Department of
Environmental Protection

Jeb Bush
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Colleen M. Castille
Secretary

PERMITTEE:

Madison County Public Works Department
Post Office Box 237
Madison, Florida 32341

I.D. Number:	7775321
Permit/Cert Number:	7775321-001-AC
Date of Issue:	August 4, 2006
Expiration Date:	August 4, 2007
County:	Madison
Latitude/Longitude:	Site 1 - 30º30'18"N; 83º23'52"W
	Site 2 - 30º27'19"N; 83º23'40"W
UTM:	Site 1 - E- (17) 269.9; N-3377.0
	Site 2 - E- (17) 270.1; N-3371.5
Project:	Initial Air Construction Permit

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-210, 62-212, 62-272, 62-296, 62-297 and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

PROJECT

For the construction of a relocatable air curtain incinerator for the combustion of land clearing debris, yard waste and other clean wood debris.

FACILITY DESCRIPTION

This air curtain incinerator will burn the yard waste (trees, limbs and leaves) generated by the public and collected from solid waste/recycling center throughout Madison County.
Definition of Air Curtain Incinerator [Rule 62-210.200(16), F.A.C.]: A portable or stationary combustion device that directs a plane of high velocity forced draft air through a manifold head into a pit with vertical wall in such a manner as to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain.

The figure above is the process flow diagram for an air curtain incinerator and is for information purpose only.

(1) Air curtain machine manifold and nozzles directing high velocity air flow into trench.
(2) Airflow forms a high velocity "curtain" over fire.
(3) Trench wall.
(4) Continued airflow over-oxygenates fire keeping temperature high. Higher temperatures provide a cleaner and more complete burn.
(5) Material to be burned.

Incineration Rate: The maximum incineration rate is 8 tons/hour. The actual hourly rate is immeasurable since the facility does not have a weight station onsite. The amount of yard wastes burned can be determined on a weekly basis by obtaining the record from Madison County Solid Waste Department.

Potential to Emit: Emissions factors from Los Alamos National Laboratories and AP-42 are used to estimate the potential emissions of both the wastes burning and engine operation. Table below shows the emissions factors used and the potential emissions of the unit.

Pollutant	Wood Burning Emissions Factor (lb/ton of wood waste)	PTE of Wood Waste Burning (Ton/year)	Engine Operation Emissions factor (lb/hp-hr)	PTE of Engine Operation (Ton/year)	Total Emissions (Ton/year)
PM/PM10	2.0	24.0	0.0022	0.2	24.2
SO2	0.1	1.2	0.0021	0.2	1.4
NOx	2.0	24.0	0.031	2.3	26.3
CO	1.4	16.8	0.0067	0.5	17.3
VOC	3.8	45.6	0.0025	0.2	45.8
HAPs	0.4	4.2	0.000046	0.0	4.2

The PTE estimations are based on maximum operational hours of 3000 hours/year and maximum incineration rate of 8 tons/hour.

Compliance: Since the hourly incineration rate is immeasurable on site, the owner or operator shall load as much wood waste as possible into the pit without protruding above the air curtain in order to demonstrate compliance with the opacity standards at the maximum incineration rate during the performance test.

OPERATING LOCATION

This is a relocatable unit that operates at the following locations.

Site 1: Rocky Ford Burn Site located at 2505 NE Rocky Ford Road, Madison, Madison County, Florida.
Site 2: West Farm Burn Site located at corner of Old County Camp Road and SE Ash Way, Madison, Madison County, Florida.

REGULATORY CLASSIFICATION

The facility is classified as a natural minor air pollution source. The facility is subject to F.A.C. Chapter 62-296.410, for Air Curtain Incinerator. The facility is also subject to 40 CFR 60, Subpart CCCC-Air Curtain Incinerators. The facility is not subject to any requirements of NESHAP.

