

LANE REGIONAL AIR PROTECTION AGENCY
TITLE V OPERATING PERMIT REVIEW REPORT

Kingsford Manufacturing Company
3315 Marcola Road
Springfield, Oregon 97478

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LIST OF ABBREVIATIONS USED IN THIS REVIEW REPORT

ACDP	Air Contaminant Discharge Permit
AIA	Aggregate Insignificant Activities
ASTM	American Society of Testing and Materials
CFR	Code of Federal Regulations
CO	Carbon monoxide
CAM	Compliance Assurance Monitoring
EF	Emission factor
EPA	United State Environmental Protection Agency
EU	Emissions unit
HAP	Hazardous Air Pollutant
ID	Identification code
I&M	Inspection and maintenance
LRAPA	Lane Regional Air Protection Agency
NA	Not applicable
NESHAP	National Emission Standard For Hazardous Air Pollutants
NO _x	Oxides of nitrogen
OAR	Oregon Administrative Rules
PCD	Pollution Control Device
PM	Particulate matter
PM ₁₀	Particulate matter less than 10 microns in size
PSD	Prevention of Significant Deterioration
PSEL	Plant Site Emission Limit
PSEU	Pollutant-specific emissions unit
SO ₂	Sulfur dioxide
TOC	Total Organic Carbon
VOC	Volatile Organic Compound

INTRODUCTION

1. The proposed permit is a renewal of the Title V Operating Permit for this facility. In accordance with OAR 340-218-0140(1)(f), this review report is intended to provide the legal and factual basis for the draft permit conditions. In most cases, the legal basis for a permit condition is included in the permit by citing the applicable regulation. In addition, the factual basis for the requirement may be the same as the legal basis. However, when the regulation is not specific and only provides general requirements, this review report is used to provide a more thorough explanation of the factual basis for the draft permit conditions.

PERMITTEE IDENTIFICATION

2. Kingsford Manufacturing Company (Kingsford) operates a charcoal manufacturing facility at 3315 Marcola Road in Springfield, Oregon.

FACILITY DESCRIPTION

3. The facility manufactures and packages charcoal briquets. The charcoal manufacturing operation consists of two (2) separate production areas, char production and briquet manufacturing. The char production process uses a retort furnace to convert wood hogged fuel into char. The briquet manufacturing process is where the char is mixed with additives, and the charcoal briquets are formed, dried, and packaged.

OPERATING SCENARIOS

4. The facility will have one (1) alternative operating scenario. When the retort furnace and wood dryer systems are shut down and no char is being produced, the source may operate an auxiliary natural gas burner to provide heat to the briquet dryers.

REASONS FOR PERMIT ISSUANCE

5. The facility is required to obtain a Title V Operating Permit because the emissions, both potential and actual, of PM/PM₁₀, NO_x and VOC are greater than 100 tons per year. The facility applied for a permit renewal on July 29, 2004. The primary reason for this permit action is to renew the expired permit.

EMISSIONS UNIT AND POLLUTION CONTROL DEVICE IDENTIFICATION

6. Wood Fuel Receipt and Storage (EU 1)

The wet hog fuel to be converted into charcoal is delivered by truck and unloaded by a tilt-dump to form storage piles. The operation has the capacity to receive 80,000 tons of wet hog fuel per month. The storage measures 1000 feet by 1000 feet in plan and is about 50 feet high.

7. Hogfuel Sizing and Infeed System (EU 2)

The wet hog fuel is moved on a series of conveyers across a belt scale to a screener. Material passing through the screener is sent to the hog fuel dryer. Material caught by the screener is sent to a hammer mill, and then to the hog fuel dryer. The sizing and infeed system has the capacity to process approximately 29,200 tons of wet hog fuel per month and 323,500 tons of wet hog fuel per year.

8. Charring and Drying System (EU 3)

There are eight (8) emission points in EU 3:

- 8.a. ACC Stack
- 8.b. Dryer 1 Wet End Exhaust
- 8.c. Dryer 1 Dry End Exhaust
- 8.d. Dryer 2 Wet End Exhaust
- 8.e. Dryer 2 Dry End Exhaust

Charring

Wet wood hog fuel is dried in a drying system, which was installed in 1997 as a replacement for an existing drying system that was installed in 1982. LRAPA determined that the 1997 dryer system installation was a replacement in kind and a maintenance activity that did not require an Approval to Construct. LRAPA determined that the 1982 dryer system installation did not represent an actual increase in system capacity over the baseline level. The construction approval for this equipment was issued by LRAPA on April 22, 1982. Heated air from the drying system is conveyed to material recovery cyclones and sent to the after combustion chamber (ACC) on the retort furnace. After being dried, the wood hog fuel is conveyed to the retort furnace, which is a multi-hearth furnace, where the wood hog fuel pyrolyzes into charcoal and off-gas. The charcoal is cooled and conveyed to storage. The off-gas passes through hot cyclones for recovery of charcoal material before entering the after combustion chamber (ACC). Some of the heated air from the ACC is recovered and used in the briquet dryers. Material recovered from the cyclones is combined with dry wood hog fuel being conveyed to the retort. Heated air from the ACC is exhausted directly to the atmosphere.

An Administrative Amendment was issued on December 16, 2002, to increase the short-term PSEL emission rates for the charring system (EU-3). Short-term PSELs were increased to reflect a char hourly production rate of nine (9) tons per hour (from six (6) tons per hour).

As part of the significant modification applied for on October 8, 2004, the facility requested that the annual char production cap listed in the table below be changed from 38,000 tons per year to 40,000 tons per year. The NO_x emission factor in the permit for the charring and drying system was also changed from 19 pounds per ton to 18 pounds per ton. This change were based upon emission test data from multiple Kingsford facilities.

Drying

The wet briquets created in the briquetting process (see EU 8) are dried in one (1) of two (2) briquet dryers. Briquet Dryer 2 was replaced in 1994. LRAPA issued an Approval to Construct for the replacement of Briquet Dryer 2 on July 13, 1994. There was no estimated increase in emissions due to the installation of the new dryer. Heated air from the briquet dryers is exhausted directly to the atmosphere.

