Attachment X

Considerations for the Use of Active Treatment Systems (ATS) for Controlling Turbidity in Storm Water Runoff from Construction Sites in California

Technical Need: A methodology to analyze the pertinent factors listed below, prior to construction, to determine if an ATS would be an appropriate or required BMP for use at a particular high-risk construction site. This methodology should account for the following factors:

Receiving Water and Environmental Risk Considerations

- Analysis should consider natural levels of suspended sediment (TSS and turbidity) and its role in the ecological and morphological health of the receiving water. ATS should only be implemented when natural background TSS concentrations and turbidity are very low, otherwise impacts to receiving waters may result. Significant reductions in natural levels of sediment delivery to streams can alter the balance between supply and transport, potentially leading to downstream erosion of the channel bed and banks.

- Analysis should consider the sensitivity of aquatic resources (invertebrates, fish, etc…) in the receiving water and the potential risk of acute and chronic toxicity of residual chemicals in ATS discharges.

- Analysis should consider if the receiving water body is 303(d)-listed for sediment or sediment-related pollutants that may be discharged during the construction phase of a project (e.g., legacy pesticides), or if a TMDL implementation plan has been adopted that includes advanced sediment treatment as a feasible measure to meet the construction waste load allocation. Considerations should include whether the TMDL implementation plan is achieving the sediment TMDL.

Construction Site Considerations

- Analysis should consider hydraulic connectivity to a 303(d)-listed water body impaired for sediment or sediment-related pollutants that may be discharged during the construction phase of a project or to a water body, and compliance of the watershed and/or site with any approved sediment-related TMDL.

- Analysis should consider hydraulic connectivity to a sensitive receiving water body.

- Analysis should consider the total amount of exposed soil (at any one time).

- Analysis should consider other risk factors such as: site soil characteristics; site slopes; timing of construction (i.e. wet season construction).