

## **Will Conventional BMPs Meet NAL/NELs? A Decision Support Tool for BMP Selection**

This presentation will propose a pre-construction site investigation that can be used to inform BMP selection.

The Construction General Permit for California requires compliance with numeric action levels (NALs) and numeric effluent limits (NELs), depending on receiving water sensitivity and erosion potential. The permit does not offer guidance on how to assess whether conventional best management practices (BMPs) will meet NALs and NELs. Pre-construction site evaluation of construction sites can help estimate whether traditional stormwater BMPs are sufficient.

This presentation will discuss methods to evaluate sedimentation BMPs for compliance with discharge objectives. While surface treatments and other erosion control methods are not required during active grading, sedimentation BMPs are always required. This presentation offers potential evaluation methods to determine the likely turbidity of effluent from two common sedimentation BMPs: silt fence and sedimentation basins. Installing silt fence is the most common sedimentation BMP on small construction sites. For larger sites, sedimentation basins are also used.

The protocol will discuss potholing guidelines for collecting soil samples that will be used in the evaluation procedure. The guidelines will address excavation and grading throughout the project, including sampling import soil from borrow sites. Methods of soil analysis will be presented to estimate effluent turbidity from silt fence and sedimentation basins. Limited field investigation results will be presented and uncertainty will be discussed.

This presentation will be helpful to those looking for ideas for pre-construction site assessment and it will also help facilitate a much-needed discussion on site investigation techniques. The ideas presented are expected to evolve based on feedback from the audience and experience gained in application in the field.

This presentation can fit into a 30-minute time slot, but a longer format will allow for more discussion and a more thorough demonstration of the procedure that includes an in-class demonstration of turbidity measurement.