

**YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT**  
1947 Galileo Court, Suite 103, Davis, CA 95616  
(530) 757-3650

**TITLE V OPERATING PERMIT**  
Permit Number: F-00514-6

**ISSUED TO:**

Woodland Biomass Power Ltd.  
PO Box 1560  
Woodland, CA 95776

**PLANT SITE LOCATION:**

1786 East Kentucky Ave.  
Woodland, CA 95776

**ISSUED BY:**

	Mat Ehrhardt, P.E., Air Pollution Control Officer	Date
PROPOSED		April 4, 2011
EFFECTIVE		Proposed
EXPIRATION		Proposed

Nature of Business: Electric Power Production

SIC Code: 4911

**Responsible Official:**

Name: Steve Sorrentino  
Title: Vice President Operations  
Phone: (734) 302-4893

**Site Contact Person:**

Name(s): Troy Owens  
Title: Plant Manager  
Phone: (530) 661-6095

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**I. FACILITY EMISSION UNITS AND EQUIPMENT LISTS:**

**A. Insignificant Emissions Units**

Insignificant emissions units or exempted equipment may be supplemented, replaced or modified with non-identical equipment without notice provided exemption status has not changed as defined in current district or federal rules. The equipment listed in Table 1 is a partial listing of equipment currently identified as exempt or insignificant and not required to obtain an operating permit pursuant to Rule 3.2 of the Yolo-Solano Air Quality Management District.

Table 1. Exempted And Insignificant Emissions Units (partial listing)

Insignificant Equipment Description	Basis for Exemption
980 Cat Loader (non-road vehicle)	Rule 3.2, Section 101.1
966 Cat Loader (non-road vehicle)	Rule 3.2, Section 101.1
Ford 9000 Water Truck	Rule 3.2, Section 101.1
RTC66 Cat Fork Lift	Rule 3.2, Section 101.1
Man Lift	Rule 3.2, Section 105.1
All Mobile Vehicles	Rule 3.2, Section 101.1
Solvent Cleaning Tank (Safety Kleen)	Rule 3.2, Section 110.3
Turbine Lube Oil Tanks	Rule 3.2, Section 109.2
Emergency Feedwater Pump	Rule 3.2, Section 113
Diesel Storage Tank	Rule 3.2, Section 109.2
Laboratory and Fuel Analysis	Rule 3.2, Section 111
Repairs and Maintenance Operations	Rule 3.2, Section 108
Anhydrous ammonia receiving/storage	Rule 3.2, Section 109
Office HVAC	Rule 3.2, Section 103

**B. Significant Emissions Unit Information**

Each of the sources has been constructed pursuant to issuance of an authority to construct in accordance with District Rules 3.1 and 3.4.

**Identification Number: P-105-90(a1)**

Equipment Description: 330 MMBtu/hr Gotaverken circulating fluidized bed boiler (Model No. 722-118), total air fan (700 hp), primary air fan (400 hp), seal air blower (2 at 150 hp each), recirculating air fan (60 hp), induced draft fan (1250 hp)

Control Equipment: Baghouse, 6-cell, 342 bags/cell, 6" D x 168" L each, 156,500 acfm; 20,000 gallon ammonia tank, variable flow, for use in the Thermal De-NOx system; and limestone SOx control

**Identification Number: P-31-94(t)**

Equipment Description: Sand screening: 3 hp conveyor; 1 hp shaker screener; and 1 hp air separator with conveyor

Control Equipment: None

**Identification Number: P-34-94(t)**

Equipment Description: Rice hull receiving, storage, and shipping: twenty three screw conveyors; two bucket elevators; one belt tube conveyor; four boiler feed conveyors; one storage silo; and four rotary air locks

Control Equipment: Baghouse, MAC Equipment Company, 9 bags, model 36AV59, 530 cfm, which serves the metering bin vent

**Identification Number: P-50-94(t)**

Equipment Description: Hydrated lime storage and mixing: 0.75 hp screw feeder; 0.3 hp slurry mixer; two 3 hp slurry pumps

Control Equipment: Baghouse, Griffin Environmental Company, model JV-24-6X, 24 bags, 920 cfm

**Identification Number: P-51-94(t)**

- Equipment Description: 890 hp Caterpillar diesel emergency engine, model number 3412, serial number 81Z07888
- Control Equipment: None
- Identification Number: P-52-94(t)**
- Equipment Description: 185 hp Caterpillar diesel emergency engine (fire pump), model number 3208, serial number 90N71122
- Control Equipment: None
- Identification Number: P-61-89(a1)**
- Equipment Description: Fuel receiving, processing, grinding and storage: One 400 hp electric drive fuel grinder, two 120 hp fuel unloading truck tippers; 20 hp fuel unloading truck tipper drag chain; 30 hp fuel stacking conveyor A; 8 hp fuel stacking conveyor B; 40 hp fuel feed conveyor E; two 20 HP each fuel reclaimers (primary and secondary); 15 hp boiler fuel feed conveyor C; two 5 hp each disc type fuel sizing screen; 200 hp hog type wood sizing mill; 5 hp spike roller; 10 hp belt F; and 20 hp boiler feed conveyor D.
- Control Equipment: Dust suppression spray at multiple points; Baghouse, Mikro-Pulsaire, model number 81S-8-40 C; and Baghouse, Mikro-Pulsaire, model number 25S6-30 B
- Identification Number: P-74-94(t)**
- Equipment Description: Cooling tower, Hammon HUC-3448, 20,765 GPM; two 125 hp fans
- Control Equipment: Mist eliminators for drift control
- Identification Number: P-90-89(t)**
- Equipment Description: Hydrated Lime/Sodium Bicarbonate receiving and storage: storage silo; 5 hp injection blower; 0.75 hp rotary gate; and 1 hp cross auger

Control Equipment: Baghouse: serving storage silo

**Identification Number: P-91-89(t)**

Equipment Description: Flyash outloading and transfer: storage silo; 1.5 hp rotary valve; and 5 hp drag conveyor

Control Equipment: Ash/water mixer for out loading to tractor trailer (10 HP)

**Identification Number: P-92-89(t)**

Equipment Description: Clay/limestone receiving and storage: storage silo and pneumatic conveyor system

Control Equipment: Baghouse serving storage silo

**Identification Number: P-93-89(t)**

Equipment Description: Sand receiving and storage: storage silo and pneumatic conveyor system

Control Equipment: Baghouse serving storage silo

**Identification Number: P-12-11**

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Equipment Description: 1,000 BHP (maximum) Diesel Fired IC Engine, EPA Certified Tier II Engine

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Control Equipment: Aftercooler and Turbocharger

