PROPOSED PERMIT
PMP Fermentation Products, Inc.
I.D. No.: 143065AJY
Application No.: 96030051
January 25, 2000

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

PMP Fermentation Products, Inc.
Attn: Ken Hofbauer, Facilities Engineer
121 Wayne Street
Peoria, Illinois 61603

Application No.: 96030051 I.D. No.: 143065AJY
Applicant's Designation: Ferment. Proc. Date Received: March 6, 1996
Operation of: Sodium Gluconate, Calcium Gluconate, and EN Processing Equipment and Boilers
Date Issued: TO BE DETERMINED Expiration Date[2]: TO BE DETERMINED
Source Location: 121 Wayne Street, Peoria, Peoria
Responsible Official: Ken Hofbauer, Facilities Engineer

This permit is hereby granted to the above-designated Permittee to OPERATE a fermentation process, 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 Michael J. Knobloch at 217/782-2113.

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

DES:MJK:psj

cc: Illinois EPA, FOS, Region II
USEPA

[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.

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1.0 SOURCE IDENTIFICATION

1.1 Source

PMP Fermentation Products, Inc.
121 Wayne Street
Peoria, Illinois 61603
309-637-0400

I.D. No.: 143065AJY
Standard Industrial Classification: 2869, Industrial Organic Chemicals

1.2 Owner/Parent Company

PMP Fermentation Products, Inc.
121 Wayne Street
Peoria, Illinois 61603

1.3 Operator

PMP Fermentation Products, Inc.
121 Wayne Street
Peoria, Illinois 61603

Ken Hofbauer/Facilities Engineer
309-637-0400

1.4 General Source Description

PMP Fermentation Products, Inc. is located at 121 Wayne Street Peoria, Illinois. The source manufactures food preservatives from various raw materials.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
Agency	Illinois Environmental Protection Agency
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
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
°C	Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
cm	Centimeter
CO	Carbon Monoxide
ERMS	Emission Reduction Marketing System
°F	Fahrenheit
gal	gallon
HAP	Hazardous Air Pollutant
hr	hour
in	inch
KPa	Kilopascal
Kg	Kilogram
l	Liter
LAER	Lowest Achievable Emission Rate
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
lb	pound
m^3	Cubic meter
MACT	Maximum Achievable Control Technology
Mg	Megagram
min	Minute
mmBtu	Million British thermal units
mmscf	Million standard cubic foot
mo	month
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
psi	Pound per square inch
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
T1	Title I – Identifies Title I conditions that have been carried over from an existing construction permit
T1N	Title I New – Identifies Title I conditions that are being established in this permit
T1R	Title I Revision – Identifies Title I conditions that have been carried over from an existing construction permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
yr	Year

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:

MAU-06, 6.0 mmBtu/hr
MAU-01, 2.75 mmBtu/hr
MAU-07, 2.25 mmBtu/hr

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:

Portable Welding Machines
Comfort Air Heaters

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)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

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	Boilers B1 and B4 Natural Gas Fired Boilers with distillate fuel oil backup, Maximum Heat Input 37.5 mmBtu/hr and 27.5 mmBtu/hr each respectively	B1-9/74 B4-7/75	N/A
	Boilers B5, B6, and B7 Natural Gas Fired Boilers, Maximum Heat Input 26.8 mmBtu/hr each	B5-1996 B6-1996 B7-1996	N/A
02	EN processing	June 1996	Scrubber R483, and R484
	Sodium Hydroxide Handling	June 1996	R417 Filter
	Carbon Slurry Mixing	June 1996	Bag Filter
	Methanol Storage Tanks S801, S802, S804	June 1996	N/A
	Calcium Carbonate Material Handling System	June 1996	Baghouse F121
	Wastewater Pretreatment System	June 1996	N/A
	Finished EN Product Handling System	June 1996	Baghouses P703, P717, and P753S1
	Storage Tank (S823)-Hydrochloric Acid Storage	June 1996	Scrubber A226
	Calcium Gluconate Processing (packaging filter, fluid bed control, conveyer control, mixer/sifter control)	July 1994	C-3302 filter, C-6000, C-7000 and C-8000 scrubber and separator
	Calcium Gluconate Carbon Slurry Mixing	July 1994	C-5000 bag breaker filter

