

Supplemental Environmental Project: Third Party Monitoring of discharge from the King America Finishing Wastewater treatment plant

Description:

This Supplemental Environmental Project (SEP) is to provide for unannounced sampling and analysis of water being discharged from the King America Finishing wastewater treatment plant in order to verify the testing being done by the company for its NPDES permit reporting.

The complete, detailed proposal is attached. This project would be funded by King America Finishing.

Estimated Cost:

Month 1	\$7,500.00
Month 2	\$7,500.00
Month 3	\$7,500.00
Month 4	\$7,500.00
Month 5	\$7,500.00
Month 6	\$7,500.00
Month 9	\$7,500.00
Month 12	\$7,500.00
Month 15	\$7,500.00
Month 18	\$7,500.00
Total for project	\$75,000.00

This project would not be associated with daily operations of King America's wastewater treatment plant.

This testing would be in addition to, not in place of, routine testing for compliance reporting.

This sampling does not fulfill any of King America Finishing's statutory requirements.

Benefit:

This would serve to assure the public that the discharge from the King America Finishing wastewater plant is meeting NPDES permit requirements.

Further, this would advance the objective of The Clean Water Act, which is stated on the EPA web site as:

"The objective of the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act (CWA), is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

The expected result would be verification of the validity of the analysis being done by the company's contract laboratory.

Project Schedule

Months 1-6
Month 7-18

Monthly sampling events
Quarterly sampling events

Progress reports, verifying that required sampling events took place, would be filed with EPD by the 15th of each month Documenting the previous month's activities.

Responsibility for completion of this project and filing reports will be assigned to Mr. Terry Dodd.

Proposed Components of King America Third Party Wastewater Monitoring Supplemental Environmental Project

- Third Party Wastewater Monitoring (TPM) will be a SEP under the September 21, 2012 Consent Order.
- TPM project duration will be 18 months, consisting of monthly sampling for the first six months and quarterly thereafter for the next 12 months.
- TPM cost is estimated to be approximately \$75,000.00 over the 18 month duration of the project.
- TPM will be conducted by an independent laboratory and/or consulting firm under contract with King America who will collect and test samples from the discharge effluent from the King America wastewater treatment facility.
 - The vendor will be selected by King America through a request for proposal (RFP) process that includes at least three qualified applicants. Bids will be part of the proposal. If the party bidding will be subcontracting the analysis portion of the work to another party, then the laboratory to be used must be included in the bid. No change in analytical laboratory may be made once the contract is awarded. The selected vendor must be acceptable to Georgia EPD. Prior to final selection of the vendor, a split sample sampling event will be scheduled for the purpose of insuring consistent results prior to the commencement of unscheduled sampling events.
 - In the case where 24 hour composite samples are required, the vendor will provide an independent and appropriate sampling device with approved storage. The vendor will be expected to secure the sampling device in a manner to eliminate the suspicion of tampering.
 - All samples are to be collected and analyzed in a manner that complies with 40 CFR Part 136. This includes, but is not limited to, sample containers, preservation requirements and techniques, sample hold times, and analytical methods. For any parameter not listed in 40 CFR Part 136, analytical methods, sample containers, preservation techniques, and holding times shall be approved by EPD.
 - The laboratory analyzing the samples must be a laboratory accredited in accordance with the Georgia Rules for Commercial Laboratory Accreditation.

- Sampling under the TPM will be unannounced but with the following conditions to be met:
 - Due to security and safety concerns, sampling activities will be restricted to daylight hours (generally between 7:00 am to 5:00 pm).
 - The vendor's personnel will be accompanied by King America personnel during placement of sampling devices and during collection of samples.
 - In order to be as close as possible to the same collection period as King America's regular compliance sample, the 24 hour composite must begin no later than 11:00 a.m.
 - Sampling should only occur during times that King America is discharging to the Ogeechee River
 - A sufficient sample volume will be collected to allow the samples to be split between King America and the vendor for appropriate testing by each party. The vendor will provide a sufficient quantity of containers for splitting of samples.
 - A Chain of Custody (CoC) compliant with EPA standards must be filled out for each sampling event. This should include, among other information, the time of the first and last sample of the composite and the time(s) for any grab samples collected.
 - When samples are collected, bottled, and placed in the transportation unit (typically a cooler) a serial numbered custody seal is to be placed on the transportation unit in a manner that will indicate if the unit is opened prior to arrival at the testing laboratory. The placement of the custody seal is to be witnessed by representatives of both King America and the vendor. The receiving lab will be expected to verify that the seal is intact when the samples are received.
 - The day of the week should vary from one sampling event to the next.

- The parameters included in the TPM will be those listed in Part I.A.1 of King America's NPDES permit once the final permit is issued by EPD, except for THPC, which is not included in the TPM given its limited usage and twice yearly sampling regime. Until such time as the final permit is issued (and during the pendency of any challenge to the permit not brought by King America), the following parameters listed below will be part of the sampling regime:
 - Biochemical Oxygen Demand (BOD5)
 - Chemical Oxygen Demand (COD)
 - Total Suspended Solids (TSS)
 - Sulfide

Phenols
Chromium- total
Total Ammonia
Total Kjeldahl Nitrogen
Total Phosphorous
Formaldehyde
Sodium
Color (ADMI color value)
Whole Acute Toxicity (using ceriodaphnia dubia)
Chronic Toxicity (using ceriodaphnia dubia)
Temperature
pH
Peroxide
Dissolved Oxygen (DO)
Specific Conductance

Sample type (i.e., grab, composite, or continuous) for each parameter should be the sample type identified in Part I.A.1 of the draft NPDES permit dated Jan 9, 2012. The last five parameters (temperature through specific conductance) will be subject to field testing, and not laboratory analysis.

- Reports from the vendor containing TPM sampling results will be simultaneously provided to EPD and King America by the vendor.
 - TPM results are to be reported in units consistent with Table 1-A(1) in the draft NPDES permit. For field generated data (temperature, pH, peroxide, dissolved oxygen, and conductivity), the calibration data for the instrument used by the vendor shall be included in the report.
 - The lab report must include all quality control data and instrument calibration data.
 - If King America questions the validity and/or accuracy of any TPM results, it is to notify EPD and the vendor of its concerns and may provide the TPM results from its selected laboratory to document those concerns.
- The following will apply only to chronic toxicity testing, due to special scheduling circumstances associated with that test:

A bio-assay lab must have advanced notice in order to procure the test specimens and assure the availability of space in one of the incubator tables used for the procedure. In addition to scheduling concerns, chronic toxicity testing requires additional samples be collected from the facility 48 and 96 hours after the initial sample to refresh the test, which will require multiple sampling trips. Because of these requirements, chronic toxicity utilizing

ceriodaphnia will be conducted 2 times during the 18 month duration of this project. The third party monitoring contractor will select the times of these tests, but King America must be given 7 days notice of the intent to initiate a chronic toxicity test in order to schedule the split sample with their bio-assay lab.

- River sampling (*i.e.*, at the discharge point and 25 feet upstream and downstream) will not be a part of this TPM. King America currently intends for river sampling to be the subject of a separate SEP proposal.