty towers receive process water from deodorization and acidulation. Cooled water is returned to the processes. Approximately one half of the hexane which is

received by the plant in the raw incoming oil is emitted from the process cooling towers.

Waste Water Treatment:

ACH operates a waste water treatment plant to treat process water prior to discharge into the city water treatment system. The waste water contains vegetable oil which is treated prior to discharge. Lime is used in the water treatment system. The only significant emissions from the system are a result of the transfer of lime to the lime storage silo. These emissions are controlled by a baghouse at the top of the silo.

The waste water treatment process is otherwise considered to be insignificant.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Vacuum Dryer (OP-01)	1990	
	4 Deodorizers (OP-02, 03, 04, 05)	1983	Scrubber/Condenser/Trap Tank
	Creamer 108 Line (CL-01)	1972, modified 1988	Wet Scrubber
	Creamer 120 Line (CL-02)	1972, modified 1988	Wet Scrubber
	Creamer 132 Line (CL-03)	1981	Wet Scrubber
	4 Contact Cooling Towers (CT-01, 02, 03, 04)	---	---
	Waste Water Treatment	---	---
	Trisyl Storage Silo (SS-01)	1994	Baghouse
	Clay Storage Silo (SS-02)	1994	Baghouse
	Lime Storage Silo (SS-03)	1988	Baghouse
	Diatomaceous earth silo & conveying system		Baghouse

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected process emission source" for the purpose of these unit-specific conditions, are the units described in 7.1.1 and 7.1.2.

- b. Each affected process emission source is subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].

- c. Each affected process emission source is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (see also Attachment 2) [35 IAC 212.322(a)].

- d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from an affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].

- e. The affected process emission sources are subject to the emission limits identified in Condition 5.2.2.

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected emission units not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected emission units does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.1.5 Operational and Production Limits and Work Practices

The Permittee shall install, operate, maintain, and replace the pollution control equipment in a manner that assures compliance with the conditions of this section.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected process emission sources are subject to the following:

- a. Permit #72101069:
 - i. Emissions of volatile organic materials from the above-referenced deodorizers, mechanical vacuum system and process water cooler shall not exceed the following limits:

Emission Sources	VOM Emissions	
	Lb/Hour	Tons/Year
Deodorizers (combined), Mechanical Vacuum System, and Process Water Cooler	21.5	91.82

This permit special condition is based on the representation of maximum actual emission rates made in the permit application in order to limit emissions to levels below those at which the Agency believes the PSD regulations, 40 CFR 52.21 would apply [T1].

- ii. The Permittee shall perform annual analyses to determine the hexane content of all raw materials used in the above-referenced refinery vacuum system. These analyses shall be performed on raw material samples which are representative of each of the Permittee's raw material feed streams [T1].

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

- iii. Emissions of particulate matter from the spray dryer shall not exceed 4.8 lbs/hour and 19.5 tons/year. These limits are based on the information in the permit application and the allowable emission limit as provided by 35 Ill. Adm. Code 212.321.
 - iv. This permit is issued based upon the addition of the mechanical vacuum system and the recording of the actual emissions from the process water cooler without any net increase in actual emissions of volatile organic material into the atmosphere [T1].
 - v. Emissions of particulate matter from the Trisyl Storage Silo shall not exceed 0.55 pounds per hour and 2.40 tons per year. These limits are based on the information in the permit application and the allowable emission limit as provided by 35 Ill. Adm. Code 212.321. Compliance with annual limits shall be determined from a running total of twelve (12) months of data [T1].
 - vi. ACH Food Companies shall maintain the cooling tower odor control system utilizing a chlorine Compound as necessary to prevent the emanation of odors from this facility [T1].
 - vii. ACH Food Companies shall perform chlorine residual and bacteria count tests on the process cooling towers at a minimum frequency of every third working day, to achieve optimum odor control [T1].
- b. Permit #98100049:
- i. Emissions of particulate matter (PM) from the diatomaceous earth silo and conveying system both controlled by a baghouse shall not exceed 0.5 lb/hr and 0.1 ton/yr. These limits are based on diatomaceous earth throughputs of 30,000 lb/hr and 164 ton/yr for the silo and 1,400 lb/hr and 164 ton/yr for the conveying system, and a baghouse efficiency of 99.7% [T1].

