



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
BUTLER COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-02748

DATE: 1/29/2004

Butler Dehy, Inc.
Todd Watson
P.O. Box 177 1830 Hamilton-Cleves Road
Ross, OH 45061

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

HCDES



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: 1/29/2004
Effective Date: 1/29/2004**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-02748

Application Number: 14-02748
APS Premise Number: 1409040713
Permit Fee: **\$0**
Name of Facility: Butler Dehy, Inc.
Person to Contact: Todd Watson
Address: P.O. Box 177 1830 Hamilton-Cleves Road
Ross, OH 45061

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1830 Hamilton-Cleves Road
Hamilton, Ohio**

Description of proposed emissions unit(s):
30 mmBtu/Hr Natural Gas or Oil-Fired Sludge Drying Operation, Administrative Modification to PTI 14-02748, issued January 21, 1993.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.


Ohio Environmental Protection Agency

Director

Butler Dehy, Inc.
PTI Application: 14-02748
Modification Issued: 1/29/2004

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Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

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representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

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Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or

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modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

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- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	11.8
PM10	11.8
SO2	38.4
NOx	18.4
CO	10.8
OC	2.9

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
P001 - 30 MMBTU/Hr Natural Gas/Oil-Fired Sludge Drying Operation with Scrubber - Modification	OAC rule 3745-31-05(A)(3)	40 CFR Part 61, Subpart E
		OAC rule 3745-17-07(A)
		OAC rule 3745-17-11
		OAC rule 3745-18-06

Butler**PTI A****Modification Issued: 1/29/2004**Emissions Unit ID: **P001**

Applicable Emissions
Limitations/Control Measures

2.7 lbs PM/hr*
 2.7 lbs PM10/hr*
 0.51 lb SO₂/MMBTU
 0.14 lb NO_x/MMBTU*
 0.08 lb CO/MMBTU*
 0.66 lb OC/hr*

11.8 TPY PM*
 11.8 TPY PM10*
 38.4 TPY SO₂
 18.4 TPY NO_x*
 10.8 TPY CO*
 2.9 TPY OC*

*The emissions limitation(s) outlined above are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

The requirements of this rule also include compliance with the requirements of 40 CFR Part 61, Subpart E.

See term A.2.a

The emission limitation specified by this rule is less stringent than the emission limitation established

pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** Mercury emissions from this emissions unit shall not exceed 3.2 kilograms (7.1 lbs) of mercury per 24-hour period pursuant to 40 CFR 61.52(b).
- 2.b** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a scrubber, emissions limitations and fuel oil usage limitations.
- 2.c** The application and enforcement of the provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 61, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 61 are also federally enforceable.

B. Operational Restrictions

- 1.** The maximum annual No. 2 fuel oil usage for this emissions unit shall not exceed 1,075,000 gallons.
- 2.** No changes in the operation of the emissions unit shall be made after a stack test or sludge test has been conducted which would potentially increase mercury emissions above the level determined by the most recent stack test or sludge sampling analyses, until the new mercury emission level has been estimated and the results reported to Hamilton County Department of Environmental Services, Air Quality Management Division pursuant to term E.3.
- 3.** The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.1.

C. Monitoring and/or Recordkeeping Requirements

- 1.** The permittee shall maintain monthly records of the amount of No. 2 fuel oil used in this emissions unit.
- 2.** The permittee shall retain records of emission test results, sludge sampling, test reports, and other data needed to determine total emissions of mercury (see term E.3) for a minimum of five years.
- 3.** For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same

supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294,) or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the

Emissions Unit ID: **P001**

tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBTU). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).]

D. Reporting Requirements

1. The permittee shall submit reports of the mercury emissions testing data conducted pursuant to term E.3. below. An exceedance shall be reported within 45 days of the emissions test that resulted in an emissions limit exceedance.
2. The permittee shall submit annual reports, to Hamilton County Department of Environmental Services, Air Quality Management Division, which identify any exceedance of the No. 2 fuel oil usage limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 30th of each year and cover the previous 12 calendar months.
3. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record which shows a deviation of the allowable sulfur dioxide limitation based upon the calculated sulfur dioxide emission rates from Section C.3 above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

E. Testing Requirements

1. Emission Limitation(s):
 2.7 lbs PM/PM10/hour
 0.66 lb OC/hr

Applicable Compliance Method(s):

Compliance with the PM/PM10 and OC emission limitations outlined in this permit shall be demonstrated by the manufacturer emission factors, stack test data, control efficiencies, and the operational parameters as submitted in the PTI application 14-2748 submitted 07/02/1992.