## II. SPECIFIC UNIT REQUIREMENTS

### A. Emission Limits

1. For the flyash out-loading system (P-91-89(t)), the Permit Holder shall not discharge into the atmosphere from any equipment associated with this process any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- a. As dark or darker in shade than No. 1/2 on the Ringelmann Chart;  
or
  - b. Greater than 10% opacity. [District Rule 3.4/C-02-119]
2. The VOC emissions from the boiler (P-105-90(a1)) shall not exceed 420.0 lb/day, 37,800 lb/1<sup>st</sup> calendar quarter, 38,220 lb/2<sup>nd</sup> calendar quarter, 38,640 lb/3<sup>rd</sup> calendar quarter, 38,640 lb/4<sup>th</sup> calendar quarter, and 65.60 tons/year. [District Rule 3.4/C-09-124]
  3. The CO emissions from the boiler (P-105-90(a1)) shall not exceed 1,188.0 lb/day, 106,920 lb/1<sup>st</sup> calendar quarter, 108,108 lb/2<sup>nd</sup> calendar quarter, 109,296 lb/3<sup>rd</sup> calendar quarter, 109,296 lb/4<sup>th</sup> calendar quarter, and 185.60 tons/year. [District Rule 3.4/C-09-124]
  4. The NOx emissions from the boiler (P-105-90(a1)) shall not exceed 631.2 lb/day, 56,808 lb/1<sup>st</sup> calendar quarter, 57,439 lb/2<sup>nd</sup> calendar quarter, 58,070 lb/3<sup>rd</sup> calendar quarter, 58,070 lb/4<sup>th</sup> calendar quarter, and 98.60 tons/year. [District Rule 3.4/C-09-124]
  5. The SOx emissions from the boiler (P-105-90(a1)) shall not exceed 316.8 lb/day, 28,512 lb/1<sup>st</sup> calendar quarter, 28,829 lb/2<sup>nd</sup> calendar quarter, 29,146 lb/3<sup>rd</sup> calendar quarter, 29,146 lb/4<sup>th</sup> calendar quarter, and 49.50 tons/year. [District Rule 3.4/C-09-124]
  6. The PM10 emissions from the boiler (P-105-90(a1)) shall not exceed 172.8 lb/day, 15,552 lb/1<sup>st</sup> calendar quarter, 15,725 lb/2<sup>nd</sup> calendar quarter, 15,898 lb/3<sup>rd</sup> calendar quarter, 15,898 lb/4<sup>th</sup> calendar quarter, and 27.00 tons/year. [District Rule 3.4/C-09-124]
  7. Except during periods of start-up or shut-down, the permit holder shall operate the fluidized bed combustion system (P-105-90(a1)) in a manner such that the exhaust stack emissions are less than the following values, as determined by the average value of three one-hour source tests and based upon the measured heat input during the source tests: [District Rule 3.4, Section 409.1/C-09-124]

VOC (as methane)	0.05 lb/MMBtu;
CO	0.15 lb/MMBtu;
NOx (as NO <sub>2</sub> )	0.08 lb/MMBtu;
SOx (as SO <sub>2</sub> )	0.04 lb/MMBtu;
PM10 (front and back half)	0.010 gr/dscf (referenced to 12% CO <sub>2</sub> );
PM10 (front half)	0.007 gr/dscf (referenced to 12% CO <sub>2</sub> );
	and

Ammonia slip 50 parts per million by volume dry (ppmvd).

8. Except during periods of start-up or shut-down, the permit holder shall operate the fluidized bed combustion system (P-105-90(a1)) in a manner such that the exhaust stack emissions are less than the following values, as determined by the average value of three one-hour source tests: [District Rule 3.4, Section 409.1/C-09-124]

VOC (as methane)	17.5 lb/hr;
CO	49.5 lb/hr;
NOx (as NO <sub>2</sub> )	26.3 lb/hr;
SOx (as SO <sub>2</sub> )	13.2 lb/hr;
PM10 (front and back half)	7.2 lb/hr; and
PM10 (front half)	5.0 lb/hr.

9. During periods of startup, shutdown, and malfunction, the permit holder shall operate the fluidized bed combustion system in a manner such that the exhaust stack emissions are less than the following values, as determined by the CEMS system: [40 CFR 60.44b(d)]

NOx (as NO <sub>2</sub> )	0.30 lb/MMBtu (30 day rolling average)
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10. For the boiler (P-105-90(a1)), for in-stack opacity purposes, except during periods of startup, shutdown, and malfunction, the source shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity. [40 CFR 60.43b(f) and (g)]
11. For the boiler (P-105-90(a1)), for visible opacity purposes, the Permit Holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:
- a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
  - b. Greater than 20% opacity. [District Rule 2.3]
12. The PM10 emissions from the sand screening operation (P-31-94(t)) shall not exceed 2.6 lb/day, 234 lb/1<sup>st</sup> calendar quarter, 237 lb/2<sup>nd</sup> calendar quarter, 239 lb/3<sup>rd</sup> calendar quarter, 239 lb/4<sup>th</sup> calendar quarter, and 0.47 tons/year. [District Rule 3.4/C-94-85]
13. The PM10 emissions from the rice hull processing operation (P-34-94(t)) shall not exceed 6.4 lb/day, 582 lb/1<sup>st</sup> calendar quarter, 582 lb/2<sup>nd</sup> calendar quarter,

582 lb/3<sup>rd</sup> calendar quarter, 582 lb/4<sup>th</sup> calendar quarter, and 0.40 tons/year.  
[District Rule 3.4/P-34-94(t)]

14. The PM10 emissions from the hydrated lime storage and mixing operation (P-50-94(t)) shall not exceed 3.0 lb/day, 60 lb/1<sup>st</sup> calendar quarter, 60 lb/2<sup>nd</sup> calendar quarter, 60 lb/3<sup>rd</sup> calendar quarter, 60 lb/4<sup>th</sup> calendar quarter, and 0.03 tons/year. [District Rule 3.4/P-50-94(t)]
15. The VOC emissions from the emergency engine (P-51-94(t)) shall not exceed 47.1 lb/day, 393 lb/1<sup>st</sup> calendar quarter, 393 lb/2<sup>nd</sup> calendar quarter, 393 lb/3<sup>rd</sup> calendar quarter, 393 lb/4<sup>th</sup> calendar quarter, and 0.20 tons/year. [District Rule 3.4/P-51-94(t)]
16. The CO emissions from the emergency engine (P-51-94(t)) shall not exceed 108.0 lb/day, 900 lb/1<sup>st</sup> calendar quarter, 900 lb/2<sup>nd</sup> calendar quarter, 900 lb/3<sup>rd</sup> calendar quarter, 900 lb/4<sup>th</sup> calendar quarter, and 0.45 tons/year. [District Rule 3.4/P-51-94(t)]
17. The NOx emissions from the emergency engine (P-51-94(t)) shall not exceed 496.5 lb/day, 4,137 lb/1<sup>st</sup> calendar quarter, 4,137 lb/2<sup>nd</sup> calendar quarter, 4,137 lb/3<sup>rd</sup> calendar quarter, 4,137 lb/4<sup>th</sup> calendar quarter, and 2.07 tons/year. [District Rule 3.4/P-51-94(t)]
18. The SOx emissions from the emergency engine (P-51-94(t)) shall not exceed 7.5 lb/day, 63 lb/1<sup>st</sup> calendar quarter, 63 lb/2<sup>nd</sup> calendar quarter, 63 lb/3<sup>rd</sup> calendar quarter, 63 lb/4<sup>th</sup> calendar quarter, and 0.03 tons/year. [District Rule 3.4/P-51-94(t)]
19. The PM10 emissions from the emergency engine (P-51-94(t)) shall not exceed 34.1 lb/day, 284 lb/1<sup>st</sup> calendar quarter, 284 lb/2<sup>nd</sup> calendar quarter, 284 lb/3<sup>rd</sup> calendar quarter, 284 lb/4<sup>th</sup> calendar quarter, and 0.14 tons/year. [District Rule 3.4/P-51-94(t)]
20. The VOC emissions from the emergency fire pump (P-52-94(t)) shall not exceed 13.1 lb/day, 110 lb/1<sup>st</sup> calendar quarter, 110 lb/2<sup>nd</sup> calendar quarter, 110 lb/3<sup>rd</sup> calendar quarter, 110 lb/4<sup>th</sup> calendar quarter, and 0.05 tons/year. [District Rule 3.4/P-52-94(t)]
21. The CO emissions from the emergency fire pump (P-52-94(t)) shall not exceed 30.1 lb/day, 251 lb/1<sup>st</sup> calendar quarter, 251 lb/2<sup>nd</sup> calendar quarter, 251 lb/3<sup>rd</sup> calendar quarter, 251 lb/4<sup>th</sup> calendar quarter, and 0.13 tons/year. [District Rule 3.4/P-52-94(t)]