Emission Unit	Description	Date Constructed	Emission Control Equipment
02 (cont.)	Sodium Gluconate Processing	March 1987	C-01 control system, S-01 spray scrubber, BH-01, BH-02, BH-03, BH-06, and BH-07
	Sodium Gluconate Carbon Slurry Mixing	March 1987	BH-04
Fugitive VOM Emission	Fugitive VOM Equipment Leaks	-	None

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 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. i. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

ii. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

iii. All normal traffic pattern roads and parking facilities located at this source shall be

paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

c. 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 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 Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

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.

5.2.7 PM_{10} Contingency Measure Plan

Should this stationary source, as defined in 35 IAC 212.700, become subject to the requirement to prepare and submit a contingency measure plan reflecting the PM_{10} emission reductions as set forth in 35 IAC 212.703, then the owner or operator shall submit such plan to the Illinois EPA for review and approval within ninety (90) days after the date this source becomes subject to this requirement. Such plan will be incorporated by reference into this permit and shall be implemented in accordance with 35 IAC 212.704. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U, incorporated herein by reference.

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)	98.4
Sulfur Dioxide (SO_2)	2.0
Particulate Matter (PM)	5.1
Nitrogen Oxides (NO_x)	63.9
HAP, not included in VOM or PM	0
TOTAL	169.4

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

The annual emissions from the source shall not exceed the following limitations:

Pollutant	Emissions (Tons/Year)	Underlying Rules
NO_x	70.7	40 CFR 52.21
CO	58.9	40 CFR 52.21
SO_2	2.04	40 CFR 52.21
PM	5.44	40 CFR 52.21
VOM	98.9	40 CFR 52.21

The limits on VOM are limitations established in Permit 95010120, 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. See Condition 7.1.6 and 7.2.6 [T1].

Compliance with 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).

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 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 noncompliance 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.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01 – Boilers B1, B4, B5, B6, and B7
Control – N/A

7.1.1 Description

Boilers B1 and B4 are natural gas fired boilers with distillate fuel oil backup. These two boilers provide steam for the gluconate plant processes. Boilers B5, B6, and B7 are natural gas fired boilers with no backup fuel capabilities. These boilers provide steam for the EN plant processes. All three boilers B5, B6, and B7 are subject to NSPS.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Natural Gas Fired Boilers (B1 and B4) with distillate fuel oil backup, maximum heat input 37.5 mmBtu/hr and 27.5 mmBtu/hr each respectively	N/A
	Natural gas fired boilers (B5, B6, and B7), maximum heat input 26.8 mmBtu/hr each	N/A

7.1.3 Applicability Provisions and Applicable Regulations

a. An “affected boiler” for the purpose of these unit-specific conditions, are steam generating boilers listed in Condition 7.1.1 and 7.1.2.

b. Affected boilers B5, B6, and B7 are subject to a New Source Performance Standard (NSPS), 40 CFR 60, Subparts A and Dc for small steam generators because the boilers were constructed after June 9, 1989 and the firing rates of the affected boilers are less than 100 mmBtu/hr and greater than 10 mmBtu/hr. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

c. The affected boilers are subject to Condition 5.2.2.

d. All affected boilers shall not 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. Affected boilers B1 and B4 shall not 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]

f. Affected boilers B1 and B4 shall not cause sulfur dioxide emissions to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu). [35 IAC 214.161(b)]

7.1.4 Non-Applicability of Regulations of Concern

a. The New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, reconstructed, or modified after June 9, 1989. Boilers B1 and B4 were constructed prior to June 9, 1989 and therefore, these rules do not apply.

b. All affected boilers are not subject to 35 IAC 217.141, because the actual heat input of the affected boilers are less than 73.2 MW (250 mmBtu/hr).

