

CASQA 2010 Conference Abstract Submittal

By

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Title:

An Overview of Active Treatment Systems: Applications, Design, Operations, and Costs

The State's new General Construction Permit includes Numeric Action Levels and Numeric Effluent Limits for two of the three risk levels. These new numeric levels set a much higher bar on stormwater runoff quality. In the last few years, Active Treatment Systems (ATS) have emerged as an extremely effective BMP and BCT that is able to meet receiving water quality objectives under a wide range of conditions. ATS uses polymers—both cationic and anionic—to remove fine sediments such as silts and clays that do not settle out well in sediment basins.

Data from a range of sources will be presented to evaluate the effectiveness of ATS in comparison to other BMP's and in relation to the receiving waters. There will be an overview of where ATS works well and where it does not; the types of polymers used; typical treatment methodologies; design considerations and parameters; regulatory issues; and a discussion of costs.

The new permit, also, has strict guidelines that must be followed when ATS is used. The steps required to meet these guidelines will be reviewed.