22. The NOx emissions from the emergency fire pump (P-52-94(t)) shall not exceed 138.5 lb/day, 1,154 lb/1<sup>st</sup> calendar quarter, 1,154 lb/2<sup>nd</sup> calendar quarter, 1,154 lb/3<sup>rd</sup> calendar quarter, 1,154 lb/4<sup>th</sup> calendar quarter, and 0.58 tons/year. [District Rule 3.4/P-52-94(t)]
23. The SOx emissions from the emergency fire pump (P-52-94(t)) shall not exceed 2.1 lb/day, 17 lb/1<sup>st</sup> calendar quarter, 17 lb/2<sup>nd</sup> calendar quarter, 17 lb/3<sup>rd</sup> calendar quarter, 17 lb/4<sup>th</sup> calendar quarter, and 0.01 tons/year. [District Rule 3.4/P-52-94(t)]
24. The PM10 emissions from the emergency fire pump (P-52-94(t)) shall not exceed 9.5 lb/day, 79 lb/1<sup>st</sup> calendar quarter, 79 lb/2<sup>nd</sup> calendar quarter, 79 lb/3<sup>rd</sup> calendar quarter, 79 lb/4<sup>th</sup> calendar quarter, and 0.04 tons/year. [District Rule 3.4/P-52-94(t)]
25. The PM10 emissions from the fuel material operations (P-61-89(a1)) shall not exceed 93.6 lb/day, 7,396 lb/1<sup>st</sup> calendar quarter, 7,478 lb/2<sup>nd</sup> calendar quarter, 7,560 lb/3<sup>rd</sup> calendar quarter, 7,560 lb/4<sup>th</sup> calendar quarter, and 6.68 tons/year. [District Rule 3.4/C-08-234]
26. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)) and the limited use IC engine (P-12-11), the Permit Holder shall not discharge into the atmosphere from any emissions equipment any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour which is:
  - a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
  - b. Greater than 20% opacity. [District Rules 2.3 and 3.4/C-08-234, C-10-67]
27. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), the Permit Holder shall not discharge into the atmosphere from any emissions control equipment any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour which is:
  - a. As dark or darker in shade than No. 1/4 on the Ringelmann Chart; or
  - b. Greater than 5% opacity. [District Rule 3.4/C-08-234]
28. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), the Permit Holder shall not release or discharge into the atmosphere, particulate matter in excess of 0.07 grains per cubic feet of exhaust volume as

- calculated at standard conditions from the baghouses. [District Rule 3.4/C-08-234]
29. The VOC emissions from the limited use engine (P-12-11) shall not exceed 26.5 lb/day, 220 lb/1st calendar quarter, 220 lb/2nd calendar quarter, 220 lb/3rd calendar quarter, 220 lb/4th calendar quarter, and 0.44 tons/calendar year. [District Rule 3.4/ C-10-67]
  30. The CO emissions from the limited use engine (P-12-11) shall not exceed 68.8 lb/day, 573 lb/1st calendar quarter, 573 lb/2nd calendar quarter, 573 lb/3rd calendar quarter, 573 lb/4th calendar quarter, and 1.15 tons/calendar year. [District Rule 3.4/ C-10-67]
  31. The NOx emissions from the limited use engine (P-12-11) shall not exceed 127.0 lb/day, 1,058 lb/1st calendar quarter, 1,058 lb/2nd calendar quarter, 1,058 lb/3rd calendar quarter, 1,058 lb/4th calendar quarter, and 2.12 tons/calendar year. [District Rule 3.4/ C-10-67]
  32. The SOx emissions from the limited use engine (P-12-11) shall not exceed 0.1 lb/day, 1 lb/1st calendar quarter, 1 lb/2nd calendar quarter, 1 lb/3rd calendar quarter, 1 lb/4th calendar quarter, and neg. tons/calendar year. [District Rules 2.11 and 3.4/ C-10-67]
  33. The PM10 emissions from the limited use engine (P-12-11) shall not exceed 29.2 lb/day, 243 lb/1st calendar quarter, 243 lb/2nd calendar quarter, 243 lb/3rd calendar quarter, 243 lb/4th calendar quarter, and 0.49 tons/calendar year. [District Rules 2.11 and 3.4/ C-10-67]
  34. No exhaust emissions (P-31-94(t), P-50-94(t), P-90-89(t), P-92-89(t) and P-93-89(t)) shall exceed 0.3 grains per cubic foot of exhaust volume as calculated at standard conditions. [District Rule 2.11/P-31-94(t), P-50-94(t), P-90-89(t), P-92-89(t) and P-93-89(t)]
  35. No visible emissions (P-61-89(a1), P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), p-93-89(t), P-92-89 and P-90-89(t)) beyond property boundaries are permitted. [District Rule 3.4/C-08-234, P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), p-93-89(t), P-92-89 and P-90-89(t)]
  36. The PM10 emissions from the cooling tower (P-74-94(t)) shall not exceed negligible lb/day, 2 lb/1<sup>st</sup> calendar quarter, 2 lb/2<sup>nd</sup> calendar quarter, 2 lb/3<sup>rd</sup> calendar quarter, 2 lb/4<sup>th</sup> calendar quarter, and 0.01 tons/year. [District Rule 3.4/P-74-94(t)]

37. The PM10 emissions from the hydrated lime/sodium bicarbonate receiving and storage operation (P-90-89(t)) shall not exceed 0.1 lb/day, 13 lb/1<sup>st</sup> calendar quarter, 13 lb/2<sup>nd</sup> calendar quarter, 13 lb/3<sup>rd</sup> calendar quarter, 13 lb/4<sup>th</sup> calendar quarter, and 0.01 tons/year. [District Rule 3.4/P-90-89(t)]
38. The PM10 emissions from the flyash outloading and transfer operation (P-91-89(t)) shall not exceed 7.5 lb/day, 675 lb/1<sup>st</sup> calendar quarter, 683 lb/2<sup>nd</sup> calendar quarter, 690 lb/3<sup>rd</sup> calendar quarter, 690 lb/4<sup>th</sup> calendar quarter, and 1.37 tons/year. [District Rule 3.4/C-02-119]
39. The PM10 emissions from the clay/limestone receiving and storage operation (P-92-89(t)) shall not exceed 0.1 lb/day, 13 lb/1<sup>st</sup> calendar quarter, 13 lb/2<sup>nd</sup> calendar quarter, 13 lb/3<sup>rd</sup> calendar quarter, 13 lb/4<sup>th</sup> calendar quarter, and 0.01 tons/year. [District Rule 3.4/P-92-89(t)]
40. The PM10 emissions from the sand receiving and storage operation (P-93-89(t)) shall not exceed negligible lb/day, 1 lb/1<sup>st</sup> calendar quarter, 1 lb/2<sup>nd</sup> calendar quarter, 1 lb/3<sup>rd</sup> calendar quarter, 1 lb/4<sup>th</sup> calendar quarter, and 0.01 tons/year. [District Rule 3.4/P-93-89(t)]

**B. Work Practice and Operational Requirements**

41. The emergency standby engines (P-51-94(t) and P-52-94(t)) shall be operated only during an emergency or for maintenance purposes. [District Rule 2.32, §110.3]
42. For the emergency standby engines (P-51-94(t) and P-52-94(t)), the maximum operating schedule for maintenance and testing is 55 minutes/day, 1 day/week, 52 weeks/year, not to exceed 50 hours per year. [District Rule 3.4, Section 409.1]
43. For the emergency standby engines (P-51-94(t) and P-52-94(t)), the Permit Holder shall not operate this internal combustion engine more than 200 total hours per calendar year. [District Rule 3.1, §402]
44. For the emergency standby engine (P-51-94(t)), the Permit Holder shall not operate this internal combustion engine for the supplying of power to a serving utility for distribution on the grid. [District Rule 3.4/P-51-94(t)]
45. The amount of diesel fuel used for the engine (P-51-94(t)) shall not exceed 1,095 gallons/day, 8,821 gallons/1<sup>st</sup> calendar quarter, 8,821 gallons/2<sup>nd</sup> calendar quarter, 8,821 gallons/3<sup>rd</sup> calendar quarter, 8,821 gallons/4<sup>th</sup> calendar quarter, and 8,821 gallons/year. [District Rule 3.4/P-51-94(t)]