The provisions of Sections 215.301 and 215.302 shall not apply to fuel combustion emission sources. [35 IAC 215.303]

7.1.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate affected boilers B5, B6, and B7 in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based

on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11 (d)].

b. Natural gas shall be the only fuel fired in affected boilers B5, B6, and B7.

c. Natural gas and distillate fuel oil shall be the only fuels fired in boilers B1 and B4.

d. Natural gas usage for all affected boilers shall not exceed 108.20 mmscf/mo and 1273.71 mmscf/yr (Note mm = 1,000,000).

e. Fuel oil usage for affected boilers B1 and B4 shall not exceed 80,888.9 gallon/mo and 80,888.9 gallon/yr.

f. The sulfur content of the distillate fuel oil used by affected boilers B1 and B4 shall not exceed 0.28 wt%.

7.1.6 Emission Limitations

a. In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boilers are subject to the following when combusting natural gas:

NO_x Emissions (Ton/mo)	CO Emissions (Ton/mo)	PM Emissions (Ton/mo)	SO_2 Emissions (Ton/mo)	VOM Emissions (Ton/mo)
5.39	4.58	0.41	0.033	0.30

NO_x Emissions (Ton/yr)	CO Emissions (Ton/yr)	PM Emissions (Ton/yr)	SO_2 Emissions (Ton/yr)	VOM Emissions (Ton/yr)
63.1	53.1	4.8	0.40	3.4

These limits are based on the usage limits in Conditions 7.1.5(d) and emission factors and formulas in Condition 7.1.12(c)(i).

b. Emissions from affected boilers B1 and B4 when combusting fuel oil are subject to the following:

NO_x Emissions (Ton/mo)	CO Emissions (Ton/mo)	PM Emissions (Ton/mo)	SO_2 Emissions (Ton/mo)	VOM Emissions (Ton/mo)
0.8	0.2	0.1	.14	0.01

NO_x Emissions (Ton/yr)	CO Emissions (Ton/yr)	PM Emissions (Ton/yr)	SO_2 Emissions (Ton/yr)	VOM Emissions (Ton/yr)
0.8	0.2	0.1	1.64	0.01

These limits are based on the usage limits in Condition 7.1.5(e) and emission factors and formulas in Conditions 7.1.12(c)(ii).

c. Compliance with annual limits shall be determined from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

The above limitations contain revisions to previously issued Permit 95010120. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the source has requested a lower emission limit due to a decrease in natural gas usage than what was previously permitted in Permit 95010120. [T1R].

7.1.7 Testing Requirements

None

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items which allow to demonstrate compliance with Conditions 5.5.1 and 7.1.5.

a. Total natural gas usage for the affected boilers (mmscf/mo and mmscf/yr) (Note mm = 1,000,000)

b. Fuel oil usage for affected boilers B1 and B4 (gal/mo and gal/yr).

c. Sulfur content of the distillate fuel oil (wt.%).

d. Each individual pollutant emission of NO_x, CO, PM, SO_2, and VOM from the affected boilers (ton/mo and ton/yr) when fired with natural gas.

e. Each individual pollutant emission of NO_x, CO, PM, SO_2, and VOM from affected boilers B1 and B4 (ton/mo and ton/yr) when fired by distillate fuel oil.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of noncompliance 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 usage from the affected boilers in excess of the limits specified in Condition 7.1.5(d).

b. Distillate fuel oil usage from affected boilers B1 and B4 in excess of the limits specified in Condition 7.1.5(e).

c. Sulfur content of the distillate fuel oil in excess of the limit specified in Condition 7.1.5(f).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

a. Compliance with Conditions 7.1.3(d) and 7.1.3(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 7.1.3(f) is considered to be assured by the use of distillate fuel oil that meets the sulfur content limit of Condition 7.1.5(f) and by the recordkeeping of Condition 7.1.9(c).

