



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
COLUMBIANA 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: 02-17287

DATE: 1/16/2003

Redbud Company, The
Rosemary Lacher
PO Box 389 4719 Industrial Rd
Lisbon, OH 44432

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 1/16/2003
Effective Date: 1/16/2003**

FINAL PERMIT TO INSTALL 02-17287

Application Number: 02-17287
APS Premise Number: 0215000300
Permit Fee: **\$200**
Name of Facility: Redbud Company, The
Person to Contact: Rosemary Lacher
Address: PO Box 389 4719 Industrial Rd
Lisbon, OH 44432

Location of proposed air contaminant source(s) [emissions unit(s)]:
**13629 White Rd
Madison Twp., Ohio**

Description of proposed emissions unit(s):
Ash disposal and conditioning area.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit 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 emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

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 Related to Monitoring and Record keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping 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 record keeping 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

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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

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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>
PE	61.4

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>	<u>Applicable Emissions Limitations/Control Measures</u>
<p>F002 - Approved Flyash/bottom Ash Disposal Site Activities, to Include Ash Disposal and Conditioning Area</p> <p>Ash disposal operations: including topsoil removal, overburden removal, ash load-out, compacting, daily soil cover and cell capping.</p>	<p>OAC rule 3745-31-05(A)(3)</p>	<p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust shall be employed. The particulate emissions (PE) rate shall not exceed 61.4 tons/year.</p>
	<p>OAC rule 3745-17-07(B)(7)(b)</p>	<p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B)(7)(b).</p>
	<p>OAC rule 3745-17-08(B)</p>	<p>See Sections A.2a. through A.2e.</p>
		<p>Visible PE from this emissions unit shall not exceed 20% opacity as a 6-minute average.</p>
		<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

2. Additional Terms and Conditions

- 2a. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

topsoil removal
overburden removal
ash load-out of conditioned, wet ash
ash load-out of unconditioned, dry ash
compacting conditioned, wet ash
daily soil cover
cell capping

2b. Ash may be shipped and received as follows:

- i. Ash that is preconditioned at the point of generation shall have a moisture content between 15 and 25 percent prior to transport to this facility. All vehicles hauling preconditioned ash and other materials shall be closed, covered, or tarped coming to or leaving the facility.
- ii. All western ash (Class C) and any other ash that is not preconditioned at the point of generation shall be pneumatically pumped into a completely enclosed airtight pneumatic tanker truck at the generating facility. All ash received at the facility dry shall be conditioned while unloaded through use of a educator or water-canon-type system.

2c. The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

topsoil removal & overburden removal - treatment with water and/or any other suitable dust suppression chemicals.

ash load-out of conditioned, wet ash - unload ash onto a level surface and minimize free-fall distance of ash from the trucks when unloading so as to minimize or eliminate visible emissions of fugitive dust.

ash load-out of unconditioned, dry ash - unload ash from tanker trucks via hoses with airtight connections; and mixing of ash with water in an enclosed "educator" into the designated containment area.

compacting conditioned, wet ash - all ash which has been placed shall be compacted and

covered with dirt or bottom material of sufficient size and density that will not become wind blown or geotextile materials by the end of each "working day". The ash/cover material shall be watered as needed during spreading, compacting and covering activities. Exposed ash shall be watered as needed to minimize or eliminate fugitive dust.

cell capping - seeding and/or revegetation of each section of the disposal area, upon cell completion.

all operations - no operations shall occur during periods of sustained high winds of 30 miles per hour (MPH) or greater, unless the material has been conditioned to prevent fugitive dust emissions from becoming airborne.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2d. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2e. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08(B) and 3745-31-05(A)(3).

B. Operational Restrictions

- 1. This facility shall be used exclusively for ash disposal. The receipt or disposal of asbestos containing waste is prohibited. Salvage operations are prohibited. Open burning of any materials is prohibited.

C. Monitoring and/or Record keeping Requirements

- 1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

topsoil removal - weekly.

overburden removal - weekly.

ash load-out of conditioned, wet ash - daily.
ash load-out of unconditioned, dry ash - daily.
compacting conditioned, wet ash - daily.
daily soil cover - daily.
cell capping - daily, when cell capping operations are occurring.

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information regarding fugitive dust control measures:
 - a. The date and reason any required inspection was not performed;
 - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. The dates the control measure(s) was (were) implemented; and
 - d. On a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
5. The permittee shall maintain daily records of the ash shipments received in tons.
6. The permittee shall maintain monthly records of the following information:
 - a. Hour meter readings or vehicle miles for each piece of equipment operated on the site in hours/month or miles, as available.
 - b. The number and type of passenger and haulage vehicles that enter and leave the facility.