46. The amount of diesel fuel used for the engine (P-52-94(t)) shall not exceed 295 gallons/day, 2,461 gallons/1<sup>st</sup> calendar quarter, 2,461 gallons/2<sup>nd</sup> calendar quarter, 2,461 gallons/3<sup>rd</sup> calendar quarter, 2,461 gallons/4<sup>th</sup> calendar quarter, and 2,461 gallons/year. [District Rule 3.4/P-52-94(t)]
47. For the boiler (P-105-90(a1)), a curing startup shall not exceed 96 hours in duration and a non-curing startup shall not exceed 24 hours in duration. [District Rule 3.4/C-09-124]
48. For the boiler (P-105-90(a1)), a gauge shall be maintained to indicate the differential pressure across the baghouse bags. The baghouse bags shall be cleaned or replaced before the differential pressure reaches the critical pressure, as determined by the manufacturer of the bags. [District Rule 3.4/C-09-124]
49. The permit holder shall fully offset all actual VOC emissions from this permit unit (P-105-90(a1)) and shall fully offset all actual PM10 emissions from the entire facility, on a calendar quarter basis, by diverting qualified agricultural biomass from being burned in the field. [District Rule 3.4/C-09-124]
50. The boiler (P-105-90(a1)) shall only be fired on biomass fuels or supplemental fuel. Biomass fuels shall be limited to: [District Rule 3.4, Section 409.1/C-09-124]
  - a. Sawmill residue;
  - b. Forest residue;
  - c. Urban wood (defined as clean, chipped material derived from construction and demolition materials, pallets, crates, boxes, and tree trimmings). This fuel shall not contain pressure treated wood (except as listed in section e. below) and shall not contain compounds listed in CCR 66261.24(a)(2)(A) in amounts exceeding the TTLC values;
  - d. Agricultural residues (defined as organic plant-based material generated by agricultural operations). Agricultural residues include but are not limited to: grasses, reject seed, corn cobs; orchard and vineyard prunings (including from orchard removals); prune, peach and olive pits; coffee and cocoa beans; almond shells and hulls; walnut shells; and rice hulls; *or*
  - e. Railroad Ties (only creosote treated). This fuel shall comply with the provisions of CCR 66261.24.
51. For the boiler (P-105-90(a1)), the creosote treated railroad ties shall not exceed 25% (by weight) of the total biomass fuel burned at any time. [District Rule 3.4/C-09-124]
52. Natural gas shall be the only supplementary fuel for the boiler (P-105-90(a1)). The use of natural gas shall be limited to 250 MMBtu/hr. Offset credits shall be

used for any emissions generated by the combustion of natural gas. [District Rule 3.4, Section 409.1/C-09-124]

53. The permit holder shall operate the fluidized bed combustion system (P-105-90(a1)) in a manner such that the exhaust stack emissions are less than the PERMITTED EMISSION LIMITS (daily, quarterly and annual), as determined by the CEMS. [District Rule 3.4, Section 409.1/C-09-124]
54. The amount of VOC and PM10 credits (calculated separately) required from the boiler (P-105-90(a1)) are calculated as follows: [District Rule 3.4, Section 409.1/C-09-124]

$$E = (Sa/Sp) * h * ER$$

where E = emission credits required  
Sa = hourly average recorded steam flow for the calendar quarter  
Sp = hourly maximum steam production as determined during source testing, or 255,000 lbs/hour, whichever is less  
h = hours of operation for the calendar quarter  
ER = emission rate (lb/hour - average of three runs) at maximum boiler firing rate from most recent source test

55. For the Boiler (P-105-90(a1)), the amount of VOC and PM10 credits (calculated separately) generated are calculated as follows: [District Rule 3.4, Section 409.1/C-09-124]

$$EC = \text{Summation } [1/DF_i * A_i * EF_i]$$

where EC = emission credits generated in pounds per calendar quarter

DF<sub>i</sub> = distance factor

A<sub>i</sub> = amount of each type of qualified agricultural biomass material, in tons per quarter (field condition)

EF<sub>i</sub> = emission factor, in pounds of pollutant (P) per ton of qualified agricultural biomass material (in field condition moisture) open burned

56. For the Boiler (P-105-90(a1)) the Distance Factor (DF) shall be 1.2 for agricultural waste diverted from open burning within a 15 mile radius of the source claiming offsets, and 2.0 for agricultural waste diverted from open burning 15 miles or more from the source claiming offsets. [District Rule 3.4, Section 409.1/C-09-124]

57. For the Boiler (P-105-90(a1)) the Emission Factors (EF) are as follows\*: [District Rule 3.4, Section 409.1/C-09-124]

Fuel type	Emission Factor (lb/ton)	
	VOC	PM10
Rice Straw	4.7	6.3
Wheat Straw	7.6	10.6
Almond Prunings	5.2	7.0
Apricot Prunings	4.6	5.9
Cherry Prunings	6.0	7.9
Grape Prunings	3.8	4.9
Peach Prunings	3.0	5.9
Pear Prunings	5.1	8.8
Prune Prunings	4.6	2.9
Walnut Prunings	4.8	4.2
Other Prunings	6.3	7.8

\*Given in field condition moisture

58. The permit holder (P-105-90(a1), P-61-89(a1), P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), -93-89(t), P-92-89, P-90-89(t)) shall obtain all qualified agricultural biomass material (offset material) from open field burning in the following priorities: [District Rule 3.4/C-09-124, C-08-234, P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), -93-89(t), P-92-89, P-90-89(t)]
- a. within 15 miles of the facility;
  - b. within the Yolo-Solano AQMD; and
  - c. from counties within the Sacramento Air Basin.
59. The APCO (P-74-94(t)) may increase offset requirements if it is determined that above priorities are being neglected. [District Rule 3.4/P-74-94(t)]
60. The amount of sand screened (P-31-94(t)) shall not exceed 10 tons/day, 900 tons/1<sup>st</sup> calendar quarter, 910 tons/2<sup>nd</sup> calendar quarter, 920 tons/3<sup>rd</sup> calendar

- quarter, 920 tons/4<sup>th</sup> calendar quarter, and 3,650 tons/year. [District Rule 3.4/C-94-85]
61. The amount of rice hulls received (P-34-94(t)) shall not exceed 300 tons/day, 27,300 tons/1<sup>st</sup> calendar quarter, 27,300 tons/2<sup>nd</sup> calendar quarter, 27,600 tons/3<sup>rd</sup> calendar quarter, 27,600 tons/4<sup>th</sup> calendar quarter, and 40,000 tons/year. [District Rule 3.4/P-34-94(t)]
  62. The amount of rice hulls metered and conveyed (P-34-94(t)) shall not exceed 300 tons/day, 27,300 tons/1<sup>st</sup> calendar quarter, 27,300 tons/2<sup>nd</sup> calendar quarter, 27,600 tons/3<sup>rd</sup> calendar quarter, 27,600 tons/4<sup>th</sup> calendar quarter, and 40,000 tons/year. [District Rule 3.4/P-34-94(t)]
  63. For the rice hull receiving, storage, and shipping operation (P-34-94(t)), all drop point suppressing water control devices, if required by this permit, must be in operation whenever material is transferred via open air conveyors. [District Rule 3.4/P-34-94(t)]
  64. For the rice hull receiving, storage, and shipping operation (P-34-94(t)), outside pile watering and watering of vehicular traffic areas must be done on an as needed basis to minimize fugitive dust emissions from these locations. [District Rule 3.4/P-34-94(t)]
  65. The amount of hydrated lime blended (P-50-94(t)) shall not exceed 1 ton/day, 90 tons/1<sup>st</sup> calendar quarter, 91 tons/2<sup>nd</sup> calendar quarter, 92 tons/3<sup>rd</sup> calendar quarter, 92 tons/4<sup>th</sup> calendar quarter, and 350 tons/year. [District Rule 3.4/P-50-94(t)]
  66. The amount of hydrated lime loaded (P-50-94(t)) shall not exceed 350 ton/day, 350 tons/1<sup>st</sup> calendar quarter, 350 tons/2<sup>nd</sup> calendar quarter, 350 tons/3<sup>rd</sup> calendar quarter, 350 tons/4<sup>th</sup> calendar quarter, and 350 tons/year. [District Rule 3.4/P-50-94(t)]
  67. The amount of fuel handled (P-61-89(a1)) shall not exceed 1,600 tons/day, 144,000 tons/1<sup>st</sup> calendar quarter, 145,600 tons/2<sup>nd</sup> calendar quarter, 147,200 tons/3<sup>rd</sup> calendar quarter, 147,200 tons/4<sup>th</sup> calendar quarter, and 260,000 tons/year. [District Rule 3.4/ C-08-234]
  68. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), the amount of fuel ground shall not exceed 1,000 tons/day, 28,800 tons/1<sup>st</sup> calendar quarter, 29,120 tons/2<sup>nd</sup> calendar quarter, 29,440 tons/3<sup>rd</sup> calendar quarter, 29,440 tons/4<sup>th</sup> calendar quarter, and 52,000 tons/year. [District Rule 3.4/C-08-234]

69. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), all control equipment, including ducts, shall be properly maintained and kept in good operating conditions, and shall be operated at all times in conjunction with its associated process. [District Rule 3.4/C-08-234]
70. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), the permit holder shall dispose of all waste material in a manner minimizing release into the atmosphere. [District Rule 3.4/C-08-234]
71. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), water sprays shall be used during grinding operations to control emissions. [District Rule 3.4/C-08-234]
72. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), the Permit Holder shall demonstrate on a continuous basis that there is a suitable mix of biomass to satisfy offset requirements and as necessary to offset other emissions as might be required by the APCO. Complete records will be kept including but not limited to, planned deliveries of biomass materials, sources of biomass materials for the next two weeks of operation and actual use of biomass materials during the previous week. The Permit Holder will make all possible effort to obtain biomass inventories including offset materials from open field burning in the following priorities:
  - a. Within 15 miles of the facility,
  - b. Within the Yolo-Solano AQMD,
  - c. From countries within the Sacramento Air Basin. [District Rule 3.4/C-08-234]
73. The horsepower-hours used for the limited use IC engine (P-12-11) shall not exceed 12,000 hp-hr/day, 100,000 hp-hr/1st calendar quarter, 100,000 hp-hr/2nd calendar quarter, 100,000 hp-hr/3rd calendar quarter, 100,000 hp-hr/4th calendar quarter, and 400,000 hp-hr/year. [District Rule 3.4/ C-10-67]
74. The engine (P-12-11) used at the site under this permit must be, at a minimum, an EPA Certified Tier II engine. [District Rule 3.4/C-10-67]
75. The engine/grinder (P-12-11) shall be used only for grinding material which is too large to be handled by the on site electric grinder permitted under P-61-89(a1). [District Rule 3.4/C-10-67]
76. For the limited use IC engine (P-12-11) the Permit Holder shall provide written notification to the District at least 3 days prior to any engine operating at the site

under this permit. The Permit Holder shall provide separate notification for each mobilization of engine operation. [District Rule 3.4/C-10-67]

77. The equipment listed on this permit (P-61-89(a1), P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), P-93-89(t), P-92-89(t), P-90-8(t)) is subject to Division 26, Part 6, Chapter 1, Section 44300 of the California Health and Safety Code (Air Toxics "Hot Spots" Information and Assessment Act of 1987). The Permit Holder is responsible for meeting all requirements and deadlines set forth in the legislation. [District Rule 3.4/C-08-234, P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), P-93-89(t), P-92-89(t), P-90-8(t)]
78. The District reserves the right to require the Permit Holder (P-61-89(a1), P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), P-93-89(t), P-92-89(t), P-90-8(t)) to re-evaluate the health risk, if there is a significant change in population, emissions or new health data becomes available. [District Rule 3.4/C-08-234, P-74-94(t), P-50-94(t), P-34-94(t), P-31-94(t), P-93-89(t), P-92-89(t), P-90-8(t)]
79. The circulation rate (P-74-94(t)) shall not exceed 30 million gallons/day, 2,730 million gallons/1<sup>st</sup> calendar quarter, 2,730 million gallons/2<sup>nd</sup> calendar quarter, 2,760 million gallons/3<sup>rd</sup> calendar quarter, 2,760 million gallons/4<sup>th</sup> calendar quarter, and 10,950 million gallons/year. [District Rule 3.4/P-74-94(t)]
80. The make up rate (P-74-94(t)) shall not exceed 0.576 million gallons/day, 52 million gallons/1<sup>st</sup> calendar quarter, 52 million gallons/2<sup>nd</sup> calendar quarter, 53 million gallons/3<sup>rd</sup> calendar quarter, 53 million gallons/4<sup>th</sup> calendar quarter, and 210 million gallons/year. [District Rule 3.4/P-74-94(t)]
81. For the cooling tower (P-74-94(t)), no hexavalent chromium compounds shall be utilized in the cooling tower's circulating water. [District Rule 3.4/P-74-94(t)]
82. The silo fill rate (P-90-89(t)) shall not exceed 25 tons/day, 200 tons/1<sup>st</sup> calendar quarter, 200 tons/2<sup>nd</sup> calendar quarter, 200 tons/3<sup>rd</sup> calendar quarter, 200 tons/4<sup>th</sup> calendar quarter, and 200 tons/year. [District Rule 3.4/P-90-89(t)]
83. The lime injection to the baghouse (P-90-89(t)) shall not exceed 2 tons/day, 180 tons/1<sup>st</sup> calendar quarter, 182 tons/2<sup>nd</sup> calendar quarter, 184 tons/3<sup>rd</sup> calendar quarter, 184 tons/4<sup>th</sup> calendar quarter, and 200 tons/year. [District Rule 3.4/P-90-89(t)]
84. The flyash loaded and transferred (P-91-89(t)) shall not exceed 100 tons/day, 9,000 tons/1<sup>st</sup> calendar quarter, 9,100 tons/2<sup>nd</sup> calendar quarter, 9,200 tons/3<sup>rd</sup> calendar quarter, 9,200 tons/4<sup>th</sup> calendar quarter and 36,500 tons/year. [District Rule 3.4/C-02-119]

85. For the fly ash operations (P-91-89(t)), the Permit Holder shall fully offset all actual PM10 emissions associated with this process on a calendar quarter basis, by diverting qualified agricultural biomass from being burned in the field per Boiler permit P-105-90(a1). [District Rule 3.1 §402]
86. The ash/water mixer equipment on the flyash operation (P-91-89(t)) shall be properly maintained and kept in good operating condition in order to sustain the opacity limit for this equipment. [District Rule 3.4/C-02-119]
87. For the flyash operation (P-91-89(t)), material removed from the rotary valve, drag conveyor, storage silo or ash/water mixer shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 3.4/C-02-119]
88. The clay/limestone handling (P-92-89(t)) shall not exceed 240 tons/day, 1,800 tons/1<sup>st</sup> calendar quarter, 1,800 tons/2<sup>nd</sup> calendar quarter, 1,800 tons/3<sup>rd</sup> calendar quarter, 1,800 tons/4<sup>th</sup> calendar quarter and 1,800 tons/year. [District Rule 3.4/P-92-89(t)]
89. The sand silo fill rate (P-93-89(t)) shall not exceed 240 tons/day, 2,800 tons/1<sup>st</sup> calendar quarter, 2,800 tons/2<sup>nd</sup> calendar quarter, 2,800 tons/3<sup>rd</sup> calendar quarter, 2,800 tons/4<sup>th</sup> calendar quarter and 2,800 tons/year. [District Rule 3.4/P-93-89(t)]
90. The Permit holder shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR 64.7 for the boiler (P-105-90(a1)). [40 CFR 64]