- ii. Compliance with annual limits shall be determined from a running total of 12 months of data [T1].

The above limitations were established in the permits, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

7.1.7 Operating Requirements

None

7.1.8 Inspection Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected process emission sources to demonstrate compliance with conditions 5.5.1 and 7.1.3(c), pursuant to Section 39.5(7)(b) of the Act:

- a. Records addressing use of good operating practices for the baghouse:
 - i. Records for periodic inspection of the control equipment with date, individual performing the inspection, and nature of the inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- b. The throughput of the diatomaceous earth silo and diatomaceous earth conveying system (ton/mo and ton/yr).
- c. Operating time of the process emission source (hrs/day; hrs/yr)

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected process emission source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.1.12 Compliance Procedures

Compliance with the emission limits in Conditions 5.5.1 and 7.1.6 shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

Emission Unit	PM Lb/hr	VOM Lb/hr
Vacuum Dryer (OP-01)		3.8
4 Deodorizers (OP-02, 03, 04, 05)		4.0
Creamer 108 Line (CL-01)		
Creamer 120 Line (CL-02)		
Creamer 132 Line (CL-03)		
4 Contact Cooling Towers (CT-01, 02, 03, 04)	--	13.7
Waste Water Treatment	--	
Trisyl Storage Silo (SS-01)	0.1	--
Clay Storage Silo (SS-02)	0.1	--
Lime Storage Silo (SS-03)	0.1	--
Diatomaceous earth silo & conveying system	0.5	

Emissions (T/yr) = Emission rate (lbs/hr) x Hours of operation (hrs/yr)/2000

7.2 Unit 02: Package Boilers

7.2.1 Description

The boilers consist of five low-pressure steam boilers of varying capacities. These boilers can burn either natural gas, or fuel oil. Boiler 5 was installed in 1967 and act as the primary boiler. Boiler 1 was installed in 1957 and act as backup boiler (in conjunction with Boilers 2, 3, and 4).

Three of the boilers (2,3, and 4) were originally installed in 1999. They were intended to operate as high-pressure boilers as part of cogeneration system with Trigen, Inc. (I.D. No. 019010AFL). The cogeneration project was not successful and the agreement between ACH Foods and Trigen was terminated in April 2000. ACH foods has acquired the boilers and converted the boilers to provide only low-pressure steam, as needed for process purposes, i.e., no longer produce electricity at the source.

7.2.2 List of emission equipment and pollution control equipment

Emission Unit	Description	Date Constructed
02	1 primary boiler (#5), Heat input 155 mmBtu/hr, natural gas or fuel oil	1967
	1 secondary boiler (#1), Heat input 50 mmBtu/hr, natural gas or fuel oil	1958, modified in 1978
	3 Boilers (#2, #3, #4) each 83 mmBtu/hr Natural Gas Fired with Residual Fuel Backup	Pre - 1989*

* Boiler moved and installed at the source in 1999 and 2000.

7.2.3 Applicable Regulations

- a. The "affected Boiler" for the purpose of these unit-specific conditions, is the emission unit described in conditions 7.2.1 and 7.2.2.
- b. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel

combustion emission unit using liquid fuel
exclusively (0.10 lbs/mmBtu) [35 IAC 212.206].

