FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

PERMITTEE:

Hicks' Land Clearing & Incinerator, LLC	Air Permit No.:	1090446-004-AO
3445 Old Moultrie Road, Lot A	Issuance Date:	November 21, 2014
St. Augustine, Florida 32086	Expiration Date:	November 21, 2019

Authorized Representative:

Mr. James Hicks, Owner

This permit authorizes the continued operation of the existing Air Curtain Incinerator to burn land clearing debris (Standard Industrial Classification No. 4953).). The burning site is located southwest of the intersection of County Rd 214 and Interstate I-95 in St. Johns County, St. Augustine, Florida. The coordinates of the facility are latitude: 29° 51' 16" North and Longitude: 81° 23' 49" West.

Directions to burn site: Head south on I-95 from Jacksonville to County Rd 214 in St. Johns County. Exit west on County Rd 214. The haul road leading to the burn site is located approximately 1000 feet west on County Rd 214. Turn south onto the haul road and proceed south to the burn site on south side of borrow pit.

This final permit is organized by the following sections.

Section 1: General Information
Section 2: Administrative Requirements
Section 3: Emissions Unit Specific Conditions
Section 4: Appendices

a. Appendix A. Citation Formats and Glossary of Common Terms;
b. Appendix B. General Conditions;
c. Appendix C. Common Conditions;
d. Appendix D. Common Testing Requirements;

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida

11/21/2014

Richard S. Rachal III, P.G. Date
Program Administrator
Waste and Air Resources Management Program

FILING AND ACKNOWLEDGEMENT & CERTIFICATE OF SERVICE

Filed on this date pursuant to § 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged. The undersigned hereby certifies that this Final Air Operation Permit (including the Notice and Technical Evaluation), and all copies were sent before the close of business on 11/21/2014 to the listed persons.

James Hicks, Owner, Hicks' Land Clearing & Incinerator, LLC (hicksaccounts@bellsouth.net)

_____ 11/21/2014
(Clerk) (Date)

FACILITY DESCRIPTION

Existing Facility

Air Curtain Incinerator: This is a stationary Air Curtain Incinerator and is equipped with a blower powered by an existing 152 H.P. Cummins (Model No. 6BT, 5.9L) Industrial Diesel Engine. The refractory lined firebox is approximately 30 feet long, 9 feet wide and 12 feet deep. The maximum volumetric air flow is approximately 50,000 cubic feet per minute (cfm). Utilizing proper firebox loading procedures and sufficient air flow to create an oxygen rich environment, fire box combustion temperatures may reach upwards of 2200 °F.

Definition of Air Curtain Incinerator [Rule 62-210.200(12), 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 below 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) Refractory wall.
(4) Continued airflow over-oxygenates fire keeping temperature high. Higher temperatures provide a cleaner and more complete burn.
(5) Material to be burned.

This facility is subject to regulation under:
Chapter 62-4, F.A.C. – Permits
Chapter 62-204, F.A.C. – Air Pollution Control – General Provisions
Chapter 62-210, F.A.C. – Stationary Sources – General Requirements
Chapter 62-212, F.A.C. – Stationary Sources – Preconstruction Review
Rule 62-296.401(7), F.A.C.- Air Curtain Incinerators
Rule 62-296.320(4), F.A.C. for Unconfined Particulate Matter and Visible Emissions.
Rule 62-297.310, F.A.C. General Compliance Test Requirements

The existing facility consists of the following emission unit.

Facility ID No. 1090446	
EU No.	**Emission Unit Description**
001	Air Curtain Incinerator

FACILITY REGULATORY CATEGORIES

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

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.

Non-Title V Air Permit Renewal Application received November 6, 2014

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District Waste and Air Resource Management Program, Florida Department of Environmental Protection (Department). The Northeast District's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256-7590. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office. The mailing address and phone number of the District Office is: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. The Compliance Authority's telephone number is 904/256-1700.

3. Appendices: The following Appendices are attached as part of this permit:

a. Appendix A. Citation Formats and Glossary of Common Terms;
b. Appendix B. General Conditions;
c. Appendix C. Common Conditions;
d. Appendix D. Common Testing Requirements;
e. Appendix E Subpart A of 40 CFR 60 – General Provision
f. Appendix F Subpart DDDD of 40 CFR 60

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-210, 62-212, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. 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, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.

[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. A completed **Application for Non Title V Air Permit Renewal** [DEP Form No. 62-210.900(4)] shall be submitted to the Department at least 60 days prior to the expiration date of this operation 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, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC REQUIREMENTS

Air Curtain Incinerator

This section of the permit addresses the following emissions unit.

Emissions Unit	Emissions Unit Description
001	Air Curtain Incinerator

PERFORMANCE RESTRICTIONS

1. **Hours of Operation:** The hours of operation are restricted to 2,184 Hours per year.

