CALIFORNIA ENERGY COMMISSION
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DOCKET
03-AFC-1
DATE FEB 15 2006
RECD. FEB 16 2006

February 15, 2006

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1108 Kris Way
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Subject: January 6, 2006 Site Visit to Roseville Energy Park

Purpose:

The purpose of the site visit was to review both storm water Best Management Practices that had been implemented at the site prior to and during the large rain storms that had occurred in the area the week prior to the visit and biology concerns over failure of the detention ponds. Michael Stephens of the Water Unit and Marc Sazaki of our Biology Unit visited the site along with the CPM.

Findings:

As a result of our site visit last Friday, we concluded that the actions taken by John Michaels (Gemma's Site Compliance Manager) in consultation with the Designated Biologist (Debra Crowe) and the Biological Monitor (Rick Crowe) appear to have been appropriate to deal with the failure of the detention ponds and potential impacts to adjacent wetland areas to the north of the project site.

Wetland areas affected by the unintended discharge off site will be monitored until the end of the normal peak of the rainy season, probably sometime in the spring or beyond as appropriate.

John Michaels indicated that the soil excavated on site for the underground project features was too wet to use as back fill. Consequently, this material will be hauled over to the equipment and construction material lay-down area. As originally planned, only the elevated areas on this site will be utilized.

Many of the standard BMPs that were included in the SWPPP and the Erosion and Sediment Control Plan were adequate to deal with the record rainfall, but because of the intensive nature of the rainfall, approximately 5 inches in a 24 hour period, some where not. This resulted in the settling pond having had major seepage and release around the corrugated steel outlet piping which resulted in sediment being released into the adjacent wetland. Silt fences, hay bales, and straw wattles were some of the BMPs originally used. After seepage and release into the adjacent wetland Gemma displayed a very pro-active approach in dealing with the situation; applying new BMPs to deal with

the unexpected situation. Some of the new BMPs implemented, or soon to be implemented included:

- Adding a Rock and filter fabric berm between the construction area and wetlands area(s). Approximately 300 tons of gravel was used to build the berm.
- Adding a new outlet pipe and vertical inlet for the sedimentation basin
- Bringing in a Rain-for-Rent flocculation tank and sand filtration unit.

Many of the soil stockpiles were uncovered during the site visit to allow the soil to dry out. Plastic sheeting was evident on the sides of the soil stockpiles; drying the soils out during the warmer weather was a prudent choice. So was removing the soil from the construction site and using a new stockpile area in the existing construction laydown area. This new stockpile area seems adequate for storing surplus soils.

Native soils at the site appear to consist primarily of clays. These clays have a moderate erosion potential and appear to stay in suspension in water when eroded for a significant amount of time. Because of the high suspension potential of these soils, the majority of sediment generated from storm-water events travels a significant distance past the site vicinity; either through a grassy swale or directly into the un-named tributary. The exception would be standing water at and adjacent to the site. However, given the fine nature of the colloidal clay particles, the eventual settling of the sediment in the water column should generate a fairly thin veneer of clay.

The addition of an on-site storm-water treatment system, which was going to be installed the day of our visit by Rain-for-Rent, was a welcome addition to REP's BMPs. The storm-water treatment system is to consist of a polymer flocculation tank, with a secondary sand filtration unit to remove residual polymer prior to the release of the storm-water. The storm-water would then be released to the nearby un-named tributary. To minimize erosion, the rate of release will be limited to 400 gpm. Some temporary dissipation device will be required at the release outfall to ensure erosion of the stream bank does not occur.

Much of the storm-water retention was trapped in a large pipe excavation located at the facility. The project plans on dewatering this excavation, treating the water, and releasing it. Also, because very little percolation of water infiltrates the ground; all water in the retention basins will be filtered and discharged off-site in order to provide increased storage capacity for any new storm-water events that may occur during this storm season.

Large rock has been placed in the entrance and exit way of the construction site to assist in removing sediment from wheeled vehicles. This rock is replaced and cleaned on a regular basis to ensure sediment is not tracked off site.

The construction lay-down area did not appear to have any adverse storm-water effects, although a substantial wetlands/pond area formed across the street from the lay-down area as a result of the massive storm event.

Required Actions;

1. Please ensure that any measures mentioned in this letter are carried out.

2. Please provide a written description of how the monitoring will be done, including the timing and sampling methods that will be employed.

3. It is critically important for REP to use BMP measures to stabilize the fill material being stored on the lay-down area in order to protect the swales that exist there. Because this transfer of soil from the project site to the lay-down area was not anticipated, please tell us what measures you will use to stabilize the soil while it is on the lay-down area.

4. As proposed by Rick Crowe, please ensure the wetland areas affected by the unintended discharge off site will be monitored until the end of the normal peak of the rainy season, probably sometime in the spring or beyond as appropriate.

5. Some temporary dissipation device will be required at the release outfall to ensure erosion of the stream bank does not occur.

If you have any questions regarding the issues covered in this correspondence, please contact me.

Sincerely,

Donna Stone

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