- c. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion emission source, burning liquid fuel exclusively to exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (1.0 lbs/mmBtu) [35 IAC 214.161(a)].
- d. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- e. The affected boiler is subject to the emission limits identified in Condition 5.2.2(b)

7.2.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected boilers not being subject to the New Source Performance Standards (NSPS) for Small Industrial-Commercial Institutional Steam Generating Units, 40 CFR 60 Subparts A and Dc, because the affected boilers were constructed, modified, or reconstructed before June 9, 1989, pursuant to 40 CFR 60.40c(a).
- b. As a consequence of the conditions in this permit, this permit is issued based on the affected boilers not constituting a major modification subject to Prevention of Significant Deterioration (PSD), 40 CFR 52.21. For this purpose, this permit does not rely upon the contemporaneous decreases in emissions that occurred when existing Boilers 2, 3, and 4 were shut down in 2000.
- c. The affected boilers are not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MB (250 mmBtu/hr).
- d. Pursuant to 35 IAC 215.303, fuel combustion emission units are not subject to 35 IAC 215.301, "Use of Organic Material".
- e. This permit is issued based on the affected fuel combustion emission unit not being subject to 40 CFR

Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected fuel combustion emission unit does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Operational and Production Limits and Work Practices

- a. Natural gas and residual fuel oils shall be the only fuels fired in the affected boilers.
- b. Natural gas and residual fuel oil usage by the affected boilers #2, #3, and #4 shall not exceed the following:
 - i. Natural gas usage shall not exceed 798 million scf per year in affected boilers.
 - ii. Residual fuel oil usage shall not exceed 506,000 gallons per year.
 - iii. If natural gas usage in affected boilers is more than 519.5 million scf/year, then the limitation on residual fuel oil usage shall be determined using the following equation:
$$Y = - 1.8182 X + 1450.9$$

Where:

Y = Fuel oil usage allowed in thousand gallons
X = Natural gas used in million scf.
- c. The sulfur content of the residual fuel oil used by the affected boilers shall not exceed 1.0 wt. %.
- d. Organic liquid by-products or waste materials shall not be used in these fuel combustion emission units without written approval from the Illinois EPA.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected boilers #2, #3, and #4 are subject to the following:

- a. Emissions from the affected boilers combined shall not exceed the following limits. These limits reflect the Permittee's commitment to maintain

emissions of the boilers below the levels at which they would constitute a major modification, which is consistent with their expected manner of operation. [T1].

<u>(T/Mo)</u>	SO ₂	<u>(T/Yr)</u>	<u>(T/Mo)</u>	NO _x	<u>(T/Yr)</u>
39.9		39.9	39.9		39.9

- b. Compliance with the annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1].

The above limitations were established in Permit 99020044, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items, which allow to demonstrate compliance with Condition 5.5.1 and 7.6.5 pursuant to Section 39.5 (7) (b) of the Act:

- a. The Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with Conditions 5 and 6:
 - i. Natural gas usage for the affected boilers (scf/month and scf/year).
 - ii. Residual fuel oil usage for the affected boilers (gallon/month and gallon/year).

- iii. Sulfur content of the residual fuel oil (wt. %).
- iv. Emissions of NO_x and SO₂ from the affected boilers and from usage of natural gas and residual fuel oil combined (ton/month and ton/year).

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected boilers with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Natural gas or residual fuel oil usage from the affected boilers in excess of the limits specified in Condition 7.2.6.
- b. Notification within 60 days of operation of an affected boiler that may not have been in compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.
- c. If there is an exceedance of sulfur content of residual fuel oil in excess of the limit specified in Condition 7.2.5, the Permittee shall submit a report within 30 days after receipt of a noncompliant shipment of distillate fuel oil.
- d. Emissions of NO_x, PM, SO₂, or VOM from the affected boilers in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3(b) and 7.2.3(e) is considered to be assured by the normal work practices and maintenance activities inherent in operation of the affected boilers.