   [Rules 62-4.160(2), 62-210.200(PTE), F.A.C., Definitions- Potential to Emit (PTE); Permit No.1090446-001-AC]

2. **Maximum Operation Rate**: The maximum charging rate of this emissions unit is 7.5 tons per hour and shall not be exceeded without prior Department approval.

   [Rules 62-4.160(2), 62-210.200(PTE), F.A.C. and Permit No.1090446-001-AC]

3. **Opacity Limitations**: Within 60 days after the air curtain incinerator reaches the charge rate at which it will operate, but no later than 180 days after its initial startup, the owner or operator shall meet the two limitations specified in paragraphs (1) and (2) of this condition.

   (1) The opacity limitation is ≤ 10 percent (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values), except as described in paragraph (2) of this condition.

   (2) The opacity limitation is ≤ 35 percent (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) during the startup period that is within the first 30 minutes of operation.

   [Rule 62-204.800(9)(f)12., F.A.C. (incorporating 40 CFR 60.2860(a), (b)), Rule 62-296.401(7)(b)1, F.A.C.]

4. **Excess Emissions**: The general excess emissions rule, F.A.C. Rule 62-210.700, to handle startups, shutdowns, and malfunctions, shall not apply.

   [Rule 62-296.401(7)(b)1., F.A.C.]

5. **Prohibited Burning Materials**: The only materials that shall be burned in the air curtain incinerator are vegetative material and untreated wood, excluding sawdust. The air curtain incinerator shall not be used to burn any biological waste, hazardous waste, asbestos-containing materials, mercury-containing devices, pharmaceuticals, tires, rubber material, residual oil, used oil, asphalt, roofing material, tar, treated wood, plastics, garbage, trash or other material prohibited to be open burned as set forth in subsection 62-256.300(2), F.A.C. Only kerosene, diesel fuel, drip-torch fuel (as used to ignite prescribed fires), untreated wood, virgin oil, natural gas, or liquefied petroleum gas shall be used to start the fire in the air curtain incinerator. The use of used oil, chemicals, gasoline, or tires to start the fire is prohibited. [Rule 62-296.401(7)(b)3, F.A.C.]

6. <u>Operation</u>:

(a) In no case shall the air curtain incinerator be started before sunrise. All charging shall end no later than one hour after sunset. After charging ceases, air flow shall be maintained until all material within the air curtain incinerator has been reduced to coals, and flames are no longer visible. A log shall be maintained onsite that documents daily beginning and ending times of the charging.

(b) The material shall be loaded into the air curtain incinerator such that it will not protrude above the air curtain.

(c) Ash shall not be allowed to build up in the pit to higher than 1/3 of the pit depth or to the point where the ash begins to impede combustion, whichever occur first.

(d) The air curtain incinerator shall be attended at all times while materials are being burned or flames are visible within the incinerator.

[Rule 62-296.401(7)(b)5,6,8,9, F.A.C.]

7. <u>Setbacks</u>: The air curtain incinerator shall be located at least fifty (50) feet from any wild lands, brush, combustible structure, or paved public roadway.

[Rule 62-296.401(7)(b)7, F.A.C.]

8. <u>Earthen Trench Requirements</u>: The pit wall (width and length) shall be vertical, and maintain as such, so that combustion of the waste within the pit is maintained at an adequate temperature and with sufficient air circulation to provide enough residence time and mixing for proper combustion and control of emission. The following dimension for the pit must be strictly adhered to: no more than 12 feet wide, between 8 feet and 15 feet deep, and no longer than the length of the manifold. The pit shall not be dug within a previously active portion of a landfill.

[Rule 62-296.401(7)(b)2, F.A.C.]

9. <u>Emergency</u>: The air curtain incinerator may be used for the destruction of animal carcasses in accordance with the provisions of Rule 62-256.700(6), F.A.C. When using an air curtain incinerator to burn animal carcasses, untreated wood may also be burned to maintain good combustion.

[Rule 62-296.401(7)(b)4, F.A.C.]

10. <u>Operational & Maintenance Guide</u>: A detailed operation and maintenance guide must be available to the operators at all time, and the permittee must provide the proper training to all operators before they work at the incinerator. This guide shall be made available to the Department or for an inspector's onsite review upon request.

[Rule 62-296.401(7)(b)10, F.A.C.]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

11. **Visible Emissions – Compliance Test Method**: The reference test method for visible emissions shall be EPA Method 9, as described at 40 CFR 60, Appendix A-4, adopted and incorporated by reference at Rule 62-204.800, F.A.C.

    [Rule 62-204.800(9)(f)12., F.A.C. (incorporating 40 CFR 60.2865(a)), and Rule 62-296.401(7)(c)1, F.A.C.]

12. **Visible Emissions - Compliance Test Notification**: The owner or operator shall provide the Department at least 15 days prior notice of any performance test.

    [Rule 62-297.310(7)9., F.A.C.]