E.U. ID No.	Brief Description
01	Air Curtain Incinerator

RULE APPLICABILITY

The facility is subject to the following regulations:

- **Chapter 62-4, F.A.C. - Permits**
- Rule 62-4.160, F.A.C.- General Permit Conditions
- Rule 62-4.130, F.A.C. – Plant Operation - Problems
- **Chapter 62-210, F.A.C. – Stationary Sources – General Requirements**
- Rule 62-210. 300, F.A.C. – Permits Required
- Rule 62-210. 350, F.A.C. – Public Notice and Comment

- **Chapter 62-256, F.A.C. – Open Burning**
- **Chapter 62-296, F.A.C. – Stationary Sources – Emissions Standards**
- Rule 62-296.320, F.A.C.- General Pollutant Emissions Limiting Standards
- Rule 62-296.401 (7), F.A.C. – Air Curtain Incinerator
- **Chapter 62-297, F.A.C. – Stationary Sources – Emissions Monitoring**
- Rule 62-297.310, F.A.C. – General Test Requirements
- **New Source Performances Standards (NSPS) 40 CFR 60 Subpart CCCC – Air Curtain Incinerator**

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

Application for Air Permit-Non Title Source received March 27, 2006.
Electronic mail received April 7, 2006.
Request for Additional Information letter dated April 18, 2006.
Additional information received May 12, 2006.

PERMITTEE:	I.D. Number:	7775321
Madison County Public Works Department	Permit/Cert:	7775321-001-AC
Post Office Box 237	Date of Issue:	August 4, 2006
Madison, Florida 32341	Expiration Date:	August 4, 2007

GENERAL CONDITIONS [RULE 62-4.160, F.A.C.]:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   a. Have access to and copy any records that must be kept under the conditions of the permit;

   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

GENERAL CONDITIONS [RULE 62-4.160, F.A.C.]:

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. a description of and cause of non-compliance; and

   b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

   ( ) Determination of Best Available Control Technology (BACT)
   ( ) Determination of Prevention of Significant Deterioration (PSD)
   (x) Compliance with New Source Performance Standards (NSPS)

GENERAL CONDITIONS [RULE 62-4.160, F.A.C.]:

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

    - the date, exact place, and time of sampling or measurements;
    - the person responsible for performing the sampling or measurements;
    - the dates analyses were performed;
    - the person responsible for performing the analyses;
    - the analytical techniques or methods used; and
    - the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

1. Hours of Operation: The hours of operation are restricted to 3000 Hours per year.
   [Rules 62-4.160(2), 62-210.200(PTE), F.A.C. and applicant's request]

2. Hours of Operation: The air curtain incinerator shall not be started before sunrise, and the charging must be completely stopped before sunset.
   [Rule 62-296.401(7)(h), F.A.C.]

3. Maximum Operation Rate: The maximum incineration rate of the land clearing debris is 8 tons per hour.
   [Rules 62-4.160(2), 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

4. Emission Limits: The permitted maximum allowable emissions rates are as follows:

Pollutant	Emissions Limitation	Rule
Visible Emissions (VE)	5 % opacity or less shall be allowed, except that an opacity of up to 20 % shall be permitted for not more than three minutes in any one hour.	Rule 62-296.401 (7)(a), F.A.C.
	10 % or less (6 minute average)	40 CFR 60.2250(a)(1)
	≤ 35 % opacity, averaged over a 6-mimute period during startup Note (1)	62-296.401 (7)(b) 40 CFR 60.2250(a)(2)

Note (1) Startup period shall not exceed the first 30 minutes of the operation.

5. The general excess emissions rule, Rule 62-210.700, F.A.C. shall not apply to air curtain incinerators pursuant to Rule 62-296.401 (7)(c), F.A.C.

6. Except during malfunction, the opacity limitations apply at all time, and each malfunction shall not exceed 3 hours.
   [40 CFR 60.2250(b)]

7. Pit Dimensions: The pit dimensions are limited to no more than 12 feet wide, between 8 and 15 feet deep, and no longer than the length of the manifold.
   {Rule 62-296.401(7)(d), F.A.C.]

8. Setback: Air curtain incinerator must be located at least 300 feet from any pre-existing occupied building located off site.

9. Allowable Burning Materials: The only materials that can be burned are wood wastes consisting of trees, logs, large brush, stumps relatively free of soil, unbagged leaves and yard trash, tree surgeon debris, and clean dry lumber such as pallets. Air curtain incinerator can only burn 100 percent wood waste, 100 percent clean lumber, 100 percent mixture of only wood waste, clean lumber, and/or yard waste.
   [Rule 62-296.401 (7)(e), F.A.C. and 40 CFR 60. 2245(b)]

10. Prohibited Burning Materials: The burning of sawdust, paper, trash, tires, garbage, plastics, liquid wastes, chemically treated or painted wood, and other similar materials shall be prohibited.
    [Rule 62-296.401(7)(f), F.A.C.]

