MONITORING AND REPORTING PROGRAM
Order No. R1-2013-0046

FOR

EEL RIVER POWER, LLC

LAND APPLICATION OF FLY ASH
AS A SOIL AMENDMENT

Humboldt County

California Water Code section 13267 authorizes the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This monitoring and reporting program establishes monitoring and reporting requirements, which implement state regulations. Any person failing to furnish technical or monitoring reports or falsifying any information therein is guilty of a misdemeanor, and may be subject to civil liability. (Water Code section 13268)

FLY ASH SOIL AMENDMENT MONITORING

Fly ash generated during the combustion biomass at the Eel River Power Facility shall be managed, processed, sampled and handled in accordance with the approved *Best Water Quality Management Practices for Applications of Wood Ash as a Soil Amendment* (BMPs).

To ensure that the application of fly ash does not threaten water quality, exceed Code of Federal Regulations Part 503, Table III, Lower Concentrations criteria for metals, or exceed Department of Toxic Substances Control criteria for agricultural land use and to confirm agronomic concentrations for re-use of the fly ash material prior to land application, Eel River Power (Discharger) shall implement the following sampling schedule:

Table 1

Parameter	Units	Sample Type	Sampling Frequency	Required Analytical Test Method[1]
Feed Stock Composition[2]	Dry-tons	Continuous	Monthly	---
Fly Ash Volume Generated	Dry-tons	Continuous	Monthly	---
Fly Ash pH	s.u.	Grab	Monthly	title 40, section 136
Fly Ash Volume Distributed[3]	Dry-tons	Continuous	Annually	---
Fly Ash Liming Capacity	Equiv % CaCo3	Grab	Monthly	UC Davis Method 440
Fly Ash Total Phosphorous	mg/kg	Grab	Monthly	title 40, section 136
Fly Ash CAM 17 Metals	mg/kg	Composite	2x/year	6010B/7000A
Fly Ash Dioxin TEQ[4]	mg/kg	Grab	2X/year	EPA Method 1613
Soil Lime Requirement	T/A/8in[5]	Composite[6]	Annual	UC Davis Method 450
Soil CAM 17 Metals	mg/kg	Composite	1x/5 year	6010B/7000A
Soil Dioxin TEQ[4]	mg/kg	Grab	1x/5 year	EPA Method 1613

ANNUAL MONITORING REPORT

The Discharger shall provide an Annual Report to the Regional Water Board regarding implementation of the approved BMPs during the previous year. The Annual Report shall be submitted by March 15th of each year, and shall include, but not be limited to the following:

1. A description of the activities that took place during the previous year;
2. A tabular summary of information and laboratory analytical data for constituents listed in Table 1 of this Order. The tabular summary shall include analytical results presented for the previous five years of sampling and be accompanied by laboratory data sheets for the current year's results;
3. Completed copies of Land Owner Agreements;
4. A scaled map of each of the sites where fly ash was applied during the previous year. The map(s) shall display 10-foot contours and include parcel boundaries;

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1 Upon approval from the Executive Officer, an alternative method providing equivalent or superior information/results may be substituted for the specified analytical method.

2 The Discharger shall monitor and report nature, source(s), and volume of feed stock.

3 The volume, location, and use type (ie. field application or loafing bed) shall be reported.

4 Dioxin equivalents, also known as the TEQ, is a calculated value which reflects the combined effect of dioxin and furan compounds (congeners). Results for dioxin TEQ shall include all congeners.

5 Tons per acre of 100% CaCO3 required based on an 8 inch furrow slice weighing 2.4 million pounds.

6 Composite sample shall be representative of the intended area/field of application.

adjacent public roadways; equipment access point(s); loading and unloading area(s); application area boundaries; all setbacks identified in section the BMPs; the location of domestic and agricultural water wells on the application site and adjoining parcels; and the location of water bodies including wetlands, drainage ditches, creeks, and ponds;

5. Completed copies of the agronomic rate calculation worksheet for each application area developed during the previous year;

CERTIFICATION

All reports required by this Monitoring and Reporting program or other information requested by the Regional Water Board, or the State Water Resources Control Board for compliance determination with the conditions of the approved BMPs shall be signed by the Chief Executive Officer or a duly authorized representative of that person. Any person signing a document under this requirement shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Ordered by: _____

Matthias St. John
Executive Officer

June 28, 2013