c. Compliance with the emission limits in Condition 7.1.6(a) and 7.1.6(b) shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

i. To determine compliance with Condition 7.1.6(a), emissions from the affected boilers burning natural gas shall be calculated based on the following emission factors and the formula below:

NO_x (Lb/mmscf)	CO (Lb/mmscf)	SO_2 (Lb/mmscf)	PM (Lb/mmscf)	VOM (Lb/mmscf)
100	84	0.6	7.6	5.5

The above emission factors were obtained from AP-42, Standard emission factors, Volume I, Supplement F, October 1996.

Gas Boiler Emissions (tons) = [(Natural Gas consumed, mmscf) x (The appropriate emission factor, Lb/mmscf)]/2000 Lb/ton

ii. To determine compliance with Condition 7.1.6(b), emissions from affected boilers B1 and B4 burning distillate fuel oil shall be calculated based on the following emission factors and the formula below:

NO_x (Lb/1000 gal)	CO (Lb/1000 gal)	PM (Lb/1000 gal)	SO_2 (Lb/1000 gal)	VOM (Lb/1000 gal)
20	5	2	39.7	.25

The above emission factors were obtained from AP-42, Standard Emission Factors, Volume I, Supplement F, October 1996.

Oil Boiler Emissions (tons) = [(Oil consumed, 1000 gal) x (The appropriate emission factor, Lb/1000 gal)]/2000 Lb/ton

7.2 Unit 02 – Sodium Erythorbate/Gluconate Manufacturing Processes Control – Scrubbers and Baghouse

7.2.1 Description

PMP Fermentation's EN (Sodium Erythorbate) Process manufacture's a food preservative from various raw materials coupled with various processing steps. The main VOC generating material in these processes is methanol. The gluconate plant contains two principal organic chemical manufacturing operations, sodium gluconate and calcium gluconate.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
02	EN processing	Scrubber R483, and R484
	Sodium Hydroxide Handling	R417 Filter
	Carbon Slurry Mixing	Bag Filter
	Methanol Storage Tanks S801, S802, S804	N/A
	Calcium Carbonate Material Handling System	Baghouse F121
	Wastewater Pretreatment System	N/A
	Finished EN Product Handling System	Baghouses P703, P717, and P753S1
	Storage Tank (S823)-Hydrochloric Acid Storage	Scrubber A226
	Calcium Gluconate Processing (packaging filter, fluid bed control, conveyer control, mixer/sifter control)	C-3302 filter, C-6000, C-7000 and C-8000 scrubber and separator

Emission Unit	Description	Emission Control Equipment
02 (cont.)	Calcium Gluconate Carbon Slurry Mixing	C-5000 bag breaker filter
	Sodium Gluconate Processing	C-01 control system, S-01 spray scrubber, BH-01, BH-02, BH-03, BH-06, and BH-07
	Sodium Gluconate Carbon Slurry Mixing	BH-04

7.2.3 Applicable Provisions and Applicable Regulations

a. An “affected storage tank” for the purpose of these unit specific conditions are methanol storage tanks S801, S802, S804, and hydrochloric acid storage tank (S823), listed in Condition 7.2.2.

b. An “affected handling system” for the purpose of these unit specific conditions are the finished EN product handling system and the Calcium Carbonate material handling system listed in Condition 7.2.2.

c. An “affected gluconate process” for the purpose of these unit specific conditions is all processes at the facility emitting particulate matter emissions during the manufacture of calcium and sodium gluconate.

d. An “affected EN process” for the purpose of these unit specific conditions is all processes at the facility emitting Volatile Organic Material emissions from the usage of methanol.

e. The affected handling systems, gluconate processes, and EN processes are subject to 35 Ill. Adm. Code 212.321(a), 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 which, 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 Ill. Adm. Code 212.321 and Attachment 1.

