

FINAL DETERMINATION

Blacklidge Emulsions, Inc., Plant #3

Air Construction Permit

Application Number

0570461-019-AC

Environmental Protection Commission of

Hillsborough County

Tampa, Florida

May 21, 2012

## FINAL DETERMINATION

The Environmental Protection Commission of Hillsborough County mailed a public notice package on April 18, 2012 that included Intent to Issue Air Construction Permit No. 0570461-019-AC to Blacklidge Emulsions, Inc., Plant #3 located at 2701 East 2<sup>nd</sup> Avenue, Tampa, Hillsborough County, FL 33605. The air construction permit authorizes the following modifications at Plant #3 and changes to Permit No. 0570461-017-AC: (1) Rename tanks T6, T8 and T9 to become S4, S1 and S2, respectively, and add an additional NG burner (1 MMBtu/hr) to each tank, for a total of two NG burners (2 MMBtu/hr) at each tank S1, S2 and S4; (2) Add one NG burner (1 MMBtu/hr) to the existing asphalt emulsion tank E4; (3) Relocate tank T6 (or future S4) to the same area with other S series tanks S1, S2 and S3; (4) Construct a new 8,800 gal soap tank (S3) with electric heat, which will be listed as a source exempt from permitting since there is no VOC emitted from this tank; (5) Remove the 2 MMBtu/hr hot oil heater and replace it with NG heaters.

The Public Notice of Intent to Issue was published on May 4, 2012 in the La Gaceta.

No comments have ever received since the Intent was published.

The final action of the Environmental Protection Commission of Hillsborough County is to issue the final permit.

ENVIRONMENTAL PROTECTION COMMISSION OF  
HILLSBOROUGH COUNTY, as Delegated by  
STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF PERMIT

Andy Esposito  
Plant Manager  
Blacklidge Emulsions, Inc., Plant #3  
2701 East 2<sup>nd</sup> Avenue  
Tampa, FL 33605

Re: Hillsborough County - AP

Dear Mr. Esposito:

Enclosed is Permit Number 0570461-019-AC for the modification of the asphalt tanks and heaters, and the elimination of the hot oil heater at Plant #3, issued pursuant to Section 403.087, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the EPC in the Legal Department at 3629 Queen Palm Dr., Tampa, FL 33619; 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 of Appeal must be filed within 30 days from the date this Notice is filed with the clerk of the EPC.

Executed in Tampa, Florida.

Sincerely,

Richard D. Garrity, Ph.D.  
Executive Director

RDG/KRZ/krz

cc: Dean H. Meyers, P.E. - General Environmental Engineering, Inc.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on \_\_\_\_\_ to the listed persons.

Clerk Stamp

FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated clerk, receipt of which is hereby acknowledged.

\_\_\_\_\_  
Clerk

\_\_\_\_\_  
Date

PERMITTEE:

Andy Esposito, Plant Manager  
Blacklidge Emulsions, Inc., Plant #3  
2701 East 2<sup>nd</sup> Avenue  
Tampa, Florida 33605

PERMIT/CERTIFICATION

Permit No.: 0570461-019-AC  
County: Hillsborough  
Expiration Date: April 30, 2013  
Project: Modification – Tanks, NG/Oil Heaters

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-204, 62-210, 62-212, 62-213, 62-296, 62-297, and Chapter 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 Environmental Protection Commission (EPC) of Hillsborough County and made a part hereof and specifically described as follows:

This permit authorizes the following modifications at Plant #3: (1) Rename tanks T6, T8, and T9 to become S4, S1, and S2, respectively, and add an additional natural gas (NG) burner (1 MMBtu/hr) to each tank for a total of two NG burners (2 MMBtu/hr) at each tank S1, S2, and S4; (2) Add one NG burner (1 MMBtu/hr) to the existing asphalt emulsion tank E4; (3) Relocate tank T6 (or future S4) to the same area with other S series tanks S1, S2 and S3; (4) Construct a new 8,800 gal soap tank (S3) with electric heat, which will be listed as a source exempt from permitting since there is no VOC emitted from this tank; and (5) Remove the 2 MMBtu/hr hot oil heater and replace it with NG heaters.