- b. Compliance with Condition 7.2.3(c) is considered to be assured by the use of residual fuel oil that meets the sulfur content limit of Condition 5d and by the recordkeeping requirement of Condition 9a(iii).
- c. Compliance with the emission limits in Conditions 5.5.1 and 7.2.6 shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:
 - i. Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

Emission Factor (lb/mmcf)

Pollutant	Boiler < 100 mmBtu/hr	Boiler > 100 mmBtu/hr
NO _x	100	280
PM	7.6	7.6
SO ₂	0.6	0.6
VOM	5.5	5.5
CO	84	84

These are the emission factors for uncontrolled natural gas combustion in commercial boilers, Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Boiler Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- ii. Emissions from the affected boilers burning residual fuel oil shall be calculated based on the following emission factors:

Fuel Oil #6 Emission Factor (lb/10³ gal)

Pollutant	Boiler < 100 mmBtu/hr	Boiler > 100 mmBtu/hr
SO ₂	157(S)	157(S)
PM	10	10
CMP-TOT	1.5	1.5

FINAL DRAFT/PROPOSED CAAPP PERMIT
 ACH Food Companies, Inc.
 I.D. Number: 019802AAI
 Application No.: 96030172
 September 23, 2003

Pollutant	Boiler < 100	Boiler > 100
	mmBtu/hr	mmBtu/hr
CMP-IOR	85%(1.5)	85%(1.5)
CMP-ORG	15%(1.5)	15%(1.5)
NO _x	55	47
VOM	1.28	1.28
CO	5	5

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1 and 1.3-3, AP-42, Volume I, Fifth Edition, September 1998. "%S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Boiler Emissions (ton) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor/2000.

7.3 Unit 03: Other fuel combustion emission units

7.3.1 Description

Dryers:

ACH operates three lines that produce non-dairy coffee creamer. The lines are identified by the dryer associated with each line (108, 120 and 132 dryer). Creamer ingredients are blended and then fed into the creamer spray dryer. The three dryers (one for each line) are fueled by natural gas. Propane is used as a backup fuel supply.

High pressure steam Boilers #1 to #4:

These boilers are used to produce steam for deodorizers. During normal operation natural gas is fired. Propane is used only as backup fuel source.

Hydrogen Reformer Burner:

The gas plant generates hydrogen for use in the plant.

The natural gas supplied to the plant contains mercaptans (an odorant), which must be removed prior to use in the gas plant. Carbon traps are used to remove the mercaptans from the natural gas used in both the hydrogen and nitrogen processes. The carbon traps are backflushed once per week.

The hydrogen plant receives the gas from the carbon trap into the reformer where the methane is cracked. The gas is then sent through a high temperature then a low temperature catalyst (C12 and C18, respectively) to convert the CO to CO₂. The gas is then passed through an absorber where in the presence of a monoethanolamine solution, CO₂ is removed. Finally, the gas is passed through a methanator catalyst which will convert any remaining CO and CO₂ into methane. The hydrogen is transferred to a storage tank for later use.

Air Make-Up Unit:

ACH produces much of its comfort heating from the existing five medium pressure boilers at the plant. The plant does; however, have three air make-up heaters. These heaters are used to warm the outside air before it enters

the creamer building during the winter months. Two of the three units are below 2.5 mmBtu/hr and are insignificant sources as defined at Ill. Adm. Code 201.210(a)(4). The third unit is rated at 3.5 mmBtu/hr. The only emissions from the air make-up units result from the products of natural gas combustion.

7.3.2 List of Emission Equipment and Pollution Control Equipment

Boiler	Boiler	Date Constructed
03	Creamer Line Dryer 108 (7.5 mmBtu/hr), Dryer 120 (8.0 mmBtu/hr), Dryer 132 (7.0 mmBtu/hr)	1988
	4 Boilers, each 7.2 mmBtu/hr (OP-08, 09, 10, 11)	1992
	Hydrogen Reformer Burner, 26 mmBtu/hr (GP-01)	---
	Hastings Make-up air heater 3.5 mmBtu/hr (AH-01)	1972

7.3.3 Applicable Regulations

- a. The "affected fuel combustion emission unit" for the purpose of these unit-specific conditions, is the emission unit described in conditions 7.3.1 and 7.3.2.
- b. The emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- c. The affected fuel combustion emission unit is subject to the emission limits identified in Condition 5.2.2(b).