### **C. Monitoring and Testing Requirements**

91. For the boiler (P-105-90(a1)), the permit holder shall calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for O<sub>2</sub>, CO, SO<sub>2</sub>, NO<sub>x</sub>, Opacity, and Volumetric Flow. [District Rule 3.4/C-09-124]
92. A quality assurance/quality control (QC) program for the CEMS shall be maintained. As a minimum, the QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities: [District Rule 3.4/C-09-124]
  - a. Calibrations of CEMS;
  - b. Calibration Drift (CD) determination and adjustment of CEMS;
  - c. Preventive Maintenance of CEMS (including spare parts inventory);
  - d. Data recording, calculations, and reporting procedures;

- e. Accuracy audit procedures including sampling and analysis methods; and
  - f. Program for corrective action for malfunctioning CEMS.
93. For the boiler (P-105-90(a1)), the permit holder shall install and maintain such facilities as are necessary for sampling and testing purposes. The number, size, and location of sampling ports shall be in accordance with Air Resources Board Test Method 1 or EPA Test Methods. The location and access to the sampling platform shall be in accordance with the General Industry Safety Orders of the State of California. [District Rule 3.4/C-09-124]
94. For the boiler (P-105-90(a1)), the permit holder shall perform an initial source test to determine compliance with the Toxic Air Contaminant emission limitations approved by the District. [District Rule 3.4/C-09-124]
95. For the boiler (P-105-90(a1)), Toxic Air Contaminant emission rates from the boiler shall not exceed the amounts approved by the District for this permit. [District Rule 3.4/C-09-124]
96. For the boiler (P-105-90(a1)), source testing for Toxic Air Contaminants shall be conducted using the test methods approved by the District. [District Rule 3.4/C-09-124]
97. For the boiler (P-105-90(a1)), the permit holder shall perform a source test at least once every 12 consecutive calendar months in order to demonstrate compliance with the following. The District reserves the right to require the permit holder to demonstrate compliance with additional parameters in order to address or ascertain compliance with the requirements of this permit. [District Rule 3.4/C-09-124]:
- a. VOC concentration (lb/MMBtu) and emission rate (lb/hour);
  - b. CO concentration (lb/MMBtu) and emission rate (lb/hour);
  - c. NOx concentration (lb/MMBtu) and emission rate (lb/hour);
  - d. SOx concentration (lb/MMBtu) and emission rate (lb/hour);
  - e. PM10 (front and back half) concentration (gr/dscf) and emission rate (lb/hour);
  - f. PM10 (front half) concentration (gr/dscf) and emission rate (lb/hour);
  - g. NH3 concentration (ppmvd);
  - h. Oxygen and Carbon Dioxide concentration (%);
  - i. Exhaust stack gas flow rate (dscfm);
  - j. Measured heat input rate (MMBtu/hr); and
  - k. The higher heating value (dry basis) of the biomass fuel.

98. For the boiler (P-105-90(a1)), source testing shall be conducted using the following test methods. Alternative test methods may be used if approved in advance by the District. [District Rule 3.4/C-09-124]
- a. VOC - EPA method 18, 25, or 25A,
  - b. CO - EPA method 10,
  - c. NO<sub>x</sub> (as NO<sub>2</sub>) - EPA method 7E,
  - d. SO<sub>x</sub> (as SO<sub>2</sub>) - EPA method 6,
  - e. PM<sub>10</sub> (front and back half, adjusted for ammonia salts) - EPA method 5 with impinger analysis and South Coast AQMD Method 5.2,
  - f. Stack gas oxygen and carbon dioxide - EPA method 3 or 3A,
  - g. Flow rate - EPA methods 1 through 4,
  - h. NH<sub>3</sub> - Bay Area Air Quality Management District (BAAQMD) Method ST-1B,
  - i. HHV - ASTM Method D 2015 or E 711.
99. For the boiler (P-105-90(a1)), the District must be notified prior to any compliance source test, and a source test plan must be submitted for approval 30 days prior to testing. The results of the source test shall be submitted to the District within 60 days of the test date. [District Rule 3.4/C-09-124]
- For the boiler (P-105-90(a1)), mass emissions in excess of the daily PERMITTED EMISSION LIMITS shall be reported to the District within 96 hours after such occurrence. Such violations shall be subject to the appropriate enforcement action. [District Rule 3.1, Section 405.4]
100. For the boiler (P-105-90(a1)), the continuous monitoring systems shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments. [40 CFR 60.13(e)]
101. For the boiler (P-105-90(a1)), the source owner or operator shall check the zero and span calibration drifts at least once daily (24-hour) in accordance with a written procedure. [40 CFR 60.13(d)(1)]
102. For the boiler (P-105-90(a1)), the zero and span shall be adjusted whenever the daily zero drift or the daily span drift deviates from the reference value of the calibration gas by more than two-times 2.5% of the span value. [40 CFR 60.13(d)(1)]

103. For the boiler (P-105-90(a1)), the continuous monitoring system shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. [40 CFR 60.13(e)(2)]
104. For the boiler (P-105-90(a1)), one-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. [40 CFR 60.13(h)]
105. For the boiler (P-105-90(a1)), the data accumulated during periods of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, shall not be included in the data average. [40 CFR Part 60.13(h)]
106. For the boiler (P-105-90(a1)), the facility shall determine compliance with the nitrogen oxides standards on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(3)]
107. For the boiler (P-105-90(a1)), the continuous monitoring system for nitrogen oxides shall be operated and data recorded during all periods of operation of the facility, except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR 60.48b(c)]
108. For the boiler (P-105-90(a1)), the 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor shall be expressed in lb/million Btu heat input and shall be used to calculate the average emissions rates. The 1-hour averages shall be calculated using the data points required under section 60.13(b). At least two data points must be used to calculate each 1-hour average. [40 CFR 60.48b(d)]
109. For the boiler (P-105-90(a1)), the span value for the continuous monitoring system for measuring opacity shall be between 60 and 80 percent. [40 CFR 60.48b(e)]
110. For the boiler (P-105-90(a1)), the span value for the continuous monitoring system for measuring nitrogen oxides shall be between 1.5 times the applicable emission standard level and the span value given in the applicable regulation (500 ppm). [40 CFR 60, Appendix B, Section 6.1.1.2 and 40 CFR 60.48b(e)(2)]
111. For the boiler (P-105-90(a1)), when nitrogen oxides emissions data are not obtained because of continuous monitoring system breakdowns, repairs,

- calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [40 CFR 60.48b(f)]
112. For the boiler (P-105-90(a1)), if either the zero (or low-level) or high-level calibration drift (CD) result exceeds twice the applicable drift specification for five, consecutive daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary action. Following corrective action, repeat the CD checks. [40 CFR 60, Appendix F, Procedure 1, 4.3]
  113. For the boiler (P-105-90(a1)), during the period that the CEMS is out-of-control, the CEMS CFR 60, Appendix F, Procedure 1, 4.3.2]
  114. For the boiler (P-105-90(a1)), each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. [40 CFR 60, Appendix F, Procedure 1, 5.1]
  115. For the boiler (P-105-90(a1)), a relative accuracy test audit (RATA) must be conducted at least once every four calendar quarters, except as provided in Procedure 1, section 5.1.4. The RATA shall be conducted in accordance with the test procedure in the applicable performance specification. [40 CFR 60, Appendix F, Procedure 1, 5.1.1]
  116. For the boiler (P-105-90(a1)), whenever excessive inaccuracies occur for two consecutive quarters, the source owner or operator must revise the QC procedures or modify or replace the CEMS. [40 CFR 60, Appendix F, Procedure 1, 5.3]
  117. For the boiler (P-105-90(a1)), the 6-minute readings taken by the COMS unit shall be averaged over three hours to produce a 3-hour rolling average, which will be used to determine compliance with the compliance assurance monitoring (CAM) opacity limit of 10%. [40 CFR 64.3]
  118. For the boiler (P-105-90(a1)), except for monitoring malfunctions, associated repairs, and required quality assurance or control activities, the owner or operator shall conduct all monitoring in continuous operation at all times that the emissions unit is operating. [40 CFR 64.7(c)]