The following table describes the equipment used in the charring and drying system:

Device Description	Device ID	Year Installed	Device Capacity	Pollution Control Device	PCD ID	PCD Design Parameters
Wood Fuel Drying System	NA	1997	72 wet tons/hour 336,000 wet tons/year	After Combustion Chamber	03-01C	1400° - 2000°F
Charcoal Manufacturing	03-01P	1974	9 tons/hour, 40,000 tons/year	After Combustion Chamber	03-01C	1400° - 2000°F
Briquet Dryers	03-02P	1977 for Dryer 1; 1994 for Dryer 2	21 tons/hour 150,000 tons/year	NA	NA	NA

9. Briquet Cooling (EU 4)

The dried briquets are conveyed through the briquet coolers, and then to storage. In the briquet coolers, fans pull ambient air through the bed of briquets. The air from the briquet coolers is exhausted directly to the atmosphere. The briquet cooling system (Device ID 04-01P) was installed in 1977, and has the capacity to process 21 tons of briquets per hour (daily average) and 150,000 tons of briquets per year.

As part of the significant modification applied for on October 8, 2004, the facility requested that the PM₁₀ emission factor in the permit for the briquet cooling emission unit be changed from 0.38 pound per ton briquets to 0.30 pound per ton briquets. These changes were based upon emission test data from the Springfield facility in 2004.

10. Unpaved Roads (EU 6)

LRAPA received an application from the facility on June 18, 2002, for approval to pave an existing unpaved road around Warehouse 4. LRAPA approved this project which eliminated unpaved roads at the facility and EU06 has been removed from the permit.

11. Briquet Handling System (EU 8)

In briquetting, retort char is combined with other carbon material, limestone, and minor ingredients, any water needed to facilitate mixing, and then is mixed with cooked starch as a binder. The mixed material is conveyed to the briquet press which continuously forms the materials into wet briquets. The briquets are dried in one (1) of two (2) briquet driers (see EU 3). Dried briquets are conveyed from the storage area to the Packaging Department, where they are filled into bags, palletized, warehoused, and shipped from the plant site. The briquet handling system has the capacity to process 21 tons of briquets per hour and 150,000 tons of briquets per year. The following table describes the equipment used in the briquet handling system.

As part of the significant modification applied for on October 8, 2004, the facility requested that the PM/PM₁₀ emission factor in the permit for the Briquet Handling System be changed from 0.006g gr/dscf to 0.005 gr/dscf. These changes were based upon emission test data from the Springfield facility.

Device Description	Device ID	Year Installed	Pollution Control Device	PCD ID	PCD Design Parameters
Briquetting	08-26D	1993	Wet Dust Collector (Wet Scrubber)	08-26C	5 gal/min design water flow rate 20 psig design water pressure 2500 acfm design inlet gas flow rate 2 in water design pressure drop
Briquet Conveying	08-27D 08-29D	1967 1967	West Dust Collector	08-29C	99.95% rated efficiency 23,000 acfm design inlet gas flow rate 8.8:1 air-to-cloth ratio 14-15 in water design pressure drop
			East Dust Collector	08-30C	
			Small Vokes Dust Collector	08-27C	99.95% rated efficiency 10,000 acfm design inlet gas flow rate 7.7:1 air-to-cloth ratio 12 in water design pressure drop
Briquet Packaging	08-41D 08-42D	1967 1967	North Package Bin Vent Dust Collector	08-41C	99.95% rated efficiency 1400 acfm design inlet gas flow rate 7:1 air-to-cloth ratio 2-4 in water design pressure drop
			South Package Bin Vent Dust Collector	08-42C	

12. Combustion Unit (EU 10)

The facility operates a natural gas-fired boiler (Device ID 10-01P), which was installed in June of 1970, and is rated at 3.345 MM BTU/hour. The exhaust from this burner is vented directly to the atmosphere.

13. Solvent Treated Briquet Operation (EU 11)

In the solvent-treated briquet (STB) operation some of the charcoal briquets are treated with Match Light® and BBQ Bag® solvent before packaging. The operating schedule for the source is 8,232 hours per year. Emissions from some of the solvent-handling equipment, i.e., equipment that is located inside the STB building, is collected by the solvent exhaust system and ducted to the existing ACC. In the event of ACC malfunction, the solvent exhaust system will be discharged to the atmosphere uncontrolled.

An Administrative Amendment was issued in April of 2003 for the installation of a 30,000-gallon solvent storage tank associated with STB operation.

As part of the significant modification applied for on October 8, 2004, the facility requested that the annual STB production cap listed in the table below be changed from 77,000 tons per year to 76,000 tons per year.

The following table describes the equipment used in the STB operation:

Device Description	Year Installed	Device Capacity	Pollution Control Device	PCD ID	PCD Design Parameters
Solvent Application and Fines Recycling	2000	25.0 tons/hour, 76,000 tons/year	After Combustion Chamber	03-01C	1400E – 2000 °F
Solvent Handling	2000	NA	After Combustion Chamber	03-01C	1400E - 2000 °F
Storage Tanks	2000	NA	NA	NA	NA

CATEGORICALLY INSIGNIFICANT ACTIVITIES

14. Categorically insignificant activities at the source include the following:

- evaporative and tail pipe emissions from onsite motor vehicle operation;
- distillate oil, kerosene, and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr;
- natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr;
- office activities;
- janitorial activities;
- personal care activities;
- groundskeeping activities including but not limited to building painting and road and parking lot maintenance;
- instrument calibration;
- maintenance and repair shop;
- automotive repair shops or storage garages;
- air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment;
- refrigeration systems with less than 50 pound charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems;
- bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities;
- temporary construction activities;
- warehouse activities;
- accidental fires;
- air vents from compressor;
- air purification systems;
- routine maintenance, repair and replacement, such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking;

- electric motors;
- storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids;
- on-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles;
- natural gas, propane, and liquified petroleum gas (LPG) storage tanks and transfer equipment;
- pressurized tanks containing gaseous compounds;
- storm water settling basins;
- paved roads and paved parking lots within an urban growth boundary;
- non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems;
- non-contact steam condensate flash tanks;
- non-contact steam vents on condensate receivers, decanters, and similar equipment;
- boiler blowdown tanks

AGGREGATE INSIGNIFICANT EMISSIONS

15. As part of the significant modification applied for on October 8, 2004, the facility requested that the aggregate emission sources be changed to the activities and amounts in the table below. The emissions estimates from the activities included in aggregate insignificant emissions are as follows:

Emissions Source	Pollutant Emissions (ton/yr)	
	PM	PM ₁₀
Starch Silo Vent	0.01	0.01
Lime Silo Vent	0.04	0.04
Nitrate Silo Vent	0.01	0.01
Sawdust Bin Vent	0.02	0.02
Mesquite Blower Exhaust	0.01	0.01
Purchased Char Tank Vent	0.05	0.05
Sawdust Hopper Bin Vent	0.004	0.004
Starch use Bin Vent (exhaust into building)	0.03	0.03
Fugitive Dust Sources (includes Railcar/Truck Unloading and Rerun Handling)	0.04	0.04
Total for All Sources	0.22	0.22

