

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Gulf Central System
502 East Hosler Street
Huntington, Indiana 46750**

is hereby authorized to construct

- (a) One (1) propane-fired ammonia heater, known as H-1, rated at 25.26 million British thermal units per hour, exhausted through Stack H1.
- (b) One (1) propane-fired ammonia heater, known as H-2, rated at 18.5 million British thermal units per hour, exhausted through Stack H2.
- (c) One (1) propane-fired vaporizer, known as V-1, rated at 0.46 million British thermal units per hour.
- (d) Four (4) propane-fired vaporizers, known as V-2, through V-5, rated at 0.08 million British thermal units per hour, each.
- (e) One (1) gasoline-fired auxiliary generator, rated at 9 horsepower.
- (f) One (1) ammonia tank, known as T1, equipped with a propane-fired flare, known as EF-1, rated at 1.14 million British thermal units per hour, exhausted through Stack EF1, capacity: 12,000,000 gallons.
- (g) One (1) ammonia tank, known as T2, equipped with a propane-fired flare, known as EF-2, rated at 1.14 million British thermal units per hour, exhausted through Stack EF2, capacity: 12,000,000 gallons.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP 069-9596-00058	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Construction Conditions

General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
 - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1-7.1(Fees).
 - (e) Pursuant to 326 IAC 2-1-4, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. The operation permit issued shall contain as a minimum the conditions in the Operation Conditions section of this permit.

7. That when the facility is constructed and placed into operation the following operation conditions shall be met:

Operation Conditions

General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. That the Permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.

Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
- (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
 - (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
 - (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
- (a) In the event that ownership of this ammonia processing source is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
- (a) Violation of any conditions of this permit.

- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

Malfunction Condition

7. That pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):
- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
 - (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
 - (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
 - (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

Opacity Limitations

8. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:
- (a) visible emissions shall not exceed an average of 40 percent opacity in 24 consecutive readings.

- (b) visible emissions shall not exceed 60 percent opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

Fugitive Dust Emissions

- 9. That pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)].

Open Burning

- 10. That the Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6.

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO₂, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m.: 11 IR 2373)

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Gulf Central System
 Source Location: 502 East Hosler Street, Huntington, Indiana 46750
 County: Huntington
 Construction Permit No.: CP 069-9596-00058
 SIC Code: 4266
 Permit Reviewer: Mark L. Kramer

The Office of Air Management (OAM) has reviewed an application from Gulf Central System relating to the construction and operation of ammonia processing source, consisting of the following equipment:

- (a) One (1) propane-fired ammonia heater, known as H-1, rated at 25.26 million British thermal units per hour, exhausted through Stack H1.
- (b) One (1) propane-fired ammonia heater, known as H-2, rated at 18.5 million British thermal units per, exhausted through Stack H2.
- (c) One (1) propane-fired vaporizer, known as V-1, rated at 0.46 million British thermal units per hour.
- (d) Four (4) propane-fired vaporizers, known as V-2, through V-5, rated at 0.08 million British thermal units per hour, each.
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- (f) One (1) ammonia tank, known as T1, equipped with a propane-fired flare, known as EF-1, rated at 1.14 million British thermal units per hour, exhausted through Stack EF1, capacity: 12,000,000 gallons.
- (g) One (1) ammonia tank, known as T2, equipped with a propane-fired flare, known as EF-2, rated at 1.14 million British thermal units per hour, exhausted through Stack EF2, capacity: 12,000,000 gallons.

All facilities were constructed prior 1973.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
EF1	Flare	78	0.5	415.7	475
EF2	Flare	20	0.83	415.7	475
H1	Ammonia Heater	19	1.96	9,211	475
H2	Ammonia Heater	19	1.96	6,746	475

Enforcement Issue

IDEM is aware that this ammonia processing source has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 24, 1998, with additional information received on April 23, 1998 by telephone.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations on pages 1 - 5 of 5.

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/yr)	Potential Emissions (tons/yr)
Particulate Matter (PM)	86.8	86.8
Particulate Matter (PM ₁₀)	39.8	39.8
Sulfur Dioxide (SO ₂)	0.056	0.056
Volatile Organic Compounds (VOC)	2.76	2.76
Carbon Monoxide (CO)	27.5	27.5
Nitrogen Oxides (NO _x)	39.9	39.9
Single Hazardous Air Pollutant (HAP)	negligible	negligible
Combination of HAPs	negligible	negligible

- (a) Allowable emissions have been set equal to the potential emission since there are no applicable rules. See attached spreadsheets for detailed calculations.

- (b) Allowable emissions (as defined in the Indiana Rule) of carbon monoxide (CO) and nitrogen oxides (NO_x) are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Huntington County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	1.29
PM ₁₀	1.29
SO ₂	0.056
VOC	2.76
CO	27.5
NO _x	39.9
Single HAP	negligible
Combination HAPs	negligible

This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 63 applicable to this facility.

The two (2) ammonia tanks constructed prior to 1973 predate the June 11, 1973 applicability date of New Source Performance Standard Subpart K (40 CFR Parts 60.110).

This source is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Parts 60.200 through 60.240 or 60.420, Subparts T through X or Subpart PP since the source is not a phosphate fertilizer or ammonium sulfate manufacturer.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because the source emits less than 100 tons per year of VOC in Huntington County.

326 IAC 5-1-2 (Visible Emission Limitations)

The visible emissions from this source are subject to this rule. The rule requires that opacity be less than an average of forty (40) percent in twenty-four (24) consecutive readings and less than sixty (60) percent for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6)-hour period.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

This new will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to the Clean Air Act.

Conclusion

The construction of this ammonia processing source will be subject to the conditions of the attached proposed **Construction Permit No. CP 069-9596-00058**.

Mail to: Permit Administration & Development Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Gulf Central System
502 East Hosler Street
Huntington, IN 46750

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for Gulf Central System.
(Title) (Company)
3. By virtue of my position with Gulf Central System, I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of Gulf Central System.
4. I hereby certify that Gulf Central System, 502 East Hosler Street, Huntington, Indiana 46750, has constructed the ammonia manufacturing source in conformity with the requirements and intent of the Construction Permit application received by the Office of Air Management on March 24, 1998 and as permitted pursuant to **Construction Permit No. 069-9596, Plant ID No. 069-00058** issued on _____.
5. Additional TYPEOFFACILITY were constructed/substituted as described in the attachment to this document and were not made in accordance with the Construction Permit. (Delete this statement if it does not apply.)

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana
on this _____ day of _____, 19 _____.

My Commission expires: _____.

Signature

Name (typed or printed)