119. For the boiler (P-105-90(a1)), at any time that the continuous opacity monitoring system three hour average is greater than 10% opacity an excursion has occurred, and the Permit Holder shall implement the following corrective actions: use a dye method to identify and isolate the effected cell(s) of the baghouse and repair/replace the faulty bags as required (with the baghouse online). [40 CFR 64.3]
120. For the boiler (P-105-90(a1)), any time that the COMS reads opacity greater than the CAM opacity limit of 10% (3 hour average), the event shall be defined as an excursion. Any time that the COMS reads opacity greater than the 40 CFR 60, subpart Db limit of 20% or 27% (as applicable), the event shall be defined as an exceedance. [40 CFR 64.1]
121. For the boiler (P-105-90(a1)), upon detecting an excursion or exceedance, the owner or operator shall restore operation of the emissions unit (including the control/capture device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR 64.7(d)]
122. For the boiler (P-105-90(a1)), if the accumulation of excursions exceeds 5% of the total duration of the emission unit's operating time for the calendar year, the owner or operator shall develop a Quality Improvement Plan (QIP) consistent with 40 CFR 64.8(b). [40 CFR 64.8(a)]
123. For the boiler (P-105-90(a1)), if a QIP is required, the owner or operator shall develop and implement the QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP will exceed 180 days from the date on which the need to implement the plan was determined. [40 CFR 64.8(c)]

#### **D. Recordkeeping Requirements**

124. For the rice hulling receiving, storage and shipping operation (P-34-94(t)), the Permit Holder shall maintain daily records of the amount of rice hull received and metered/conveyed on a quarterly and yearly basis. [District Rule 3.1, Section 402/P-34-94(t)]
125. For the hydrated lime storage and mixing operation (P-50-94(t)), the Permit Holder shall maintain daily records of the operating date and time and the quantity of all materials received and stored. [District Rule 3.1, Section 402/P-50-94(t)]

126. For the two emergency engines (P-51-94(t) and P-52-94(t)), the permit holder shall maintain a log of operating hours for the internal combustion engine identifying the type of usage (either maintenance or emergency), the duration and date of each usage. The log shall be retained for five years and be made available to the District upon request. [District Rule 2.32, §503 and Rule 3.8]
127. For the cooling tower (P-74-94(t)), the Permit Holder shall maintain records of the circulation rate and make-up rate on a quarterly and yearly basis. [District Rule 3.1, Section 402/P-74-94(t)]
128. For the hydrated lime/sodium bicarbonate receiving and storage unit with injection system to boiler exhaust gas SO<sub>2</sub> control (P-90-89(t)), the Permit Holder shall maintain daily records of the operating date and time and the quantity of all materials received and stored. [District Rule 3.1, Section 402/P-90-89(t)]
129. The Permit Holder shall maintain daily operating records of the amount of flyash (P-91-89(t)) transferred from the storage silo. These records shall be retained for a period of five years and shall be made available to the District upon request. [District Rule 3.4/C-02-119]
130. For the hydrated clay/limestone receiving and storage unit with injection system to boiler combustor (P-92-89(t)), the Permit Holder shall maintain daily records of the operating date and time and the quantity of all materials received and stored. [District Rule 3.1, Section 402/P-92-89(t)]
131. For the sand receiving and storage unit with injection system for batch loading to boiler combustor (P-93-89(t)), the Permit Holder shall maintain daily records of the operating date and time and the quantity of all materials received and stored. [District Rule 3.1, Section 402/P-93-89(t)]
132. The permit holder shall maintain a daily log of all biomass (P-105-90(a1)) received by type, origin, certified weight, and date. Records shall include certifications that any creditable biomass has historically been openly burned in the Sacramento air basin. [District Rule 3.5, Section 501/(C-09-124)]
133. For the boiler (P-105-90(a1)), the permit holder shall maintain the following records [District Rule 3.4/(C-09-124)]:
  - a. daily, quarterly, and annual hours of operation,
  - b. the date and time of each occurrence, duration, and type of any start-up or shut-down event,
  - c. emission measurements from all source testing and fuel analyses,
  - d. equipment breakdowns or malfunctions,

- e. daily, quarterly, and annual records of the measured cumulative CO, NOx, and SOx mass emissions,
  - f. daily, quarterly, and annual records of the calculated (using the measured steam per period and the emission concentration from the previous source test) cumulative VOC and PM10 mass emissions,
  - g. any emissions in excess of the PERMITTED EMISSION LIMITS section as recorded by the CEM or source test data,
  - h. all records from the CEMS, including performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period of non-operation of any CEM.
134. For the boiler (P-105-90(a1)), all records shall be kept for a minimum of five years and made available to the District upon request. [District Rule 3.4/C-09-124 and 40 CFR 60.49b(o)]
135. For the boiler (P-105-90(a1)), the source owner or operator shall submit a quarterly excess emissions and monitoring system performance report and/or a summary report form to the District and EPA, Region IX within 30 days of the end of each quarter. [40 CFR 60.7(a)(7)(c)]
136. For the boiler (P-105-90(a1)), the source owner or operator shall include excess emissions in the monitoring system performance report if the total duration of excess emissions for the reporting period is 1% or greater of the total operating time, or if the total duration of continuous monitoring system downtime is 5% or greater of the total operating time for the reporting period. When excess emissions are included in the monitoring system performance report, the source owner or operator shall also include the date, duration, and amount of excess emissions. [40 CFR 60.7(d)(2)]
137. For the boiler (P-105-90(a1)), the owner/operator of the facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and wood for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR 60.49b(d)]
138. For the boiler (P-105-90(a1)), the owner or operator shall maintain records of opacity. [40 CFR 60.49b(f)]
139. For the boiler (P-105-90(a1)), The Permit Holder shall maintain records of the following information for each day the boiler is operated. The records shall be

updated monthly and submitted to the District for each calendar year within 60 days of the end of the calendar year.

- a. Calendar date;
  - b. The average daily nitrogen oxides (expressed as NO<sub>2</sub>) and CO emission rates (lb/hour) measured;
  - c. The 30-day average nitrogen oxides emission rates (lb/hour) calculated at the end of each boiler operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 boiler operating days;
  - d. Identification of the boiler operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxide emission limitations of this permit, with the reasons for such excess emissions as well as a description of corrective actions taken;
  - e. Identification of the boiler operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
  - f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
  - g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
  - h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with 40 CFR Part 60 Appendix B, PERFORMANCE SPECIFICATIONS 2 or 3;
  - j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60 appendix F, Procedure 1;
  - k. Time and duration of boiler start-up and shutdown events; and
  - l. Time and duration of equipment and/or control equipment malfunction. [40 CFR Part 60.7(b), 60.49 and District Rule 3.4]
140. For the boiler (P-105-90(a1)), the owner or operator is required to submit excess emission reports for any excess emissions which occurred during the reporting period. For the opacity monitor, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under section 60.43b(f). [40 CFR 60.49b(h)(3)]
141. For the boiler (P-105-90(a1)), the owner or operator is required to submit excess emission reports for any excess emissions which occurred during the reporting period. For the nitrogen oxides monitor, excess emissions are defined as any 30-day rolling average nitrogen oxides emissions rate which exceeds the applicable emission limits in section 60.44b. [40 CFR 60.49b(h)(4)]