SPECIFIC CONDITION:

11. Operation: The burning materials shall not be loaded into the air curtain incinerator in such that it will protrude above the air curtain.
[Rule 62-296.401(l), F.A.C.]

12. Operation: Ash shall not be allowed to build up in the pit to higher than 1/3 the pit depth or to the point where the ash begins to impede combustion, whichever occur first.
[Rule 62-296.401 (m), F.A.C.]

13. Startup Fuel: Only virgin oil, natural gas, or liquefied petroleum gas may be used to start the fire. The use of waste oil, chemicals, gasoline, or tires is expressively prohibited.
[Rule 62-296.401(7)(g), F.A.C.]

14. Operational & Maintenance Guide: A detailed operation and maintenance guide must be available to the operators at all times, and the permittee must provide the proper training to all operators before they work at the incinerator.
[Rule 62-296.401(7)(n), F.A.C.]

15. General Visible Emissions Standard (Facility Wide): Except for emissions unit that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharge into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on Ringelmann Chart (20% opacity). Compliance shall be determined by EPA Method 9 upon Department's request, incorporated and adopted by reference in Rule 62-297, F.A.C. [Rule 62-296.320(4)(b) 1., F.A.C.]

16. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. Objectionable odor, is an odor present in the outdoor atmosphere which by itself or by combination with other odors, is or maybe harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which create a nuisance.
[Rule 62-296.320(2) and 62-210.200 (181), F.A.C.]

17. Unconfined Particulate Matter (Facility Wide): No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of material; construction, alteration, demolition or wrecking; or industrially activity such as loading, unloading, storing and handling; without taking reasonable precaution to prevent such emissions. Reasonable precautions may include but are not limited to the followings:
    a. Paving and maintenance of roads, parking areas and yards.
    b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
    c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
    d. Removal of particulate matter from paved roads and/or other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
    e. Landscaping or planting of vegetation.
    f. Use of hoods, fans, filters and similar equipment to contain, capture and prevent particulate matter.
    g. Enclosure or covering of conveyor systems.
    h. Confining abrasive blasting where possible.

    [Rule 62-296.320(4)(c), F.A.C.]

18. The owner or operator shall comply with the open burning requirements of Rule 62-256.300, 62-256.500, 62-256.600 and 62-256.700, F.A.C.

SPECIFIC CONDITION:

19. The owner or operator shall comply with the applicable requirements of 40 CFR 60, Subpart A- General Provisions.
[40 CFR 60.1 (a)]

20. The open burning authorized by the department does not relieve the owner or operator from complying with any other applicable law, rules, or ordinances, including Chapter 590, Florida Statues, and rules of the Division of Forestry.
[Rule 62-256.500, F.A.C.]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

21. Initial Compliance Test: The owner and operator shall conduct the initial opacity test(s) within 60 days after the air curtain incinerator reach the charge rate at which it will operate, but no later than 180 days after its initial startup, facility shall conduct performance test(s) and furnish the Department a written report of the results of such performance test(s). A thirty-minutes opacity test shall be conducted during startup and a sixty-minutes opacity test shall be conducted during normal operation. Compliance tests shall be conducted on each burn site.
[Rule 62-297.310 (7)(a), F.A.C., 40 CFR 60.2255 and 40 CFR 60. 8(a)]

22. Compliance Testing: Test the emissions units with the test method specified below no more than 12 calendar months following the date of the previous date. [40 CFR 60.2255(c)]

Emissions Unit	Pollutant	Test Method
001	VE	EPA Method 9

23. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

24. Compliance Test Procedures: Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.414(3)(b), F.A.C.]

25. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
[Rule 62-297.310(7), F.A.C.]

SPECIFIC CONDITION:

NOTIFICATION, REPORTING AND RECORDKEEPING

26. Compliance Test Notification: The owner or operator of an affected facility shall provide the Department at least 30 days prior notice of any performance test.
[40 CFR 60.8(d)]

27. Initial Startup Notification: The owner or operator shall notify the Department of the Actual Initial Startup Date postmarked within 15 days after such date.
[40 CFR 60.7(a)3.]

28. Construction Notification: The owner or operator shall notify the Department of the date construction of the unit is commenced postmarked no later than 30 days after such date.
[40 CFR 60.7(a)1.]