7.2.4 Non-Applicability of Regulations of Concern

a. Hydrochloric acid storage tank (S823) is not subject to IAC 215.122(b) because this tank stores acid which is considered to be a nonvolatile organic liquid.

b. Methanol storage tanks S801, S802, and S804 are not subject to IAC 215.122(b) because the vapor pressure of methanol is less than 2.5 psia.

c. The affected EN processes are not subject to 35 IAC 215.301 because the VOC containing material, methanol, is not a photochemically reactive material.

7.2.5 Operational and Production Limits and Work Practices

a. Fresh virgin methanol usage for the EN processes shall not exceed 92,000 Lb/mo and 542,857 Lb/yr.

b. Calcium carbonate throughput shall not exceed 416.7 ton/mo and 2500 ton/yr.

c. Sodium hydroxide bead throughput shall not exceed 333.3 ton/mo and 2000 ton/yr.

d. Carbon slurry mixing throughput for the EN process shall not exceed 6.3 ton/mo and 38 ton/yr.

e. Calcium gluconate production shall not exceed 83.3 ton/mo and 500 ton/yr.

f. Calcium gluconate carbon slurry mixing shall not exceed 6.2 ton/mo and 37 ton/yr.

g. Sodium gluconate production shall not exceed 1833.3 ton/mo and 11,000 ton/yr.

h. Sodium gluconate carbon slurry mixing shall not exceed 28.0 ton/mo and 168 ton/yr.

7.2.6 Emission Limitations

a. VOM emissions from the affected EN processes are subject to the following limits:

Item of Equipment	VOM Emissions (Ton/mo)	VOM Emissions (Ton/yr)
EN Processes	16.1	95

These limits are based on the usage limits in Condition 7.2.5(a) and the emission factor and formula in Condition 7.2.12(b)(i).

b. Emissions from the affected Finished EN Products Handling system shall not exceed the following:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Finished EN Product Handling System	.0067	.04

These limits are based on the maximum usage limits as provided in the Title V application and the emission factors and formula in Condition 7.2.12(b)(ii).

c. Emissions from the affected Calcium Carbonate Material Handling system shall not exceed the following:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Calcium Carbonate Material Handling	.0033	.02

These limits are based on the maximum usage limits in Condition 7.2.5(b) and the emission factors and formula in Condition 7.2.12(b)(iii).

d. Emissions from Sodium Hydroxide Bead Handling shall not exceed the following limits:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Sodium Hydroxide Bead Handling	.0016	.01

These limits are based on the maximum usage limits in Condition 7.2.5(c) and the emission factors and formula in Condition 7.2.12(b)(iv).

e. Emissions from Carbon Slurry Mixing shall not exceed the following limits:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Carbon Slurry Mixing	.000017	.0001

These limits are based on the maximum usage limits in Condition 7.2.5(d) and the emission factors and formula in Condition 7.2.12(b)(v).

f. Emissions from Calcium Gluconate production shall not exceed the following limits:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Calcium Gluconate Production	.00033	.002

These limits are based on the maximum usage limits in Condition 7.2.5(e) and the emission factors and formula in Condition 7.2.12(b)(vi).

g. Emissions from Calcium Gluconate Carbon Slurry Mixing shall not exceed the following limits:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Calcium Gluconate Carbon Slurry	.00017	.0001

Mixing		

These limits are based on the maximum usage limits in Condition 7.2.5(f) and the emission factors and formula in Condition 7.2.12(b)(vii).

h. Emissions from the Sodium Gluconate Production shall not exceed the following limits:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Sodium Gluconate Production	.017	.1

These limits are based on the maximum usage limits in Condition 7.2.5(g) and the emission factors and formula in Condition 7.2.12(b)(viii).

i. Emissions from Sodium Gluconate Carbon Slurry Mixing shall not exceed the following limits:

Item of Equipment	Particulate Emissions (Tons/mo)	Particulate Emissions (Tons/yr)
Sodium Gluconate Carbon Slurry Mixing	.00005	.0003

These limits are based on the maximum usage limits in Condition 7.2.5(h) and the emission factors and formula in Condition 7.2.12(b)(ix).