142. The Permit Holder shall maintain a log of the operation hours for the limited use IC engine (P-12-11), including the make/model of the engine, the tier certification, the duration, and date of each usage. The log shall be retained for a period of five (5) years and be made available to District personnel upon request. [District Rule 3.4/C-10-67]
143. All records shall be kept for a minimum of five years and made available to the District upon request. [District Rule 3.4/C-09-124]
144. The Permit Holder shall submit to the District a written report for each calendar quarter, within 30 days of the end of the calendar quarter, which includes the following:
- a. The date, time intervals, and magnitude of excess permitted emissions or exceedance in opacity computed in accordance with 40 CFR Part 60.13(h);
  - b. The date, time intervals, and operating parameters of the baghouse when operating outside the indicated permitted limits;
  - c. The nature and cause of the excess emissions, exceedance in opacity or control equipment operation deviation, and corrective actions taken;
  - d. The time and date of each period during which the continuous monitoring equipment was inoperative, except for zero and span checks, and the nature of system repairs and adjustments; and
  - e. A negative declaration when no excess emissions, exceedance in opacity or control equipment operation deviation occurred, if applicable. [40 CFR Part 60.7(c), 40 CFR Part 60.49b(h) and District Rule 3.4]
145. For the fuel material receiving, processing, grinding and storage operations (P-61-89(a1)), the Permit Holder shall maintain daily, quarterly and yearly records of fuel materials received and stored, and all material ground in order to determine compliance with the permitted process limits. [District Rule 3.4/C-08-234]

### **III. FACILITY WIDE REQUIREMENTS**

#### **A. Opacity**

146. Except where otherwise required, the permit holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is:

- a. As dark or darker in shade as that designated as No. 1 on the Ringlemann Chart as published by the United States Bureau of Mines; or
- b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection a. of this condition. [District Rule 2.3]

**B. Nuisance**

147. The permit holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property. [This permit condition is federally enforceable because it derives from District Rule 2.5 - Nuisance that is currently part of the California State Implementation Plan (SIP). The District is taking steps to remove Rule 2.5 from the SIP. Once the U.S. EPA has taken final action to remove District Rule 2.5 from the SIP, this permit condition will become state-enforceable only]

**C. Circumvention**

148. The permit holder shall not build, erect, install or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26, Part 3 and Part 4 of the Health and Safety Code of the State of California or District Rules or Regulations. [District Rule 2.17]

**D. General Permit Requirements**

149. No person shall build, erect, alter, or replace any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants, without first obtaining an authorization to construct from the Air Pollution Control Officer as specified in Section 401 of District Rule 3.1. [District Rule 3.1 § 301.1]
150. No person shall operate any facility, article, machine, equipment, or other contrivance, for which an authorization to construct is required by District Rules and Regulations without first obtaining a written permit from the Air Pollution Control Officer. [District Rule 3.1 § 302.1]

151. No person shall operate any facility, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, without obtaining a permit from the Air Pollution Control Officer or the Hearing Board. [District Rule 3.1 § 302.2]
152. The owner or operator of any facility, article, machine, equipment, or other contrivance for which a permit to operate is in effect shall notify the District office whenever a breakdown, malfunction, or operational upset condition exists which would tend to increase emissions of air pollutants or whenever any operating condition contrary to any provision of the permit to operate exists. Such notice shall be given to the District no later than four hours after occurrence during regular workday hours or no later than two hours of the District workday following an occurrence not during regular District workday hours. The notice shall provide the District information as to causes and corrective action being taken, with a schedule for return to required operating conditions. [District Rule 3.1 § 405.3]

#### **IV. TITLE V GENERAL REQUIREMENTS**

##### **A. Right of Entry**

153. The permit shall require that the source allow the entry of the District, ARB, or U.S. EPA officials for the purpose of inspection and sampling, including:
  - a. Inspection of the stationary source, including equipment, work practices, operations, and emissions-related activity;
  - b. Inspection and duplication of records required by the permit to operate; and
  - c. Source sampling or other monitoring activities. [Rule 3.8 § 302.10]

##### **B. Compliance with Permit Conditions:**

154. The permittee shall comply with all Title V permit conditions. [Rule 3.8 § 302.11a]
155. The permit does not convey property rights or exclusive privilege of any sort. [Rule 3.8 § 302.11b]
156. Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [Rule 3.8 § 302.11c]

157. The permittee shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition. [Rule 3.8 § 302.11d]
158. A pending permit action or notification of anticipated non-compliance does not stay any permit condition. [Rule 3.8 § 302.11e]
159. Within a reasonable time period, the permittee shall furnish any information requested by the APCO, in writing, for the purpose of determining:
  - a. Compliance with the permit; or
  - b. Whether or not cause exists for a permit or enforcement action. [Rule 3.8 § 302.11f]

**C. Emergency Provisions:**

160. Within two weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:
  - (i) An emergency occurred;
  - (ii) The permittee can identify the cause(s) of the emergency;
  - (iii) The facility was being properly operated at the time of the emergency;
  - (iv) All steps were taken to minimize the emissions resulting from the emergency; and
  - (v) Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken; and

In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred. [District Rule 3.8 § 302.12]

**D. Severability**

161. If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgement shall not affect or invalidate the remainder of these conditions. [Rule 3.8 § 302.13]

**E. Compliance Certification**

162. The Responsible Official shall submit a compliance certification to the U.S. EPA and the APCO every twelve (12) months unless required more frequently by an applicable requirement. The twelve (12) month period will begin on January 1 and end on December 31, and will be due by January 31 for the previous reporting year, unless otherwise approved in writing by the District. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.[Rule 3.8 § 302.14a]
163. The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of Rule 3.8. [Rule 3.8 § 302.14b]
164. The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. [Rule 3.8 § 302.14c]
165. The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. [Rule 3.8 § 302.14d]

#### **F. Permit Life**

166. The Title V permit shall expire five years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. [Rule 3.8 § 302.15]

#### **G. Payment of Fees**

167. An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA. [Rule 3.8 § 302.16]

#### **H. Permit Revision Exemption**

168. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit.

**I. Application Requirements**

169. An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than 18 months and no later than six months before the expiration date of the current permit to operate. [Rule 3.8 § 402.2]
170. An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. [Rule 3.8 § 402.3]
171. An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. In the application, the owner or operator shall include the following:
- a. A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;
  - b. Proposed permit terms and conditions; and
  - c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. [Rule 3.8 § 402.4]

**J. Permit Reopening for Cause**

172. Circumstances that are cause for reopening and revision of a permit include, but are not limited to, the following:
- a. The need to correct a material mistake or inaccurate statement;
  - b. The need to revise or revoke a permit to operate to assure compliance with applicable federal requirements;

- c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is 3 years or greater, no later than 18 months after the promulgation of such requirement (where less than 3 years remain in the authorized life of the permit, the APCO shall incorporate the requirements into the permit to operate upon renewal); or
- d. Additional requirements promulgated pursuant to Title IV as they become applicable to any acid rain unit governed by the permit. [Rule 3.8 § 413.1]

#### **K. Recordkeeping**

173. The permit holder shall record maintenance of all monitoring and support information required by any applicable federal requirement, including:
- (i) Date, place, and time of sampling;
  - (ii) Operating conditions at the time of sampling;
  - (iii) Date, place, and method of analysis; and
  - (iv) Results of the analysis. [District Rule 3.8 § 302.6a]
174. The permit holder shall retain records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application. [District Rule 3.8 § 302.6b]

#### **L. Reporting Requirements**

175. Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO. For the purpose of this condition prompt means as soon as reasonably possible, but no later than 10 days after detection. [Rule 3.8 § 302.7a]
176. A semi-annual monitoring report shall be submitted at least every six (6) consecutive calendar months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7(a) of Rule 3.8. Unless otherwise approved in writing by the District, the following shall apply:
- a. The first six (6) month monitoring period will begin on January 1 and end on June 30, and the report will be due by July 31 of the reporting year; and

- b. The second six (6) month period will begin on July 1 and end on December 31, and the report will be due on January 31 of the following calendar year. [Rule 3.8 § 302.7b]
177. All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. [Rule 3.8 § 302.7c]
178. Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. [Rule 3.8 § 302.7e]