Blacklidge Emulsions, Inc., Plant #3 is an asphalt blending and mixing facility that produces paving asphalt products. The facility receives liquid asphalt cement and “off-spec” or unusable paving asphalt by tank truck and stores the asphaltic material in holding tanks, mixing tanks, or “cook-off” tanks. Tanks, T1, T2 and T3 are the “cook-off” tanks, T4 and T5 are for mixing and storage of recycled asphalt (RA). Tanks S1, S2 and S4 (identified as T8, T9 and T6 under Permit No. 0570461-017-AC) will store modified asphalt blend, and Tank S4 will be relocated to the same area with other S-series tanks. The 8,000 gallon tank, T7, stores flux oil. The new 8,800 gallon tank, S3, which will be constructed under this AC Permit, will store soap with electric heat. Both Tanks T7 and S3 were determined to be exempt from permitting pursuant to Rule 62-210.300(3)(b)(1), F.A.C.

The particulate matter and volatile organic compounds emitted from the heated asphalt cook-off, mixing, and holding tanks are controlled by the Air-Clear™ Fiber-Bed Mist Collection system and Carbon Adsorber Unit. An induced-draft fan located downstream of the carbon adsorber provides sufficient air flow through the air pollution and odor control system to evacuate the headspace of all heated asphalt tanks during tank loading or unloading, mixing and blending, and maintain negative pressures within the tank when the tank hatch is opened to add polymer, aggregate, or any other additives to manufacture paving asphalt products.

This AC Permit does not change the permitted material throughput limits. However, the AC Permit will result in an increase in the total heat input for all natural gas heaters to 24 MMBtu/hr. All 15 asphaltic material tanks will be controlled by the Air-Clear™ fiber-bed mist control system and carbon adsorber.

Location: 2701 East 2nd Avenue, Tampa, Hillsborough County

UTM Coordinates: 17-359.5 E 3093.2 N

NEDS No.: 0570461

<b>EU ID#</b>	<b>Description</b>	<b>Capacity</b>
002 – Tanks and Truck Loading	Raw Asphalt Storage tank (H1) Raw Asphalt Storage tank (H2) Raw/Product Asphalt Storage tank (H3) Product Asphalt Storage tank (H4) Product Asphalt Storage tank (H5) “Cook-off” Tank (T1) “Cook-off” Tank (T2) “Cook-off” Tank (T3) Recycled Asphalt Tank (T4) Recycled Asphalt Tank (T5) Modified Blended Asphalt Tank (S4) - new Modified Blended Asphalt Tank (S1) - new Modified Blended Asphalt Tank (S2) - new Polymer Mix Tank (P1) Polymer Mix Tank (P2) Asphalt Product Truck Loading	25,000 gallons 25,000 gallons 25,000 gallons 25,000 gallons 25,000 gallons 5,000 gallons 5,000 gallons 10,000 gallons 15,000 gallons 15,000 gallons 18,000 gallons 30,000 gallons 30,000 gallons 25,000 gallons 25,000 gallons
003 – Asphalt Emulsion Tanks	Asphalt Emulsion Tank (E1) Asphalt Emulsion Tank (E2) Asphalt Emulsion Tank (E3) Asphalt Emulsion Tank (E4)	13,500 gallons 13,500 gallons 29,000 gallons 29,000 gallons
004 – Natural Gas Heaters	H1 Natural Gas-fired Tank Heater H2 Natural Gas-fired Tank Heater H3 Natural Gas-fired Tank Heater H4 Natural Gas-fired Tank Heater H5 Natural Gas-fired Tank Heater T1 Natural Gas-fired Tank Heater T2 Natural Gas-fired Tank Heater T3 Natural Gas-fired Tank Heater T4 Natural Gas-fired Tank Heater T5 Natural Gas-fired Tank Heater S4 Natural Gas-fired Tank Heater - new S1 Natural Gas-fired Tank Heater - new S2 Natural Gas-fired Tank Heater - new P1 Natural Gas-fired Tank Heater P2 Natural Gas-fired Tank Heater E4 Asphalt Emulsion Tank Heater	1 MMBtu/hr 1 MMBtu/hr 1 MMBtu/hr 1 MMBtu/hr 1 MMBtu/hr 1 MMBtu/hr 1 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 2 MMBtu/hr 1 MMBtu/hr

**SPECIFIC CONDITIONS:**

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]
2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
3. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 62-4.070(7), F.A.C.]
4. The use of property, facilities, equipment, processes, products, or compounds, or any other act that causes or materially contributes to a public nuisance is prohibited, pursuant to the Hillsborough County Environmental Protection Act, Section 16, Chapter 84-446, Laws of Florida, as Amended.