EMISSION LIMITS AND STANDARDS, TESTING, MONITORING, AND RECORDKEEPING

Changes to ACDP Conditions

16. The following ACDP conditions have been revised in the federal operating permit because of the reasons given below:
 - 16.a. Condition 1 under “Performance Standards and Emission Limits” in the ACDP has been revised to include emissions from all sources at the facility in the facility-wide PSELs for PM and PM₁₀. The current ACDP explicitly excludes fugitive emissions, char storage emissions, and briquet making (excluding the dryers), from the PM and PM₁₀ PSELs.
 - 16.b. Condition 1 under “Performance Standards and Emission Limits” in the ACDP has been revised to increase the 1-hour plant site emission limit for particulate matter emissions from 50 pounds per hour to 90 pounds per hour and 70 pounds per hour for PM₁₀. This revision was based on stack test results and was requested in order to allow the source greater operating flexibility. This was part of the modification requested on December 6, 2002.
 - 16.c. Condition 13 under “Monitoring and Reporting” in the ACDP has been revised to require the submissions of semi-annual reports rather than monthly reports. Semi-annual compliance reporting of daily record keeping is adequate to assure compliance with requirements of the Title V Operating Permit.

New Federal Operating Permit Conditions

17. All applicable requirements, not previously contained in the ACDP, have been added to the permit.

Emission Limits and Standards

18. The following federal and/or LRAPA enforceable rules have specific limits and standards that have been determined to be applicable to the facility.
 - 18.a. LRAPA rules: 32-010, 32-015, 32-30, 32-045, 32-055, 32-090, 33-030, 33-065, 48-015, 50-020, 51-015 apply to the facility.
 - 18.b. The facility may be subject to the requirements of 40 CFR Part 68 - Chemical Accident Prevention Provisions.

Test Methods and Procedures

19. The permit requires specific testing to demonstrate compliance with the applicable emission limits and standards in LRAPA 33-065 (Charcoal Producing Plants) for EU 3 and LRAPA 32-015(2) for EU 4 and EU 8. LRAPA has determined that monitoring and recordkeeping will be sufficient to assure compliance with all other applicable emission limits and standards.

Facility-Wide Monitoring and Recordkeeping

20. The facility is required to keep a log of complaints received pertaining to odors and particulate matter fallout. The facility is required to investigate each complaint and resolve it within, at most, 24 hours of receiving the complaint.
21. The facility is required to conduct facility-wide visual emissions monitoring and take corrective action when visible emissions are detected.

- 22. The facility is required to take appropriate action in the event an Air Pollution Alert, Warning, or Emergency Episode is declared in the Eugene-Springfield area by LRAPA.
- 23. The facility is required to submit a risk management plan should it become subject to the accidental release prevention regulations in 40 CFR Part 68.

Monitoring and Recordkeeping for Individual Emissions Units

24. The facility is required to conduct routine visual emissions inspections of individual emissions units in order to determine compliance with applicable LRAPA rules. These are not compliance tests, but the information will be used to initiate corrective action if visible emissions are observed from any source at the facility. Since corrective action is triggered by any visible emissions, an observer need not be Method 9 certified to determine if visible emissions are present. No visible emissions are assumed to indicate compliance with the applicable LRAPA rules. The facility is required to record in a log all visible emissions monitoring, visible emissions exceedances, and corrective actions taken. The following table contains the applicable rules and frequency of visual emissions monitoring for each emissions unit. The monitoring frequency for each emissions unit is based on projected PM emissions and is consistent with ODEQ permitting guidance.

Emissions Unit	Applicable Requirement	Projected PM Emissions (tons/year)	Monitoring Frequency
EU 1	20% Opacity	8.0	Monthly
EU 2	20% Opacity	< 1.0	Quarterly
EU 3	20% Opacity	203.15	Daily
EU 4	20% Opacity	82.5	Monthly
	0.1 gr/dscf		
	Process Weight Limit		
EU 6	20% Opacity	0.0	Quarterly
EU 8	20% Opacity	10.6	Monthly
EU 10	20% Opacity	< 1.0	Quarterly
EU 11	20% Opacity	< 1.0	Quarterly
	0.1 gr/dscf		

The facility is required to take corrective actions to minimize emissions if any visible emissions are identified from any emissions unit. If visible emissions are identified from EU 3, EU 4, EU 8, EU 10, or EU 11, the facility must take corrective actions to minimize emissions or use EPA Method 9 to determine the opacity of the visible emissions. EPA Method 9 is not appropriate for fugitive emission sources such as EU 1, EU 2, and EU 6, but can be used to measure the opacity of point sources such as EU 3, EU 4, EU 8, EU 10, and EU 11.