The above limitations contain revisions to previously issued Permit 95010120. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not

constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the source has requested a lower emission limit than what was previously permitted under permit 95010120.

Compliance with annual limits shall be determined from the sum of the data for the current month plus the proceeding 11 months (running 12 month total). [T1R].

7.2.7 Testing Requirements

N/A

7.2.8 Monitoring Requirements

Monitoring of methanol concentration from the effluent end of the wastewater pretreatment shall be accomplished daily. Mass balance calculations shown in Condition 7.2.12(b)(i) shall be utilized to determine methanol emissions to the atmosphere from all EN processes.

7.2.9 Recordkeeping Requirements

a. The Permittee shall maintain daily records of the methanol concentration in the wastewater discharge.

b. The Permittee shall maintain records of the following to demonstrate compliance with Condition 7.2.6(a).

i. Virgin methanol purchased by the facility in lb/mo and lb/yr.

ii. Monthly and annual VOM emissions from the EN processes, based on methanol usages in Condition 7.2.9(b)(i) and applicable emission factors and formulas in Condition 7.2.12(b)(i).

c. The Permittee shall maintain records of the following to demonstrate compliance with Condition 7.2.6(b) through 7.2.6(i).

i. Monthly and annual EN production (ton/mo and ton/yr).

ii. Monthly and annual particulate emissions from the EN production, based on the recordkeeping production rates in Condition 7.2.9(c)(i) and applicable emission factors and formulas in Condition 7.2.12(b)(ii).

iii. Monthly and annual throughput (ton/mo and ton/yr) of calcium carbonate.

iv. Monthly and annual particulate emissions from the calcium carbonate material handling system, based on the recordkeeping throughput in Condition 7.2.9(c)(iii) and applicable emission factors and formulas in Condition 7.2.12(b)(iii).

v. Monthly and annual throughput (ton/mo and ton/yr) of sodium hydroxide beads.

vi. Monthly and annual particulate emissions from sodium hydroxide bead throughput, based on the recordkeeping throughput in Condition 7.2.9(c)(v) and applicable emission factors and formulas in Condition 7.2.12(b)(iv).

vii. Monthly and annual throughput (ton/mo and ton/yr) of carbon slurry mixing.

viii. Monthly and annual particulate emissions from carbon slurry mixing, based on the recordkeeping throughput in Condition 7.2.9(c)(vii) and applicable emission factors and formulas in Condition 7.2.12(b)(v).

ix. Monthly and annual throughput (ton/mo and ton/yr) of calcium gluconate production.

x. Monthly and annual particulate emissions from calcium gluconate production, based on the

recordkeeping throughput in Condition 7.2.9(c)(ix) and applicable emission factors and formulas in Condition 7.2.12(b)(vi).

xi. Monthly and annual throughput (ton/mo and ton/yr) of calcium gluconate slurry mixing.

xii. Monthly and annual particulate emissions from calcium gluconate slurry mixing, based on the recordkeeping throughput in Condition 7.2.9(c)(xi) and applicable emission factors and formulas in Condition 7.2.12(b)(vii).

xiii. Monthly and annual throughput (ton/mo and ton/yr) of sodium gluconate production.

xiv. Monthly and annual particulate emissions from sodium gluconate production, based on the recordkeeping throughput in Condition 7.2.9(c)(xiii) and applicable emission factors and formulas in Condition 7.2.12(b)(viii).

xv. Monthly and annual throughput (ton/mo and ton/yr) of sodium gluconate carbon slurry mixing.

xvi. Monthly and annual particulate emissions from sodium gluconate carbon slurry mixing, based on the recordkeeping throughput in Condition 7.2.9(c)(xv) and applicable emission factors and formulas in Condition 7.2.12(b)(ix).