If required, the permittee shall demonstrate compliance with the PM emission limitations through

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PTI A

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emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5.

If required, the permittee shall demonstrate compliance with the PM10 emission limitations through emission tests performed in accordance with 40 CFR Part 51, Appendix M, Methods 1 through 4 and 201.

If required, the permittee shall demonstrate compliance with the OC emission limitations through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

2. Emission Limitation(s):
0.51 lb SO₂/MMBTU
0.14 lb NO_x/MMBTU
0.08 lb CO/MMBTU

Applicable Compliance Method:

Compliance with the SO₂, NO_x, and CO emission limitations outlined in this permit shall be based on the AP-42, Fifth Edition, Section 1.3 for Fuel Oil Combustion, Table 1.3-1, and Section 1.4 for Natural Gas Combustion, Table 1.4-1 and 1.4-2, revised 1998, or the most recent emission test data.

3. Emission Limitation:
3.2 kilograms of mercury per 24-hour period

Applicable Compliance Method:

Annual emission tests shall be conducted to determine compliance with 40 CFR Part 61, Subpart E for mercury emissions by either of the following methods:

- a. Stack sampling by Method 101A of Appendix B and paragraph 61.53(d) of the above code;
- b. Sludge sampling by Method 105 of Appendix B and paragraph 61.54 of the above code.

Samples shall be taken over such a period as necessary to determine accurately the maximum emissions which will occur in a 24-hour period.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the

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test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

All samples shall be analyzed and mercury emissions shall be determined within 30 days after the emissions test. Results shall be reported to the Hamilton County Department of Environmental Services, Air Quality Management Division within 15 calendar days following the date such determination is completed. Reports shall contain the following information if the sludge sampling method is performed:

- a. the mercury concentration of the sludge on a dry solids basis, Ug/g;
- b. sludge charging rate, kg/day;
- c. weight fraction of solids in the collected sludge; and
- d. mercury emissions in grams per day.

If mercury emission test results, demonstrated by either stack sampling or sludge sampling according to the above methods, do not exceed 1600 grams (3.5 lbs) of mercury per 24-hour period, the permittee may apply for a reduced emission testing schedule through a written request to Hamilton County Department of Environmental Services, Air Quality Management Division.

4. When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.
5. Compliance with the fuel oil usage limitation in term B.1 shall be demonstrated by the recordkeeping in term C.1.
6. Emission Limitation(s):

11.8 TPY PM
11.8 TPY PM10
38.4 TPY SO₂
18.4 TPY NO_x
10.8 TPY CO

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Butler

PTI A

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2.9 TPY OC

Butler**PTI A****Modification Issued: 1/29/2004**Emissions Unit ID: **P001**

Applicable Compliance Method:

Compliance with the PM, PM10 and OC emission limitations outlined in this permit shall be determined by multiplying the hourly emissions limit by 8760 hours per year then dividing by 2000 lbs per ton.

Compliance with the NOx and CO emission limitations outlined in this permit shall be determined by multiplying the lb/MMBTU emissions limit by 30 MMBTU/hour then 8760 hours per year then dividing by 2000 lbs per ton.

Compliance with the SO2 emission limitations outlined in this permit shall be determined by the fuel oil sulfur content limits and fuel oil usage as outlined in terms C.1 and C.3.

F. Miscellaneous Requirements

1. If probable cause exist indicating the source is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3745-15-07, the owner or operator of this emissions unit shall be required to submit and implement a control program which will bring this source into compliance.
2. The terms and conditions of this permit to install shall supercede the terms and conditions of permit to install (PTI)14-02748 as issued on January 21, 1993.