7.3.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, reconstructed, or modified after June 9, 1989, with firing rates of 100 mmBtu/hr or less, but greater than 10 But/hr. All four of the affected fuel combustion emission units were

constructed prior to June 9, 1989 and therefore, are not subject to this regulation.

- b. The affected fuel combustion emission units are not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MB (250 mmBtu/hr).
- c. Pursuant to 35 IAC 215.303, fuel combustion emission units are not subject to 35 IAC 215.301, "Use of Organic Material".
- d. This permit is issued based on the affected fuel combustion emission units not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected fuel combustion emission units does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Operational and Production Limits and Work Practices

- a. The four (4) boilers shall not operate for more than 8400 hours per year.
- b. Natural gas and/or propane shall be the only fuel(s) combusted in the four (4) boilers.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected fuel combustion emission units are subject to the following:

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items, which allow to demonstrate compliance with Condition 5.5.1 and 7.3.5 pursuant to Section 39.5 (7) (b) of the Act:

- a. Total natural gas usage for the affected fuel combustion emission units (mmcf/year), and
- b. The heat content of natural gas (Btu/ft³).
- c. Total propane gas usage for the affected fuel combustion emission units (gal/yr); and
- d. Annual aggregate NO_x, PM, SO₂, and VOM emissions from the affected fuel combustion emission units, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected fuel combustion emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Notification within 60 days of operation of an affected boiler that may not have been compliance with the opacity limitations in Condition 5.2.2(b), with a copy of such record for each incident.
- b. Emissions of NO_x, PM, SO₂, or VOM from the affected fuel combustion emission units in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance with the emission limits in Conditions 5.5.1 and 7.3.6 shall be based on the recordkeeping

requirements in Condition 7.3.9 and the emission factors and formulas listed below:

- i. Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

Emission Factor (lb/mmcf)

Pollutant	Boiler < 100 mmBtu/hr
NO _x	100
PM	7.6
SO ₂	0.6
VOM	5.5
CO	84

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- ii. Emissions from the fuel combustion emission units burning propane gas shall be calculated based on the following emission factors:

Pollutant	Emission Pounds/1,000 Gallons
PM	0.6
NO _x	19
CO	3.2
VOM	0.5
CO	3.2

These are emission factors determined for the affected furnace using standard AP-42 emission factors Table 1.5-1, Volume I, Fifth Edition, October 1996.

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

Emissions (ton) = (Propane consumed, gallons)
x (The appropriate emission factor in lb/1000
gallons)/2000

- b. Compliance with Condition 7.3.3(b) is considered to be assured by the normal work practices and maintenance activities inherent in operation of the affected units.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after ?????? (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12) (a) (i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these

conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7) (e) (i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
- i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
 - iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506
 - iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604
- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

I provisions until the Illinois EPA deletes or revises them in
accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or

resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for

continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7) (o) (ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7) (k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
 - ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process
 Emission Units

10.1.1 Process Emission Units for Which Construction or
 Modification Commenced On or After April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

Where:

P = Process weight rate; and
 E = Allowable emission rate; and,

- i. Up to process weight rates of 408 Mg/hr (450 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rate greater than or equal to 408 Mg/hr (450 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units For Which
 Construction or Modification Commenced On or After
 April 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	ton/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.2	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or T/hr; and
 E = Allowable emission rate in Kg/hr or lbs/hr

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

10.2.1 Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

Where:

P = Process weight rate; and,
 E = Allowable emission rate; and,

- i. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	ton/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67

- ii. For process weight rates in excess or 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	ton/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

c. Limits for Process Emission Units For Which
 Construction or Modification Commenced Prior to
 April 14, 1972

P Mg/hr	Metric	English	E lbs/hr
	E kg/hr	P T/hr	
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Where:

P = Process weight rate in Mg/hr or T/hr; and
 E = Allowable emission rate in Kg/hr or lbs/hr

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

10.3 Attachment 3 - Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Illinois EPA;
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
 - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule,

marketable permits rule, or generic emissions trading rule.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of

minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

Application forms can be obtained from the Illinois EPA website
at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for
truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require
the Illinois EPA to deny the application. The Illinois EPA
reserves the right to require that additional information be
submitted as needed to evaluate or take final action on
applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC
270.305.