25. The facility is allowed to demonstrate compliance with the visible emissions limit that applies to char production, and the visible emissions, grain loading, and process weight limits that apply to the EU 3 alternative operating scenario by monitoring the ACC stack and one dryer exhaust stack. Dryer (1) Wet Exhaust stack was selected because this stack has had the greatest measured grain-loading values of all the dryer exhaust stacks. The facility is required to record when the daily monitoring performed on EU 3 is being used to demonstrate compliance with the visible emissions, grain-loading, and process weight limits that apply to the EU 3 alternative operating scenario.
26. In order to demonstrate continuous compliance with the grain loading limit and process weight limit in LRAPA's rules, the facility is required to inspect the baghouses in EU 8 once per quarter for wear, plugging, abrasion, and integrity of mechanical and ancillary systems, and take corrective action when the inspections show that the baghouses are operating at less than an optimum level.
27. The facility is required to monitor parameter action levels for the baghouses used to control PM emissions for EU 8. The parameter action levels are minimum and maximum compliance pressure drop ranges (inches of water column) that indicate that the grain-loading and process weight limits are not being exceeded. This range of values has been established based on the fact the LRAPA has in the past accepted these values as indicators of compliance with the grain-loading and process weight limits. The facility is required to perform weekly monitoring of pressure drop for each baghouse and take corrective action when any pressure drop reading is outside the range of the established parameter action levels.
28. The facility is required to demonstrate compliance with the one-hour PSEL for PM, PM₁₀, VOC, NO_x, SO₂, and CO by implementing a Surrogate Compliance Emissions Monitoring Parameter (SCEMP) plan. The plan includes temperature and other physical monitoring and record keeping. The facility is required to maintain a temperature in the ACC at or above 1400°F during normal operations. If the temperature within the ACC falls below 1500°F, the facility is required to take corrective action. While the temperature within the ACC is normally around 1600°F, the value of 1400°F was proposed by the facility along with documentation and calculations showing that the temperature and residence time within the ACC is sufficient for oxidation of CO and VOC. The emissions from the alternative operating scenario are not included in the 1-hour PSEL because the maximum 1-hour emission rates when the retort and wood dryer are not operating are much less than when the retort and wood dryer are operating. No compliance demonstration is required for the solvent treated briquet component of the 1-hour VOC PSEL because the value corresponds to the maximum capacity of the equipment.
29. LRAPA 33-065 (Charcoal Producing Plants) exempts charcoal furnaces, after combustion chambers, and dyers using charcoal furnace off-gases as a heat source from the grain-loading and process weight limits in LRAPA Title 32. Therefore, the permit includes no compliance monitoring for these provisions for EU 3.
30. The PM PSELs for the briquet cooling operation (EU 4) and the briquet handling system (EU 8) are based on the actual hours of operation and flow rate and actual hours of operation, respectively. Therefore, the facility is required to monitor the hours of operation rather than the amount of briquets processed through these emissions units.
31. To demonstrate compliance with the opacity limits in LRAPA's rules for EU 11, the facility can satisfy the monitoring requirements for EU 3 and EU 8, since all of the PM emissions from EU 11 are directed to the retort in EU 3 or the baghouses on EU 8.
32. To demonstrate compliance with the grain-loading and process weight limits in LRAPA's rules for EU 11, the permittee can satisfy the monitoring requirements for EU 8, since all of the PM emissions from EU 11 are directed to the retort in EU 3 or baghouses on EU 8. Because the grain-loading and process weight limits do not apply to EU 3, there are no specific monitoring or recordkeeping requirements for EU 3. However, virtually all of the PM emissions from EU 11 will be emitted from EU 8 rather than EU 3 because of the pyrolysis of PM in the retort.

Monitoring and Recordkeeping for Insignificant Activities

33. Section 70.6(a)(3) of the federal Title V permit rules, requires all monitoring and analysis procedures or test methods required under applicable requirements be contained in Title V permits. In addition, where the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the facility's compliance with the permit.

However, the requirements to include in a permit testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance does not require the permit to impose the same level of rigor with respect to all emissions units and applicable requirement situations. It does not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. Where compliance with the underlying applicable requirement for an insignificant emission unit is not threatened by a lack of a regular program of monitoring and where periodic testing or monitoring is not otherwise required by the applicable requirement, then in this instance, the status quo (i.e., no monitoring) will meet section 70.6(a)(3). For this reason, this permit does not include any monitoring for insignificant emissions units and activities.

Compliance Assurance Monitoring

34. The facility is subject to the provisions of 40 CFR Part 64 -- Compliance Assurance Monitoring (CAM) because of its classification as a Title V facility, and because of control equipment, emission limitations and pre-control emissions at or above Title V major source levels at one (1) or more pollutant-specific emission units (PSEU). CAM applies to the EU 8 large East and West fabric filter dust collectors for PM and PM₁₀, and the ACC afterburner (serving both EU 3 and EU 11) for PM, CO, and VOC. The permit includes CAM requirements for the cited pollutants at these PSEU control devices.

PLANT SITE EMISSION LIMIT (PSEL) INFORMATION

Facility History and Baseline Emission Rates (BERs)

35. The facility began manufacturing charcoal briquets before the baseline period in Lane County.
36. The baseline operating schedule for the facility was 7,056 hours per year.
37. The facility has reported the following production for the baseline period.
 - 37.a. Amount of hogged fuel processed: 219,000 wet tons per year
 - 37.b. Amount of char produced from furnace: 27,300 tons per year
 - 37.c. Amount of charcoal briquets produced: unknown
38. In the ACDP review report (ACDP 204402), baseline emission rates (BERs) were only established for particulate matter from the charring and drying system. The following table summarizes the existing baseline emissions, the baseline emissions requested by the facility, and the reason for any changes. The increases in emissions for the baseline due to these corrections do not represent an actual increase in emissions. The increases are due to corrections, allowed by LRAPA 34-060(5) and OAR 340-222-0040(7)(a), for emissions that were previously calculated incorrectly or were inadvertently omitted from the last permit revision. The calculations are contained in the attached emissions details sheets. The baseline emissions from the alternative operating scenario for EU 3 are calculated in the emissions details sheets but are not included but baseline emissions for EU 3 in the following table. This is because the emissions are much less during the alternative operating scenario than during primary operating scenario.

Emission Unit	Baseline Emission Rate Prior Permit			Baseline Emission Rate Proposed* Permit			Requested Change in Baseline			Reason Code
		<u>ton/mo</u>	<u>ton/yr</u>		<u>lb/mo</u>	<u>ton/yr</u>		<u>lb/mo</u>	<u>ton/yr</u>	
EU 1 - Wood Fuel Receipt and Storage										
	PM	0.0	0.0	PM	13,700	27	PM	+13,700	+27	a
	PM ₁₀	0.0	0.0	PM ₁₀	6420	13	PM ₁₀	+6420	+13	a
EU 2 - Wood Fuel Sizing and Infeed System		<u>lb/mo</u>	<u>ton/yr</u>		<u>lb/mo</u>	<u>ton/yr</u>		<u>lb/mo</u>	<u>ton/yr</u>	
	PM	0.0	0.0	PM	31	0.2	PM	+31	+0.2	a
	PM ₁₀	0.0	0.0	PM ₁₀	15	0.1	PM ₁₀	+15	+0.1	a
EU 3 - Charring and Drying System		<u>lb/hr</u>	<u>ton/yr</u>		<u>lb/hr</u>	<u>ton/yr</u>		<u>lb/hr</u>	<u>ton/yr</u>	
	PM	50	206	PM	40	137	PM	-10	- 69	c
	PM ₁₀	0.0	0.0	PM ₁₀	31	106	PM ₁₀	+31	+106	b
	NOx	0.0	0.0	NOx	96	330	NOx	+96	+330	b
	SO ₂	0.0	0.0	SO ₂	5.7	19	SO ₂	+5.7	+19	b
	VOC	0.0	0.0	VOC	22	74	VOC	+22	+74	b
	CO	0.0	0.0	CO	23	79	CO	+23	+79	b
EU 4 - Briquet Cooling		<u>lb/hr</u>	<u>ton/yr</u>		<u>lb/mo</u>	<u>ton/yr</u>		<u>lb/mo</u>	<u>ton/yr</u>	
	PM	0.0	0.0	PM	15,700	80	PM	+15,700	+80	a
	PM ₁₀	0.0	0.0	PM ₁₀	4700	24	PM ₁₀	+4700	+24	a