Operation and Emission Limitations

5. The facility is permitted to operate continuously; 8,760 hours per consecutive 12 month period. [Rule 62-210.200 (Potential to Emit), F.A.C.]
6. In order to establish this facility as a Synthetic Non-Title V Source, and as requested by the permittee, the facility shall not produce more than 98,000 tons of paving asphalt product in any consecutive 12 month period. [Rule 62-4.070(3), F.A.C., Air Construction (AC) Permit No. 0570461-017-AC and AC Permit Application received January 26, 2012]
7. In order to establish this facility as a Synthetic Non-Title V Source, the facility operations shall be limited as follows:
  - A. The temperature of the asphalt material mixing and storage tanks shall not exceed 375 °F;
  - B. Only asphalt cement as presented in the Construction Application shall be used. The use of lower boiling asphalt cement or cutback asphalt without prior approval by the EPC is prohibited;
  - C. The tank heaters for Tanks T1, T2, H1, H2, H3, H4, H5 and E4 shall be fired by natural gas with a maximum heat input of 1 MMBTU/hour per tank;
  - D. The tank heaters for Tanks P1, P2, T3, T4, T5, S1, S2 and S4 shall be fired by natural gas with a maximum heat input of 2 MMBTU/hour per tank;[Rules 62-4.070(3), F.A.C., AC Permit No. 0570461-017-AC and AC Permit Application received January 26, 2012]
8. The maximum allowable visible emissions from the Tank & Truck Loading activities (EU002) and the Asphalt Emulsion Tanks (EU003) shall not be equal to or greater than 5% opacity. The maximum

**SPECIFIC CONDITIONS:**

allowable visible emissions from the natural gas-fired tank heaters (EU004) shall not be equal to or greater than 20% opacity.

Emission Unit	Emission Point	Description	VE Limit (% opacity)
002	n/a	Tanks and Truck Loading (vented through single control device)	5
003	001	Emulsion Tank E1	5
	002	Emulsion Tank E2	5
	003	Emulsion Tank E3	5
	004	Emulsion Tank E4	5
004	n/a	Natural Gas Heaters (each heater)	20

[Rule 62-296.320, F.A.C., and Chapter 1-3.52, Rules of the Environmental Protection Commission of Hillsborough County (EPC)]

9. The facility shall maintain the system to control Visible Emissions and Odors from EU002. The system shall be configured with the following specifications:

- A. An Air-Clear TM fiber-bed mist collection system with a maximum exhaust flow of 2,600 acfm;
- B. As recommended by the manufacturer, the inlet temperature of the Air-Clear TM system shall be in the range of 120° - 140° Fahrenheit (F). In addition, since the cooling of the exhaust prior to the Air-Clear TM system is imperative in effectively collecting the submicron particulates that cause opacity, the permittee shall make all attempts to have the exhaust be on the lower side of the temperature range;
- C. The facility shall install, calibrate, operate, and maintain an inlet thermometer and inlet temperature chart recorder in degrees Fahrenheit for the Air-Clear TM fiber-bed mist collection system;
- D. The facility shall install, calibrate, operate, and maintain a pressure drop measuring device in inches of water across the main fiber-bed diffusion filters of the Air-Clear TM system. As recommended by the manufacturer, the pressure drop of the main fiber-bed filters shall be in the range of 0 – 3 inches water gauge (w.g.) with clean filters;
- E. The facility shall install, calibrate, operate, and maintain a velocity pressure gauge at the inlet of the Air-Clear TM fiber-bed mist collection system that is integrated with the variable frequency drive fan to verify adequate air flow through the system. As indicated in the Air-Clear TM O&M Manual (Attachment B), the normal operating range should fall between 1” and 4” w.g.;

