

**CONSTRUCTION PERMIT and PERMIT BY RULE (PBR)
OFFICE OF AIR MANAGEMENT**

**Cargill Grain Division
147 East Railroad Street
Wheatfield, Indiana 46392**

is hereby authorized to construct

- (a) Two (2) Intersystems grain legs (Leg #1 and Leg #2) rated at 5,000 bushels of corn per hour each, and
- (b) one (1) Zimmerman VT-3026 column natural gas fired dryer rated at 31.867 million British Thermal Units per hour and 3,000 bushels of corn per hour.

There are no stacks or pollution control devices associated with these processes.

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-073-8769-00010	
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. In lieu of obtaining an operating permit pursuant to 326 IAC 2-1-4, the permittee shall comply with 326 IAC 2-11-3(b)(1) (Permit By Rule) and prior to the start of operation, shall meet following requirements:
 - (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 2-11-3(b)(1), the facility shall be considered permitted by rule.

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 grain handling and drying facility 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]

Permit by Rule

8. That pursuant to 326 IAC 2-11-3(b)(1), the annual throughput of grain at the source will be

limited to 11.2 million bushels per year. The source shall also comply with the following:

- (a) No later than thirty (30) days after the beginning of each calendar year the permittee shall demonstrate that the source is in compliance with the limit by providing throughput records for the previous twelve (12) months.
- (b) Not later than thirty (30) days after receipt of a written request by the department or the U.S. EPA, the permittee shall demonstrate that the source is in compliance with the limit by providing throughput records for the previous twelve (12) months.
- (c) The source shall operate and properly maintain air pollution control devices at the source.
- (d) The source shall follow generally accepted industry work practices to minimize emissions of regulated pollutants.
- (e) The source shall not discharge air pollutants so as to create a public nuisance.

Opacity Limitations

9. 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% opacity in 24 consecutive readings.
 - (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

Particulate Matter Limitations

10. That particulate matter (PM) emissions from the legs and dryer shall be considered in compliance provided that:
- (a) good housekeeping and equipment maintenance procedures are implemented.
 - (b) emissions are minimized in receiving, handling, and shipping operations by appropriate methods. These may include but need not be limited to, dust collection systems, windscreens, baffles, restricted hopper openings, enclosed transfer points, flexible drop spouts and/or sleeves,
 - (c) no visible accumulation of particulate matter beyond the plant property line, and
 - (d) emissions do not violate 326 IAC 6-4 (Fugitive Dust Emissions).

Fugitive Dust Emissions

11. 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

12. 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.

Reporting Requirements

13. That a log of information necessary to document compliance with operation permit condition no. 8 shall be maintained. These records shall be kept for at least the past 36 month period and made available upon request to the Office of Air Management (OAM).
- (a) An annual summary shall be submitted to:
- Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
- within thirty (30) calendar days after the end of the year being reported in the format attached. These reports shall include the total number of bushels produced.
- (b) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:
- (i) Postmarked on or before the date it is due; or
- (ii) Delivered by any other method if it is received and stamped by IDEM, OAM (and local agency if applicable), on or before the date it is due.
- (c) All instances of deviations from any requirements of this permit must be clearly identified in such reports.
- (d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.
- (e) The first report shall cover the period commencing the postmarked submission date of the Affidavit of Construction.

**Indiana Department of Environmental Management
Office of Air Management
Compliance Data Section**

Annual Report

Company Name: Cargill Grain Division
Location: 147 East Railroad Street, Wheatfield, Indiana 46392
Permit No.: CP079-8769-00010
Source: facility
Pollutant: Particulate Matter
Limit: 11.2 million bushels per year

Year	Production (bushels per year)

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

MALFUNCTION RECORDED

BY: _____ DATE: _____ TIME: _____

REV 3/96

FAX NUMBER - 317 233-5967

*SEE REVERSE

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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:

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

Cargill Grain Division
P.O. Box 218
Wheatfield, Indiana 46392

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 _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)
4. I hereby certify that Cargill Grain Division, 147 East Railroad Street, Wheatfield, Indiana 46392, has constructed the two (2) Intersystems grain legs and one (1) Zimmerman dryer in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on July 7, 1997 and as permitted pursuant to **Construction Permit No. CP-073-8769, Plant ID No.073-00010** issued on _____.

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)

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for New Construction and Operation and Permit by Rule (PBR)

Source Background and Description

Source Name: Cargill Grain Division
Source Location: 147 East Railroad Street, Wheatfield, Indiana 46392
County: Jasper
Construction Permit No.: CP-073-8769-00010
SIC Code: 5153
Permit Reviewer: KERAMIDA / KGB

The Office of Air Management (OAM) has reviewed an application from Cargill Grain Division relating to the construction and operation of an uncovered grain conveyor and drying operations, consisting of the following equipment:

- (a) Two (2) Intersystems grain legs rated at 5,000 bushels or corn per hour each.
- (b) One (1) natural gas fired Zimmerman VT-3026 grain dryer rated at 3,000 bushels of corn per hour and 31.867 million British thermal units per hour.