Emission Unit	Baseline Emission Rate Prior Permit		Baseline Emission Rate Proposed* Permit		Requested Change in Baseline		Reason Code
	<u>lb/mo</u>	<u>ton/yr</u>	<u>lb/mo</u>	<u>ton/yr</u>	<u>lb/mo</u>	<u>ton/yr</u>	
EU 6 - Unpaved Roads							
	PM	0.0	0.0	PM	740	4.4	PM: +740 +4.4 a
	PM ₁₀	0.0	0.0	PM ₁₀	270	1.6	PM ₁₀ +270 +1.6 a
EU 8 - Briquet Handling		<u>lb/mo</u>	<u>ton/yr</u>		<u>lb/mo</u>	<u>ton/yr</u>	
	PM	0.0	0.0	PM	10,700	63	PM +10,700 +63 a
	PM ₁₀	0.0	0.0	PM ₁₀	5740	33	PM ₁₀ +5740 +33 a
EU 10 - Combustion Unit		<u>lb/hr</u>	<u>ton/yr</u>		<u>lb/hr</u>	<u>ton/yr</u>	
	PM:	0.0	0.0	PM	0.1	0.1	PM + 0.1 +0.1 a
	PM ₁₀	0.0	0.0	PM ₁₀	0.1	0.1	PM ₁₀ +0.1 +0.1 a
	NOx	0.0	0.0	NOx	0.3	1.4	NOx +0.3 +1.4 a
	SO ₂	0.0	0.0	SO ₂	0.1	0.1	SO ₂ +0.1 +0.1 a
	VOC	0.0	0.0	VOC	0.1	0.1	VOC +0.1 +0.1 a
	CO	0.0	0.0	CO	0.1	0.3	CO +0.1 +0.3 a

* The changes from baseline listed in the table below were for the initial Title V issuance. For the significant modification applied for October 8, 2004, and the 2005 renewal, there were no changes to the baseline emission rate.

Reason Codes:

- a. Equipment previously not included in baseline even though it existed
- b. Baseline emission rate (BER) not previously established for this pollutant
- c. Correction in baseline production rate

Baseline Change Summary

Emission Unit	Existing Baseline Emission Rate (ton/yr)		Requested Baseline Emission Rate (ton/yr)		Requested Change in Baseline* (ton/yr)	
All Emission Units	PM	206	PM	312	PM	+106
	PM ₁₀	0.0	PM ₁₀	180	PM ₁₀	+180
	NOx	0.0	NOx	330	NOx	+330
	SO ₂	0.0	SO ₂	19	SO ₂	+19
	VOC	0.0	VOC	74	VOC	+74
	CO	0.0	CO	80	CO	+80

* The changes from baseline listed in the table below were for the initial Title V issuance. For the significant modification applied for October 8, 2004, and the 2005 renewal, there were no changes to the baseline emission rate.

Plant Site Emission Limits (PSELs)

39. The current maximum operating schedule of 8,232 hours per year is greater than the operating schedule for the baseline year.
40. The current maximum plant production is:
- 40.a. Amount of hogged fuel processed: 292,000 wet tons per year
 - 40.b. Amount of char produced from furnace: 40,000 tns per year
 - 40.c. Amount of charcoal briquets produced: 150,000 tons per year
41. The contribution to the total annual PSEL from each emissions unit is shown below. All values are in tons per year. The PSEL is based on the projected emissions from the source (see emissions detail sheets). The emissions from the alternative operating scenario for EU 3 are calculated in the emissions details sheets but are not included in the emissions for EU 3 in the following table. This is because the emissions are much less during the alternative operating scenario than during primary operating scenario.

Emissions Unit	Pollutant					
	PM	PM ₁₀	VOC	NO _x	SO ₂	CO
EU 1	8.0	3.8	NA	NA	NA	NA
EU 2	< 0.5	< 0.5	NA	NA	NA	NA
EU 3	203.2	156.9	20.1	361.5	40.1	59.3
EU 4	82.5	22.5	NA	NA	NA	NA
EU 6	<0.5	<0.5	NA	NA	NA	NA
EU 8	10.6	10.6	NA	NA	NA	NA
EU 10	< 0.5	< 0.5	< 0.5	1.4	< 0.5	< 0.5
EU 11	< 0.5	< 0.5	92.7	< 0.5	NA	< 0.5
AIA	0.2	0.2	NA	NA	NA	NA
Total	305	194	113	363	40	60

The total annual PSEL is the value used in the permit. Since it is based on the actual projected emissions, it may not equal the sum of the contribution of each emissions unit and the AIA.

42. The total 1-hour PSEL for all pollutants is shown below. All values are in pounds per hour. Except for PM and PM₁₀, the PSEL is based on the projected emissions from the facility (see attached emissions detail sheets) emissions. The PM and PM₁₀ PSELs are equal to the values requested by the facility.

Emissions Unit	Pollutant					
	PM	PM ₁₀	VOC	NO _x	SO ₂	CO
EU 3	90	70	9	120	18	26
EU 11	NA	NA	124	NA	NA	NA
Total	90	70	134	120	18	26

43. The contribution to the total monthly PSEL from each emissions unit is shown below. All values are in pounds per month. The PSEL is based on the projected emissions from the facility (see attached emissions detail sheets).

Emissions Unit	Pollutant					
	PM	PM ₁₀	VOC	NO _x	SO ₂	CO
EU 1	4,000	1,880	NA	NA	NA	NA
EU 2	84	40	NA	NA	NA	NA
EU 3	NA	NA	NA	NA	NA	NA
EU 4	24,528	8,432	NA	NA	NA	NA
EU 6	NA	NA	NA	NA	NA	NA
EU 8	3,836	3,836	NA	NA	NA	NA
EU 10	11	11	NA	NA	NA	NA
EU 11	NA	NA	NA	NA	NA	NA
Insignificant (Material Handling)	475.6	469	NA	NA	NA	NA
Total	32,934	14,667	NA	NA	NA	NA

44. The baseline emission rates (BERs), netting baseline, previous and proposed PSEL, and PTE are shown below. The attached emissions detail sheets contain these calculations. There are no changes to the PSEL being requested for this renewal.