- c. Sources from which ash is received.
7. The facility shall install and maintain a weather station capable of detecting wind speed on an ongoing basis. The weather station shall be connected to an audible alarm which will sound any time the wind speed is at or above 30 MPH.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences regarding fugitive dust control measures:
 - a. Each day during which an inspection was not performed by the required frequency; and
 - b. Each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit annual reports of the following information:
 - a. The sum total of ash received for the year in tons.
 - b. Hour meter readings or vehicle miles for each piece of equipment operated on the site in hours/month or miles, as available.
 - c. The number and type of passenger and haulage vehicles that enter and leave the facility.
 - d. Sources from which ash is received.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation: 20% opacity of visible PE as a 6-minute average.

Applicable Compliance Method: Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed in July, 2000, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.
 - b. Emission Limitation: 61.4 TPY PE.

Emissions Unit ID: F002

Applicable Compliance Method: Compliance may be determined based upon a one-time calculation of the facility's potential to emit using the following equation(s):

- i. Determination of the PE rate from all bulldozing operations, to include topsoil and overburden removal, compacting wet, conditioned ash, and soil cover or grading operations :

$$E(TP) = EF \times H \times (1 - CE)$$

where:

E(TP) = the PE rate from topsoil and overburden removal, in lbs/year.

EF = emission factor for bulldozing overburden in lb/hr as found in Ch. 11.9 (table 11.9-1, issued 7/98), where:

$$EF = 5.7 \times (s)^{1.2} / M^{1.3}$$

where:

s = the average silt content of materials handled, as found in AP-42, Table 13.2.4-1 (1/95) of 7.5%.

M = the average moisture content of the top soil and overburden, assumed to be 5.5%.

$$EF = 7.0 \text{ lb/hr}$$

H = actual operating hours of facility bulldozers per yr.

CE = control efficiency of dust control measures (CE = 80%).

The values of s and M adequately account for the silt and moisture content of the ash.

Potential emissions from this part of the emissions unit has been calculated as 122,640 lb/yr.

- ii. Determination of the PE rate from ash load out:

$$E(AL) = [\text{summation of } W_{ali} \times EF_{ali}] \times (1 - CE1i) \times (1 - CE2i) .$$

where:

E(AL) = the PE rate from ash loading operations, in lbs/year.

i = the ash type, which is either wet, conditioned ash (usually class F) or is dry, unconditioned ash (usually class C).

W_{ali} = the weight of ash type " i " loaded out, in tons/year.

E_{Fali} = the emissions factor for ash type " i ", in lbs PE generated/ton of ash type " i " loaded out.

$E_{Fali} = k \times 0.0032 \times [(U/5)^{1.3}/(M/2)^{1.4}]$, as noted in equation 1 of AP-42, chapter 13.2.4 (1/95).

where:

$k = 0.74$ for $< 30 \mu\text{m}$ diameter particles.

U = mean wind speed, 10 mph.

M = moisture content, average of 90% for unconditioned ash after it mixes with water in educator; and M_{wet} = moisture content, 25% for conditioned ash, values taken from the application.

CE_{1i} = efficiency of first dust control measure for ash type, i . Use $CE_{1wet} = 70\%$ per

Table 2.4-2 of RACM (9/80) for wet suppression, and use $CE_{1dry} = 90\%$ for educter use.

CE_2 = efficiency of second control measure, limiting drop height. Use $CE_2 = 12.5\%$

per Table 2.1.2-8 of RACM (9/80).

Potential emissions from this part of the emissions unit has been calculated as 71.7 lb/yr.

- iii. Determination of the total PE rate, E(T):

$$E(T) = [E(TP) + E(AL)] * \text{ton}/2,000\text{lb, as tons per year}$$

$$E(T) = [(122,640) + (71.7)] * \text{ton}/2,000\text{lb} = 61.4 \text{ tons per year as this emissions unit's potential to emit.}$$

F. Miscellaneous Requirements

1. Pursuant to the authority in ORC section 3704.03(L), any representative of the Director may, upon presentation of proper identification, enter at any reasonable time upon any portion of the property where this landfill is located, including any improvements thereon, to make inspections, take samples, conduct tests and examine records or reports pertaining to any emissions of air contaminants and any monitoring equipment, emissions control equipment or methods. No operator or agent of this landfill shall act in any manner to refuse, hinder, or thwart this legal right of entry.
2. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in the following permits to install for the listed emissions units:
 - a. PTI number 17-1454 issued December 6, 1995, emissions unit F002
 - b. PTI number 17-1466 issued May 1, 1996, emissions unit F006

NEW SOURCE REVIEW FORM B

PTI Number: 02-17287 Facility ID: 0215000300

FACILITY NAME Redbud Company, The

FACILITY DESCRIPTION Ash disposal and conditioning area. CITY/TWP Madison Twp.

SIC CODE 4953 SCC CODE 50300801 EMISSIONS UNIT ID F002

EMISSIONS UNIT DESCRIPTION Approved Flyash/bottom Ash Disposal Site Activities, to Include Ash Disposal and Conditioning Area

DATE INSTALLED 1994

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	na	61.4	na	61.4
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination Best engineering judgement, similar sources, use of water as dust control measure.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____