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected EN process and affected handling systems 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. Methanol usage from the affected EN processes in excess of the limits specified in Condition 7.2.5(a).

b. Emissions of particulate matter in excess of the limits specified in Condition 7.2.6(b) through 7.2.6(i).

c. Emissions of VOM in excess of the limits specified in Condition 7.2.6(a).

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

a. Compliance with Condition 7.2.3(e) is assured by the normal work practices and maintenance activities inherent in the operation of the baghouses.

b. Compliance with the emission limits in Condition 7.2.6(a) through 7.2.6(i) shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

i. To determine compliance with Condition 7.2.6(a), emissions from the affected EN processes shall be based on the following custom emission factor and formula listed below:

VOM Emission Factor (%)
35

EN Process VOC emissions (ton) = (methanol usage (lb) x VOC Emission Factor(%))/2000 lb/ton

The above emission factor is a custom emission factor derived from a mass balance determination from the facility. This factor includes all processes that handle methanol.

ii. Compliance with PM emissions from the affected finished EN products handling system, shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
2.5

EN Handling PM Emissions (tons) = (EN Production (tons) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

iii. To determine compliance with Condition 7.2.6(c), emissions from the affected calcium carbonate material handling system shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
2.5

Calcium Carbonate Handling PM Emissions (tons) = (calcium carbonate throughput (tons) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

iv. To determine compliance with Condition 7.2.6(d), emissions from the affected sodium hydroxide bead handling shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
2.5

Sodium Hydroxide Bead Handling PM Emissions (tons) = (sodium hydroxide bead throughput (tons) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

v. To determine compliance with Condition 7.2.6(e), emissions from the carbon slurry

mixing shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
0.8

Carbon Slurry Mixing PM Emissions (tons) = (carbon slurry throughput (tons) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

vi. To determine compliance with Condition 7.2.6(f), emissions from the calcium gluconate production shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
0.8

Calcium Gluconate Production PM Emissions (tons) = (calcium gluconate production(tons)) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

vii. To determine compliance with Condition 7.2.6(g), emissions from the calcium gluconate carbon slurry mixing shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
0.8

Calcium Gluconate Carbon Slurry Mixing PM Emissions (tons) = (calcium gluconate carbon slurry throughput(tons)) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

viii. To determine compliance with Condition 7.2.6(h), emissions from the sodium gluconate

production shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
2.5

Sodium Gluconate Production PM Emissions (tons) = (sodium gluconate production(tons)) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

ix. To determine compliance with Condition 7.2.6(i), emissions from the sodium gluconate carbon slurry mixing shall be calculated based on the following emission factor and formula below:

Uncontrolled Particulate Emission Factor (Lb Part/ton material processed)
0.8

Sodium Gluconate Slurry PM Emissions (tons) = (Sodium Gluconate Carbon Slurry throughput(tons)) x Particulate Emission Factor (Lb/ton) x (1-Control Efficiency (%))/2000 lb/ton

All above particulate emission factors are obtained from (RACM) 2.6.

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 _____**{insert public notice start date}** (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 without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change, and 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 [Section 39.5(12)(a) of the Act]. This notice shall:

a. Describe the physical or operational change;

b. Identify the schedule for implementing the physical or operational change;

c. 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;

d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

e. 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

A report summarizing required monitoring 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]:

Monitoring Period	Report Due Date
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
5415 North University
Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section (MC 11)

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

iv. USEPA Region 5 - Air Branch

USEPA (AR - 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 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)(p)(ii) of the Act]:

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; 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.

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)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Summary of Process Weight Rate 35 IAC 212.321

Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:
Emissions Equation

where:

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

a. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

b. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/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 14, 1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	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

PROPOSED PERMIT
PMP Fermentation Products, Inc.
I.D. No.: 143065AJY
Application No.: 96030051
January 25, 2000

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
3.6	2.4	4.00	5.15
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

10.2 Attachment 2 Example 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: _____

MJK:psj