Pollutant	Baseline Emission Rate (tons/yr)	Netting Baseline		Plant Site Emission Limit (PSEL)			PTE (tons/yr)
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)	
PM	312	312	NA	305	305	0	305
PM ₁₀	180	180	NA	194	194	0	194
VOC	74	74	NA	113	113	0	113
NO _x	330	330	NA	363	363	0	363
SO ₂	19	19	NA	40	41	1	40
CO	80	80	NA	60	60	0	60

45. The components of the PSEL are shown below. The unassigned PSEL is equal to the netting baseline minus the active PSEL and any credits.

Pollutant	Assigned PSEL			Unassigned PSEL (tons/yr)	Credits (tons/yr)
	Annual (tons/yr)	Short-term (lbs/hr)	Short-term (lbs/mo)		
PM	305	90	32,934	7	0
PM ₁₀	194	70	14,667	0	0
VOC	113	134	NA	0	0
NO _x	363	120	NA	0	0
SO ₂	41	18	NA	0	0
CO	60	26	NA	20	0

SIGNIFICANT EMISSION RATES

46. The proposed PSEL is greater than the netting baseline as shown below. However, since the difference is less than the significant emission rate (SER) for all a pollutants, the New Source Review provisions in LRAPA Title 38 do not apply at this time.

Pollutant	SER	Netting Basis	Proposed PSEL	Increase Over Baseline
PM	25	312	305	-7
PM ₁₀	15	180	194	+14
VOC	40	74	113	+39
NO _x	40	330	363	+33
SO ₂	40	19	40	+21
CO	100	80	60	-20

PLANT SITE EMISSION LIMIT MONITORING

47. The permit specifies monitoring, record keeping, and emissions estimation methods that are to be used to demonstrate compliance with the short-term and annual PSELs. Beside the testing of the char production process and associated equipment, as defined in and required by LRAPA 33-065, the facility is required to verify the emission factors used to estimate VOC, NO_x, SO₂, and CO emissions from char production. In addition, the facility is required to conduct testing once during the duration of this permit to verify the emission factors and flow rate values that are used to demonstrate compliance with the monthly PM and PM₁₀ PSELs for the briquet cooling (EU 4) and briquet handling (EU 8) systems. The previous ACDP requires compliance testing of the VOC emissions from the solvent-treated briquet operation within 180 days of startup. The startup date of the STB operation was October of 2000. There is no other testing required by the permit.
48. The facility can use a value of 80 pounds per year to estimate annual VOC emissions from the storage tanks in EU 11. This is acceptable since the emissions are relatively small and the value is based on worst-case conditions.

GENERAL TESTING, MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

49. The section of the permit on general testing requirements is provided so that the facility and LRAPA will know what test methods should be used to measure pollutant emissions in the event that testing is conducted for any reason. Although the permit may not require testing because other routine monitoring is used to determine compliance, LRAPA and EPA always have the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the facility may elect to voluntarily conduct testing to confirm the compliance status. In either case, the methods to be used for testing in the event that testing is conducted are included in the permit.

50. The permit includes general monitoring requirements beyond the specific requirements required to demonstrate compliance with the applicable emission limits and standards and PSELs.
51. The permit includes general requirements for maintaining records of all monitoring information. These records must be maintained for at least five (5) years.
52. The permit includes general reporting requirements for submitting semi-annual and annual monitoring reports that include semi-annual compliance certifications. Excess emissions are required to be reported to LRAPA immediately as well as in a log book attached to the annual report. Emissions fees reports are required annually.

NEW SOURCE REVIEW (NSR) REQUIREMENTS

53. There are no New Source Review (NSR) Provisions that apply to the facility at this time.

TYPICALLY ACHIEVABLE CONTROL TECHNOLOGY (TACT)

54. LRAPA Title 32 requires a new emissions unit to meet TACT if the facility where the emissions unit is located is required to have a permit, the new emissions unit is not subject to New Source Review (NSR), New Source Performance Standards (NSPS), or any other applicable standard, and the emissions unit would have emissions of any criteria pollutant equal to or greater than one (1) ton per year, or of PM₁₀ equal to or greater than 500 pounds per year in a PM₁₀ nonattainment area. The STB operation satisfies these criteria for VOC and is, therefore, subject to TACT.

LRAPA Title 32 defines TACT for new facilities as the emission limit that is typical of the emission level achieved by well-controlled new or modified emissions units similar in type and size that were recently installed. As part of its application, the facility submitted a TACT analysis of the VOC emission control methods for the STB operation. The facility has proposed the following methods to satisfy TACT:

- X Refrigeration system to maintain solvent temperature below 50°F during STB production before pumping to the dip tank to minimize solvent fume generation;
- X Ventilation of the dip tank, the STB building, and the STB handling and bagging operations through a common fume exhaust fan to the ACC;
- X Meeting total enclosure requirements for the STB operations area;
- X ACC to be operated at a minimum temperature of 1400°F and to achieve at least 95% VOC reduction;
- X Submerged filling of the dip tank;
- X Pre-screening briquets prior to solvent application to minimize the amount of solvent coated fines produced; and
- X Ventilation of the dried briquet handling and screening operations to the packaging fabric filter dust collector.

The facility has stated that the proposed VOC control methods have been determined to be BACT for similar sources in West Virginia and Kentucky. LRAPA has determined that the VOC control methods proposed by the source for the STB operation satisfy the TACT requirements of LRAPA 32-008(2) for new emissions units. The use of these control methods is required by the permit.

HAZARDOUS AIR POLLUTANTS

55. The facility estimates that small quantities of methanol, a hazardous air pollutant (HAP), are present in the ACC exhaust. The facility estimates that the maximum annual emissions of methanol are less than three (3) tons. Therefore, the facility is not a major source for HAPs.

TOXIC AND FLAMMABLE SUBSTANCE USAGE

56. The facility uses no toxic or flammable substances.

STRATOSPHERIC OZONE-DEPLETING SUBSTANCES

57. The facility does not manufacture, sell, distribute, or use any stratospheric ozone-depleting substances except as contained in refrigeration and fire suppression equipment. Use of these materials is not regulated and can continue until supplies are depleted. These materials will be recycled by authorized vendors until replacements are developed. As such, the 1990 Clean Air Act, as amended, Sections 601-618, do not apply to the facility.