**SPECIFIC CONDITIONS:**

- F. Prior to each instance of the addition of polymer additive to the polymer mix tanks, the facility shall verify adequate air flow as measured by the velocity pressure gauge;
- G. A complete spare filter set (enough to replace all the filters in the unit) for the Air-Clear™ system shall be kept onsite;
- H. A Vapor Phase Carbon Adsorber Unit containing at least 1,600 pounds of activated carbon and designed for an airflow of up to 4,000 acfm shall be connected to the exhaust of the Air-Clear™ fiber-bed mist collection system;
- I. The Carbon Adsorber Unit shall be monitored and maintained as prescribed in the Carbon Adsorber OM&M Plan (Attachment C) to maintain the efficiency of the odor control system;
- J. As per manufacture's recommendation, the facility shall measure the inlet and outlet temperature of the Carbon Adsorber Unit immediately upon installation of a new carbon canister and monitor the outlet temperature every four (4) hours for the first twenty-four (24) hours of operation.

[Rule 62-4.070(3), F.A.C., Permit No. 0570461-018-AC, Construction Application received January 26, 2012, and Carbon Adsorber and Air Clear™ O&M Manuals]

10. [RESERVED]

11. No person shall store, pump, handle, process, load, unload, or use in any process or installation any VOC/OS without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Environmental Protection Commission of Hillsborough County. The following procedures shall be utilized to minimize pollutant emissions:

- A. Maintain covers, lids, etc., on all containers of VOC/OS when they are not being handled, tapped, etc.
- B. Prevent excessive air turbulence across exposed VOC/OS.
- C. Where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, bath, etc., of VOC/OS so that it can be covered when not in use.
- D. All fittings, valve lines, etc., shall be properly maintained.
- E. All VOC/OS spills shall be attended to in a timely manner and the waste properly disposed of, recycled, etc.

[Rule 62-296.320(1), F.A.C.]

12. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An objectionable odor is any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of

### SPECIFIC CONDITIONS:

life or property, or which creates a nuisance. During tank loading/loadout and tank to tank/blending operations, a representative of Blacklidge Emulsions shall daily monitor the downwind property boundary for odors. If objectionable odors are noted, the operation(s) shall be curtailed or halted. If the Environmental Protection Commission of Hillsborough County receives odor complaints attributed to this facility and they are determined to be a nuisance, the permittee will need to evaluate their operations and propose corrective actions that may include installing additional odor control measures for this facility. [Rules 62-4.070(3), 62-296.320, F.A.C., and Chapter 1-3.22, Paragraph 3, Rules of the EPC.]

13. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 62-296.320, F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include, but not limited to, the following:

- A. Maintenance of parking areas and yards. Use water or dust suppressants, if necessary;
- B. Removal of particulate matter from paved areas and work areas under the control of the owner/operator;
- C. Monitor each tank loading operation and observe the associated equipment and stack for visible emissions;
- D. Curtail or halt operation if visible emissions are noted.

[Rule 62-296.320, F.A.C.]

14. The permittee shall not circumvent any air pollution control device, or allow the emissions of air pollutants without the applicable air pollution control device operating properly. [Rules 62-4.070(3), and 62-210.650, F.A.C.]

15. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. The pollution control equipment (fiber-bed mist eliminator, odor control system, and associated equipment) shall be maintained in good repair to perform adequately the function for which it was intended. The permittee shall lower the temperature in the tanks as necessary to comply with the limitations in Specific Condition Nos. 8 and 9. Maintenance shall include, but is not limited to, monthly inspections and repair or replacement of faulty equipment when necessary. [Rules 62-4.070(3), 62-210.700(4), and 62-210.700(5), F.A.C.]

### Testing and Compliance Requirements

16. In order to demonstrate compliance with Specific Condition No. 8, the permittee shall conduct a visible emission test on the carbon absorber exhaust stack within thirty (30) days of the start-up of all

### SPECIFIC CONDITIONS:

new tanks controlled by the Air-Clear™ fiber-bed mist collection system. [Rules 62-297.310(7)(a), F.A.C. and Chapter 1-3.50, Rules of the EPC]

17. Test emission units 002, 003, and 004 for visible emissions annually, during each federal fiscal year (October 1 through September 30). Concurrent with the VE test for EU 002, perform an odor evaluation (test team's opinion whether objectionable odors are being emitted from the facility). The odor evaluation shall be conducted during normal tank loading/loadout and tank to tank/blending operations. The odor evaluation report shall include the names of the odor evaluation team members, date, time, wind direction, observation, tank loading/loadout and tank to tank/blending operations taking place at the time, and corrective actions taken. [Rule 62-297.310(4)(a)2 and (8), F.A.C.]