Illinois Environmental Protection Agency
 Division Of Air Pollution Control -- Permit Section
 P.O. Box 19506
 Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	I.D. number:
	Permit number:
Date received:	

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. I.D. number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents	
24. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25. Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:	
BY:	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____/_____/_____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance certification for the source. For this purpose, the Illinois EPA will accept a copy of the most recent form 401-CAAPP, ANNUAL COMPLIANCE CERTIFICATION submitted to the Illinois EPA.
3. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
4. Information addressing any outstanding transfer agreement pursuant to the ERMS.
5.
 - a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.
 - b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

FINAL DRAFT/PROPOSED CAAPP PERMIT
ACH Food Companies, Inc.
I.D. Number: 019802AAI
Application No.: 96030172
September 23, 2003

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

MJP:psj

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

ACH Food Companies, Inc. ("ACH"), Champaign Plant is located at, 710 North Mattis Avenue, Champaign, Illinois. The facility manufactures edible oil and coffee creamer.

ACH receives either refined & bleached vegetable oil or refined, bleached & deodorized vegetable oil and further refines it into various edible oil products. Some of the product is packaged in containers and labeled for retail sale while the rest is shipped in bulk quantities to be used as an ingredient in other food products. The creamer lines receive both wet and dry ingredients for blending into a creamer product. The creamer is processed and packaged as required by the customer.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Vacuum Dryer (OP-01)	1990	
	4 Deodorizers (OP-02, 03, 04, 05)	1983	Scrubber/Condenser/Trap tank
	Creamer 108 Line (CL-01)	1972, modified 1988	Wet Scrubber
	Creamer 120 Line (CL-02)	1972, modified 1988	Wet Scrubber
	Creamer 132 Line (CL-03)	1981	Wet Scrubber
	4 Contact Cooling Towers (CT-01, 02, 03, 04)	-	---
	Waste Water Treatment	-	---
	Trisyl Storage Silo (SS-01)	1994	Baghouse
	Clay Storage Silo (SS-02)	1994	Baghouse
	Lime Storage Silo (SS-03)	1988	Baghouse
	Diatomaceous earth silo & conveying system		Baghouse
02	1 primary boiler (#5), Heat input 155 mmBtu/hr, natural gas or fuel oil	1967	---
	1 secondary boiler (#1), Heat input 50 mmBtu/hr, natural gas or fuel oil	1958, modified in 1978	---

Emission Unit	Description	Date Constructed	Emission Control Equipment
02 (Cont.)	3 Boilers (#2, #3, #4) each 83 mmBtu/hr Natural Gas Fired with Residual Fuel Backup	Before 1989	---
03	Creamer Line Dryer 108 (7.5 mmBtu/hr), Dryer 120 (8.0 mmBtu/hr), Dryer 132 (7.0 mmBtu/hr)	1988	---
	4 Boilers, each 7.2 mmBtu/hr (OP-08, 09, 10, 11)	1992	---
	Hydrogen Reformer Burner, 26 mmBtu/hr (GP-01)	---	---
	Hastings Make-up air heater 3.5 mmBtu/hr (AH-01)	1972	---

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Pollutant	Tons/Year
Volatile Organic Material (VOM)	101.41
Sulfur Dioxide (SO ₂)	982.12
Particulate Matter (PM)	144.57
Nitrogen Oxides (NO _x)	457.13
HAP, not included in VOM or PM	---
Total	1,685.23

This permit is a combined Title I/CAAPP permit that may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission

standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft 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 Ill. Adm. Code Part 166.