GENERAL BACKGROUND INFORMATION

58. The facility is located in an area that has been designated non-attainment for PM₁₀.
59. The facility was issued an ACDP by LRAPA in 1989. The ACDP contained a PSEL of 50 pounds per hour and 206 tons per year for PM. The ACDP expired on August 21, 1999. A Title V permit was issued on August 11, 2000. A significant modification of the permit was issued on June 9, 2005.
60. The facility is required to obtain a Federal Operating Permit because the facility's PTE for PM/PM₁₀, NO_x, and VOC is greater than 100 tons per year.
61. The facility has been issued one (1) NPDES permit, No. 101335.

COMPLIANCE HISTORY

62. On January 6, 1978, LRAPA issued Notice of Non-Compliance (NON) 78-001 to the facility. NON 78-001 was issued because the facility allowed a direct discharge of dryer exhaust gases to the atmosphere and failed to report an upset condition. Both actions were violations of the facility's ACDP.
63. On March 4, 1983, LRAPA received an application from the facility for a variance to the provisions of LRAPA 33-065 (Charcoal Producing Plants) until December 31, 1983. On May 11, 1983, LRAPA granted the requested variance until October 31, 1988. Additional PM control measures were installed at the source. Emissions testing performed in September of 1983 showed that the facility was in compliance with the provisions of LRAPA 33-065.
64. On March 20, 1998, LRAPA issued Notice of Non-Compliance (NON) 1529 to the facility. NON 1529 was issued because the visible emissions in the exhaust from the ACC exceeded 20% opacity for a period aggregating more than three (3) minutes in any one (1) hour. Using EPA modified Method 9, the opacity was determined to be 32%, which is greater than the limit of 20% in LRAPA 32-010. The facility stated that the opacity violation was due to the introduction of wet hog fuel into the charcoal production process. On April 10, 1999, LRAPA received a plan of action from the facility for preventing the introduction of hog fuel with unacceptable moisture content. NON 1529 was closed on May 19, 1998.

65. On July 15, 1998, LRAPA conducted an inspection of the facility and determined that the facility was in compliance with the conditions of its ACDP and all applicable provisions of LRAPA rules.
66. On September 9, 1999, LRAPA issued Notice of Non-Compliance (NON) 1831 to the facility. NON 1831 was issued because the facility violated Condition 2 under "Other Conditions" in ACDP 204402 by failing to operate a plant process discharging air contaminants such that emissions are minimized at all times. The NON required that the facility submit by October 11, 1999, a detailed written account of the events related to the violation and a description of actions to be taken in the future to prevent its recurrence. On October 5, 1999, the facility submitted to LRAPA a report that included this information. NON 1831 was closed on January 4, 2000.
67. On October 17, 2000, LRAPA issued NON 2119 to the facility for failure to take reasonable precautions to minimize particulate emissions from becoming airborne from truck dump operations. A civil penalty in the amount of \$1200 was assessed and paid in a timely manner on February 6, 2001.
68. In January of 2001, the facility conducted stack tests on the ACC. Results indicated that the facility was in violation of PSELS for PM. On April 26, 2001, LRAPA issued Notice of Non-Compliance for the Violation (NON No. 2239). As resolution to the violation, LRAPA and the facility entered into SFO 01-2239. On December 14, 2001, the facility submitted the results of the stack testing conducted from October 30 through November 3, 2001. Results of the stack test indicated that the facility was in compliance with the emission limits, the exceedance of which was the basis for SFO 01-2239. On September 18, 2002, LRAPA received the results from a stack test that indicated an exceedance of the hourly PSEL for total PM and PM₁₀. In November 2002, LRAPA issued a Notice of Non-Compliance (NON) 2468 to the facility for the PSEL violations. A Notice of Civil Penalty Assessment (NCP 03-2468) was issued on March 5, 2003, for the violations cited in NON 2468.
69. On November 8, 2002, LRAPA issued NON 2468 to the facility for exceeding the pound per hour PM limit of 60 pounds per hour and for exceeding the 47 pound per hour limit for PM₁₀. A civil penalty in the amount of \$2400 was assessed and paid in a timely manner on March 11, 2003.
70. Notice of Non-Compliance (NON) 2573 was issued on August 7, 2003, for a violation which occurred on June 24, 2003, for failure to take reasonable precautions to prevent particulate matter from becoming airborne from material-handling operations (failed to operate water spray system on truck dump). Notice of Civil Penalty Assessment (NCP) 03-2573 was issued on September 11, 2003, for the violation.

SOURCE TEST RESULTS

71. The following tables summarize the source test data from the facility since 1981:

Test Date: February 1981

	Retort #2	ACC #2	Cyclone #3	Primary Cyclone	Secondary Cyclone	Briquet Dryer
PM (lbs/hr)	3383	31	778	2189	2289	6.2

Test Date: February 1982

	Retort	Cyclone	ACC	Wood Dryers
PM (lbs/hr)	1394	637	38.7	173

Test Date: October 1982

	Retort	ACC	Briquet Dryers	Wood Dryer Cyclone
PM (lbs/hr)	54.8	61.1	7.07	125

Test Date: September 1983

	ACC	Briquet Dryer 1 West Stack	Briquet Dryer 1 East Stack	Briquet Dryer 1 West Stack	Briquet Dryer 2 East Stack	Total Plant
PM (lbs/hr)	24.8	1.67	1.41	1.06	1.49	30.41

TOTAL PLANT EMISSIONS: 7.73 lbs/ton of char produced

Test Date: July 1986

	ACC	Total Plant
PM (lbs/hr)	46.6	55.9*

TOTAL PLANT EMISSIONS: 10.09 lbs/ton of char produced

* Based on assumption that the emission rate for the briquet dryers measured during the September 1983 test is unchanged.