13. **Visible Emissions -Testing Duration**: The test shall consist of three hours (average of three 1-hour blocks consisting of ten 6-minute average opacity values).

    [Rule 62-204.800(9)(f)12., F.A.C. (incorporating 40 CFR 60.2860(a), (b))]

14. **Operation Rate During Compliance Test**: Testing of emissions should be conducted with the unit operating at capacity. Capacity is defined as 90-100% of rated capacity. If it is impractical to test at capacity, the unit may be tested at less than maximum capacity; in this case subsequent unit operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive calendar days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department.

    [Rule 62-297.310(2) & (2)(b), F.A.C.]

15. **Visible Emissions -Frequency of Testing**: The owner or operator shall have a performance test conducted for visible emissions annually.

    [Rule 62- 297.310(7)(a)4.a., F.A.C. and Rule 62-296.401(d)1, F.A.C.]

16. **New Trench Location:** The owner or operator of any air curtain incinerator subject to this subsection and using an earthen trench shall have a performance test conducted for visible emissions no later than thirty (30) days after it commences operation at any new trench location, and annually thereafter. However, if the air curtain incinerator will be operated for less than thirty (30) days at the new trench location, and the owner or operator has demonstrated compliance with the emissions limiting standards of paragraph 62-296.401(7)(b), F.A.C., through a visible emissions test conducted and submitted to the Department within the previous twelve (12) months, the requirement for testing within thirty (30) days of commencing operation at the new trench location shall not apply.

    [Rule 62-296.401(7)(d)2. F.A.C.]

17. **Compliance Test Procedures**: Test procedures shall conform to the procedures specified in Rule 62-297.310, F.A.C. All test results shall be reported to the Department in accordance with the provisions of Rule 62-297.310, F.A.C.

[Rule 62-296.401(7)(c)2., F.A.C.]

REPORTING AND RECORDKEEPING REQUIREMENTS

18. **Record Keeping**: The owner or operator shall keep the following records onsite in either paper copy or electronic format and shall be made available to the Department for an inspector's onsite review upon request:

a) The results of all initial and annual opacity tests.
b) Date and location of operation
c) Daily average hourly charging rate.
d. Daily Hours of operation for the unit.
e. Total hours of operation for the month, and for 12 consecutive
f. A log shall be maintained that documents daily beginning and ending times of charging

[Rule 62-204.800(9)(f)12., F.A.C. (incorporating 40 CFR 60.2870), Rule 62-296.401(7)(b)5, F.A.C. and Rule 62-4.070(3), F.A.C.]

19. **Record Keeping:**: Records of the results of all initial and annual visible emissions test shall be kept by the owner or operator in either paper copy or electronic format for at least five (5) years. These records shall be made available to the Department or for an inspector's onsite review upon request.

[Rule 62-296.401(7)(c)3, F.A.C., Rule 62-204.800(9)(f)12., F.A.C. (incorporating 40 CFR 60.2870(a), (b))]

20. **Test Report**: In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

[Rule 62-4.070(3), F.A.C., 62-210.200(PTE), F.A.C]

21. **Test Report Submittal Date**: The required test report shall be filed with the department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

[Rule 62-297.310(8)(b), F.A.C.]

FACILITY-WIDE CONDITION:

22. **Unconfined Particulate Matter**: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions.

Reasonable precaution to prevent emission of unconfined particulate matter at this facility may include but are not limited to:

a. Reduced speed for vehicular traffic.
b. Use of dust suppressants or wetting agents.
c. Use of paving or other asphaltic materials.
d. Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or wetting prior to sweeping.
e. Covering of trucks, trailers, front-end loader and other vehicles or containers to prevent spillage of particulate matter during transport.
f. Use of mulch, hydro seeding, grassing and/or other vegetative ground cover on barren areas to prevent or reduce particulate matter from being wind blown.
g. Use of hoods, fans, filters and similar equipment to contain, capture and prevent particulate matter.
h. Enclosure or covering of conveyors systems.
i. Sprinkling or otherwise wetting or conveyor systems.

[Rule 62-296.320(4)(c) 2., F.A.C.]

SOLID WASTE CONDITIONS (Permitting Note: 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.

23. **Solid Waste Storage**: The permittee shall ensure at all times that storage of the solid waste associated with the operation of the facility does not violate the prohibitions stated in F.A.C. Chapter 62-701.300.

24. **Acceptable Waste**: The facility shall be limited to accepting land clearing debris as defined by FAC Rule 62-701.200(56). Any other waste is prohibited waste.

25. **Access control**: Access to the facility shall be controlled by fencing or other effective barriers to prevent the disposal of waste other than authorized waste.

[Rule 62-701.803(5), F.A.C.]

26. **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)(d), 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.]

27. **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(6), F.A.C.]

28. 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(3), F.A.C.]

29. 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.]