

How SWAMP data helped with the Development of the First Numeric Action Levels for a Stormwater Permit in California

In the past, permits for discharges from municipal separate storm sewer systems (MS4s) in California have not established numeric action levels. Action levels are concentrations of contaminants that, if exceeded, triggers actions to be taken by the permit holder. However, the Orange County MS4 Permit recently adopted by the San Diego Regional Water Board includes numeric action levels for both wet weather and dry weather discharges. Exceedance of the numeric action levels included in the permit triggers required follow-up actions to be taken, such as source investigation and elimination. Failure to appropriately respond to any exceedance of a numeric action level is considered non-compliance.

The numeric action levels for the permit are scientifically defensible and are based on data of known and documented quality, including data obtained from the Surface Water Ambient Monitoring Program. The numeric action levels were developed using data on effluent from MS4s, as well as data on receiving waters. The receiving waters data included water chemistry, toxicity and bioassessment data collected through the San Diego Regional Water Board's SWAMP program.

After two years of negotiations, the Orange County MS4 permit was approved by the San Diego Regional Water Board on December 16, 2009. And with it the actions levels, that are partially based on SWAMP data.