29. Recordkeeping: the owner or operator shall keep records of the results of all initial and annual opacity tests onsite in either paper copy or electronic format for at least 5 years and make all the records available for an inspector's onsite review.
[40 CFR 60.2260(b) & (c)]

30. Records Keeping: The owner or operator shall also maintain the following records and retain them on site for five years.
- The date and times of air curtain incinerator operations.
- Volume of land clearing debris combusted.

31. Compliance Report Submittal: Reports of the required compliance tests shall be submitted as soon as practical but no later than 45 days after the last test is completed. Each test report shall include the maximum input / production rate at which this source was operated since the most recent test.
[Rule 62-297.310(8)(b), F.A.C.]

SOLID WASTE CONDITIONS (i.e. conditions provided by the Department's Solid Waste Section)

In addition to the rules and regulations that the air portion of the permit is issued under, the solid waste portion of the permit is issued under Chapter 403, Florida Statutes, and Florida Administrative Code (FAC) Chapters 62-4 and 62-701.

32. Acceptable Waste: The facility shall be limited to accepting land clearing debris as defined by FAC Rule 62-701.200(62). Any other waste is prohibited waste.

33. Access control: The facility shall control access to the facility and shall maintain the access control structures such as the field fence and gate.
[Rule 62-701.803 (7), F.A.C.]

SPECIFIC CONDITION:

34. Non-authorized Activities:

    a. This permit does not authorize any waste disposal activities; no waste storage shall be within the seasonal high or low groundwater table. [Rule 62-701.300(2)(e), F.A.C.]

    b. No waste shall be placed within 100 feet of any existing or approved off-site potable water well; no setback is required from on-site water well. [Rule 62-701.300(12)(a), F.A.C.]

    c. No waste shall be placed within 50 feet of any natural or artificial body of water, including wetlands within the jurisdiction of the Department, except bodies of water contained completely within the property boundaries of the disposal site and that do not have a discharge. [Rule 62-701.300(12)(b), F.A.C.]

35. Spotters: At all times the facility is accepting land clearing debris, a trained spotter shall be present to inspect the waste as it is being discharged. The spotter shall inspect the loads for unacceptable materials that may inadvertently be accepted and shall remove from the waste stream and place into appropriate containers for disposal at a permitted facility.
    [Rule 62-701.803(8), F.A.C.]

36. Handling and Removal of Prohibited Waste: The facility shall remove prohibited waste from the waste being discharged and shall remove it to covered roll-off containers upon discovery. Any containers containing putrescible waste shall have its contents removed within 48 hours. Nonputrescible waste shall be removed within 30 days or when the storage containers become full, whichever occurs first. The prohibited waste shall be removed to the appropriate authorized facilities.
    [Rule 62-701.803(5), F.A.C.]

37. Hazardous Waste: Any hazardous waste that is received by the facility shall be managed in accordance with the provision of FAC Chapter 62-730.
    [Rule 62-701.300(4), F.A.C.]

38. Training: The Permittee shall ensure that spotters employed at the facility are properly trained to operate the facility and to identify and properly manage any hazardous or other prohibited materials that are inadvertently received at the facility. The facility shall provide initial and continuing training for each employee in accordance with FAC Chapter 62-701.320(15). New employees shall complete the first training course available to them from the date of their employment but no longer than 90 days of the date of employment. Training Certification shall be kept in an office and shall be made available to the Department at the Department's request including during a routine site inspection.
    [Rule 62-701.300(15), F.A.C.]

ADMINISTRATIVE:

39. The I.D. No. and Project name for this source shall be used on all correspondence.

40. Any revision(s) to a permit (and application) must be submitted to the Department, in writing, and approved by the Department prior to implementation.

41. Modifications. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rule 62-210.300(1), F.A.C.]

42. New or Additional Conditions. For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
[Rule 62-4.080(1), F.A.C.]

43. A completed **Application for Air Permit –Non-Title V Source** (DEP Form No. 62-210.900(3), F.A.C.), shall be submitted to the Department at least 60 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.
[Rules 62-4.055 and 62-4.220, F.A.C.]

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Christopher L. Kirts, P. E.
District Air Program Administrator

"FILED, on this date, pursuant to Section 120.52, F.S., with the designated Department Clerk, receipt of which is hereby acknowledged."

Clerk

August 7, 2006
Date