These new facilities will be replacing two existing grain legs and one dryer.

Stack Summary

There are no stacks or air pollution control devices associated with the new operations

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 July 7, 1997, with additional information received on July 31, 1997.

This permit also satisfies the requirements of 326 IAC 2, Permit by Rule

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (two pages).

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/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	167.1	643.1
Particulate Matter (PM10)	42.3	158.7
Sulfur Dioxide (SO ₂)	0.1	0.1
Volatile Organic Compounds (VOC)	0.5	0.5
Carbon Monoxide (CO)	5.9	5.9
Nitrogen Oxides (NO _x)	23.4	23.4
Single Hazardous Air Pollutant (HAP)	N/A	N/A
Combination of HAPs	N/A	N/A

- (a) Allowable emissions are determined from the applicability of rule 326 IAC 2-11-3(b)(1), Permit by Rule for Grain Elevators. See attached spreadsheets for detailed calculations.
- (b) The allowable emissions based on the rules cited are less than the potential emissions, therefore, the allowable emissions are used for the permitting determination.
- (c) Allowable emissions (as defined in the Indiana Rule) of particulate matter 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 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. Jasper 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) Jasper County has been classified as attainment or unclassifiable for all 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.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	22.65
PM10	6.06
SO ₂	0.0
VOC	0.1
CO	1.8
NO _x	7.0
Single HAP	N/A
Combination HAPs	N/A

- (a) This existing 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.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	167.1	42.3	0.1	0.5	5.9	23.4
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. 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 stipulates that it is subject to the Part 70 Permit requirements because the potential to emit (PTE) of PM-10 is greater than 100 tons per year. However, in order to avoid being regulated by the Part 70 Permit requirements, the source has chosen to comply with 326 IAC 2-11-3 (Permit by Rule for Grain Elevators). Throughput will be limited to 11.2 million bushels per year. This is equivalent to a PM-10 emission rate of 40.0 tons per year from grain operations. The source also has potential emissions from natural gas combustion from the dryer of 2.3 tons per year. Therefore, total potential to emit is 42.3 tons per year PM-10. As stated

above 326 IAC 2-2 is also not applicable.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12) 40 CFR Part 60 and 40 CFR Part 63 applicable to this facility.
- (b) The applicability of 40 CFR Part 60, Subpart DD, Standards of Performance for Grain Elevators was evaluated and determined to not apply. The rules apply to grain terminal elevators with permanent storage capacity of 2.5 million bushels and to grain storage elevators with permanent grain storage of 1 million bushels. This source is a grain terminal elevator according to the definitions in 40 CFR 60.301. The permanent storage capacity of the source is 1.05 million bushels. Therefore the rule does not apply.

State Rule Applicability

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

The two grain legs and the dryer are subject to 326 IAC 5-1-2 (Visible Emission Limitations) because it is not regulated by 326 IAC 12 (New Source Performance Standards). Pursuant to this rule, 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% opacity in 24 consecutive readings.
- (b) Visible emission shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

326 IAC 6-3 (Process Operations)

The two grain legs and the dryer are subject to 326 IAC 6-3 (Process Operations). Emissions from the dryer shall not exceed the allowable particulate matter (PM) emission rate of 49.5 pounds per hour. This allowable emission rate is based on a throughput rate of 84 tons per hour. Particulate matter (PM) emissions shall be considered in compliance provided that:

- (a) good housekeeping and equipment maintenance procedures are implemented.
- (b) emissions are minimized in receiving, handling, and shipping operations by appropriate methods. These may include but need not be limited to, dust collection systems, windscreens, baffles, restricted hopper openings, enclosed transfer points, flexible drop spouts and/or sleeves,
- (c) no visible accumulation of particulate matter beyond the plant property line, and
- (d) emissions do not violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 2-11-3(b)(1) (Permit by Rule for Grain Elevators)

The entire source has agreed to comply with this permit by rule in order to avoid being regulated by 326 IAC 2-1-4. Pursuant to this rule the source will limit its annual throughput to 11.2 million bushels of grain. This is equivalent to an emission rate of 40.0 tons per year from the grain operations. The source shall also comply with the following:

- (a) No later than thirty (30) days after the beginning of each calendar year the permittee shall demonstrate that the source is in compliance with the limit by providing throughput records for the previous twelve (12) months.
- (b) Not later than thirty (30) days after receipt of a written request by the department or the U.S. EPA, the permittee shall demonstrate that the source is in compliance with the limit by providing throughput records for the previous twelve (12) months.
- (c) The source shall operate and properly maintain air pollution control devices at the source.
- (d) The source shall follow generally accepted industry work practices to minimize emissions of regulated pollutants.
- (e) The source shall not discharge air pollutants so as to create a public nuisance.

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)].

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.

- (a) None of these listed air toxics will be emitted from this proposed construction.

Conclusion

The construction of the grain receiving legs and dryer will be subject to the conditions of the attached proposed **Construction Permit No. CP-073-8769-00010**.