POSTER PRESENTATION

AVOIDING THE TRAGEDY OF THE COMMONS:
AN ARIZONA DEPARTMENT OF TRANSPORTATION EXAMPLE

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ABSTRACT

The tragedy of the commons is a term coined by scientist Garrett Hardin in 1968 describing what can happen in groups when individuals act in their own best self-interests and ignore what’s best for the whole group. In an agency as large and diverse as the Arizona Department of Transportation (ADOT) there are multiple opportunities for this to occur. The development of a standard format for Facility Pollution Prevention Plans (FPPPs) is the primary way ADOT was able to avoid the tragedy of the commons at its facilities.

Environmental regulations and maintenance yard activities seem to be at odds with each other, especially where multiple organizations with diverse activities occupy a single facility. Yet, ADOT found a way to mesh compliance and operational objectives into a standardized, achievable and environmentally protective solution.

Due to the Arizona Pollutant Discharge Elimination System individual permit issued to ADOT the agency developed stormwater pollution prevention plans (SWPPPs) for 18 maintenance yards to minimize stormwater pollution and runoff. Within two years of implementation additional Clean Water Act regulations were issued and would soon be enacted. Because ADOT realized value in the required SWPPPs, that is, a written, site-specific plan for addressing potential pollutants in maintenance yards, the agency expanded the application of written plans to all maintenance yards.

These documents would provide a comprehensive approach to pollution prevention and would contain not only stormwater pollution prevention information, but also Spill Prevention, Control, and Countermeasure (SPCC) regulations and air quality regulations; thus, the documents have been appropriately re-titled Facility Pollution Prevention Plans (FPPPs).

This poster introduces the challenges of multiple organizations conducting diverse operations in a single facility, details the timeframe under which program management rolled out, describes the content of the plan, identifies a few challenges, and shares the benefits this agency has experienced with development and implementation of the FPPPs.
BIOGRAPHICAL SKETCHES

Wendy Terlizzi, CMS4S, is the Water Quality Manager for the Arizona Department of Transportation where she is responsible for water quality activities and policies including stormwater, drinking water, wastewater, and dredge and fill activities. Wendy Terlizzi graduated from the University of California at Davis and has over 14 years of experience working for various government agencies both in California and Arizona as well as the private sector in the fields of fisheries biology and water quality.

Leigh Waite, CMS4S, is the Water Quality Analyst for the Arizona Department of Transportation where she is responsible for accumulating all metrics in regard to the statewide individual stormwater discharge permit. For the last 20 months Leigh has been assuming more responsibility of the overall statewide stormwater program and guiding program compliance under the recently negotiated Administrative Order on Consent. Leigh Waite achieved a Bachelor of Science in Conservation Biology in 2000. Professionally she has worked in the environmental field as a biology technician, an environmental planner, project coordinator, and Clean Water Act permitting specialist and analyst for both the public and private sector.