18. Visible emissions shall be tested by a certified observer in accordance with EPA Method 9 for a minimum of thirty (30) minutes and shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rules 62-297.310(4)(a)2, and 62-297.401(9)(a) F.A.C., and Chapter 1-3.50, Rules of the EPC]

19. The permittee shall notify the Air Compliance Section of the EPC at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310(7)(a)(9), F.A.C.]

20. The permittee will submit two (2) copies of the compliance test report required by this permit to the Air Compliance Section of the EPC within forty-five (45) days after the test is complete. The test report shall contain sufficient detail on the source tested and the test procedures used to allow the EPC to determine if the test was properly conducted and the test results properly computed. [Rule 62-297.310(8), F.A.C.]

21. When the Environmental Protection Commission of Hillsborough County (EPC) 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 Rules 62-204, 62-210, 62-212, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297.310(7)(b), F.A.C.]

### Monitoring and Recordkeeping Requirements

22. The permittee shall maintain a monthly log of the operation. The log shall include, at a minimum, the following items and be kept for a minimum of three (3) years and made available for inspection to representatives of the Environmental Protection Commission of Hillsborough County upon request.

- A. Daily maximum temperature of each blend batch (RA asphalt, polymer modified asphalt, and emulsified asphalt) of paving asphalt product;

**SPECIFIC CONDITIONS:**

- B. Total weight of emulsified asphalt produced, in short tons, on a monthly basis and the rolling total for the previous consecutive 12 month period;
- C. Total weight of all paving asphalt produced, in short tons, on a monthly basis and the rolling total for the previous consecutive 12 month period;
- D. Copies of the inlet temperature charts to the Air-Clear™ system as required in Specific Condition No. 9.C.;
- E. Weekly pressure drop, in inches of water, of the main fiber-bed diffusion filters for the Air-Clear™ system when unloading, transferring, mixing, or loading occurs.
- F. Weekly velocity pressure gauge reading for the Air-Clear™ system when unloading, transferring, mixing, or loading occurs;
- G. Record of odor monitoring downwind of property per Specific Condition No. 9.H. that shall include date, time, wind direction, observation, tank loading/loadout, tank to tank/blending operations taking place at the time, operator initials, and corrective actions taken;
- H. Any maintenance/repair performed on the Air-Clear™ system.

[Rule 62-4.070(3) and 62-4.160(14)(b), F.A.C. and AC Permit No. 0570461-017-AC]

23. The permittee shall submit to the Environmental Protection Commission of Hillsborough County, by April 1<sup>st</sup> of each calendar year, a completed DEP Form 62-210.900(5), "Annual Operating Report (AOR) for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

Permit Applications and Transfers

24. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 62-210.900(7)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

25. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200, F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation:

- A. Alteration or replacement of any equipment or major component of such equipment;
- B. Installation or addition of any equipment which is a source of air pollution.

Note: Items A and B are not applicable to routine maintenance, repair, or replacement of component parts of an air emissions unit. [Rules 62-210.300 and 62-4.070(3), F.A.C.]

**SPECIFIC CONDITIONS:**

26. A complete application for an air operation permit shall be submitted to the Environmental Protection Commission of Hillsborough County within 60 days of completion of the visible emissions test required under Specific Condition No. 16 or at least 90 days prior to the expiration date of this permit, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the following:

- A. The appropriate Department application form [see Rule 62-210.900, F.A.C. (Forms and Instructions)];
- B. The appropriate operation permit application fee(s);
- C. Copies of the records specified in Specific Condition No. 22 for the most recent three (3) months of operation.

[Rules 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

ENVIRONMENTAL PROTECTION COMMISSION  
OF HILLSBOROUGH COUNTY

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Richard D. Garrity, Ph.D.  
Executive Director