Test Date: December 1987

	ACC	Briquet Dryer Vent 1	Briquet Dryer Vent 2	Briquet Dryer Vent 3	Briquet Dryer Vent 4	Total Plant
PM (lbs/hr)	18.7	2.6	1.4	1.3	1.2	25.2

TOTAL PLANT EMISSIONS: 5.6 lbs/ton of char produced

Test Date: December 1991

	ACC	Briquet Dryer Vent 1	Briquet Dryer Vent 2	Briquet Dryer Vent 3	Briquet Dryer Vent 4	Total Plant
PM (lbs/hr)	32.1	3.0	0.8	1.0	1.0	37.9

TOTAL PLANT EMISSIONS: 8.3 lbs/ton of char produced

Test Date: December 1992

Unit Tested: After Combustion Chamber (ACC)

Pollutant	NO _x	SO ₂	CO	TOC
Emissions (lbs/hr)	51.3	3.0	0.1	ND

Test Date: July 1998

	ACC	Briquet Dryer 1 Vent 1	Briquet Dryer 1 Vent 2	Briquet Dryer 2 Vent 1	Briquet Dryer 2 Vent 2	Total Plant
PM (lbs/hr)	23.7	2.41	1.08	1.63	1.41	29.5

TOTAL PLANT EMISSIONS: 4.20 lbs/ton of char produced

Test Date: January 17-23, 2001

Sampling Location	Total PM		Total PM ₁₀		VOC (lb/hr)	NO _x (lb/hr)	SO ₂ (lb/hr)	CO (lb/hr)
	lb/hr	lb/ton	lb/hr	lb/ton				
ACC Stack	113	18.8	77.8	13.1	<0.3	25.5	6.39	2.40
Dryer 1 Wet End Exhaust	6.92	0.49	3.72	0.265	0.477	1.60	0.278	1.44
Dryer 1 Dry End Exhaust	5.22	0.37	3.90	0.278	0.166	1.17	0.233	1.25
Dryer 1 Cooling Fan 1 Exhaust	2.37	0.17	1.54	0.111	NA	NA	NA	NA
Dryer 1 Cooling Fan 2 Exhaust	2.84	0.20	1.34	0.095	NA	NA	NA	NA
Dryer 2 Wet End Exhaust	5.31	0.38	2.53	0.180	0.422	1.31	0.182	0.395
Dryer 2 Dry End Exhaust	4.32	0.31	2.62	0.187	0.166	0.92	0.119	0.560
Dryer 2 Cooling Fan Exhaust	5.67	0.40	5.31	0.0379	NA	NA	NA	NA
East Dust Collector Exhaust	0.12	0.0056	0.318	0.013	NA	NA	NA	NA
West Dust Collector Exhaust	0.90	0.024	0.878	0.023	NA	NA	NA	NA
Wet Dust Collector	0.038	0.0027	0.016	0.001	NA	NA	NA	NA
Small Dust Collector Exhaust	0.12	0.014	0.188	0.022	NA	NA	NA	NA
TOTAL	146.8	21.2	100.2	14.7	1.23	30.5	7.20	6.05

Test Date: October 30 -- November 1, 2001

Pollutant	ACC	Briquet Dryer 1 Vent 1	Briquet Dryer 1 Vent 2	Briquet Dryer 2 Vent 1	Briquet Dryer 2 Vent 2	Total PM
PM (lbs/hr)	27.9	3.02	2.86	2.36	2.75	38.89

Total PM = 4.76 lb/ton char produced

Test Date: October 30 -- November 1, 2001

Pollutant	No. 1 Dryer Cooler Fan No.1	No. 1 Dryer Cooler Fan No.2	No. 2 Dryer Cooler Fan No.1	Total PM
PM (gr/dscf)	0.0126	0.0122	0.0086	0.0334

Total PM = 4.76 lb/ton char produced

Test Date: August 6-7, 2002

Sampling Location	Total PM ₁₀ (lb/hr)	Total PM	
		lb/hr	lb/ ton of char
ACC Exhaust	38.4	57.4	6.32
No. 1 Cooler	4.93	6.09	0.67
No. 1 Dryer Dry End	3.03	4.93	0.54
No. 2 Dryer Green End	2.43	4.27	0.47
No. 2 Dryer Dry End	2.71	2.87	0.32
Total	51.5	51.5	8.32

Test Date: November 3-7, 2003

Sampling Location	Total PM ₁₀ (lb/hr)	Total PM	
		lb/hr	lb/ ton of char
ACC Dryers 1 &2	44.40	79.25	9.57
No. 1& No. 2 Coolers	--	--	0.437
Total	44.40	79.35	10.01

Test Date: November 15-18, 2004

Sampling Location	Total PM ₁₀ (lb/hr)	Total PM	
		lb/hr	lb/ ton of char
ACC Exhaust	13.11	20.60	2.60
No. 1 Dryer Green End	1.30	2.40	0.30
No. 1 Dryer Dry End	0.67	1.12	0.14
No. 2 Dryer Green End	1.72	4.80	0.61
No. 2 Dryer Dry End	1.51	2.88	0.36
Total	18.31	31.80	4.01

EMISSIONS DETAIL SHEETS

Criteria Pollutants

72. Attached are the estimates for current and baseline criteria pollutant emissions from the facility. The emission factors used to estimate the projected VOC and NO_x emissions from char production process are different than those used to estimate the baseline VOC and NO_x emissions. The char retort currently used is a replacement unit for the two (2) retorts that were used during the baseline period. In a May 14, 1993 letter, LRAPA approved the facility's use of AP-42 emission factors and an assumed VOC control efficiency of 98% to estimate baseline VOC and NO_x emissions. Since the original retorts were less efficient than the current retort, LRAPA has determined that the original retorts emitted more VOC and NO_x per ton of char produced than the current retort. Therefore, the emission factors used to estimate the projected VOC and NO_x emissions are those determined during the 1992 source testing on the current retort and ACC, rather than those found in AP-42.

The NO_x emission factors for Charring and Drying (EU 3), the PM₁₀ emission factor for the Briquet Cooling System (EU 4), and the PM/PM₁₀ emission factors for the Briquet Handling System (EU 8) were changed with the significant modification action applied for on October 8, 2004. These changes were based upon source tests from the facility in Springfield as well as other Kingsford facilities. Some production throughput values were also increased as part of the significant modification. No changes in emissions were requested with the 2005 renewal.

PUBLIC NOTICE

73. This draft permit was on public notice from March 24, 2006, to April 24, 2006. On April 21, 2006, LRAPA received written comments from Kingsford. Of the changes requested for the Public Notice Draft Review Report, all were made as requested except that citing Item 48, which did not appear in the Review Report as described by Kingsford. Both of the comments made pertaining to the Public Notice Draft Permit were addressed by changing the text of the permit as requested. A letter summarizing these revisions was sent to Kingsford.

EPA REVIEW OF PROPOSED PERMIT

74. This proposed permit was sent to EPA on September 14, 2006, for a 45-day review period. Because no adverse comments were received and there were no substantive changes to the permit after the public comment period, LRAPA requested and EPA agreed to expedited review. The public will have 105 days (45-day EPA review period plus 60 days) from the date the proposed permit was sent to EPA to appeal the permit with EPA.

MAX/DLE/bp
9/27/06