

Spill Prevention Control and Countermeasures and Stormwater Pollution Prevention Planning

Environmental compliance at facilities often requires spill response and pollution prevention plans because of on-site oil or hazardous material storage, and its potential for spills to impact surface water. Although the Spill Prevention Control and Countermeasures (SPCC) Rule is decades old, it is quite prescriptive and frequently revised.

Requirements to develop stormwater pollution prevention plans (SWPPP) often go hand-in-hand with SPCC plans. In 2008, EPA included more stringent requirements in its industrial stormwater Multi Sector General Permit (MSGP). State permits will begin to incorporate these requirements over time.

An up-to-date understanding of the requirements to maintain compliance and avoid fines and penalties is critical. LimnoTech has helped clients navigate these requirements nationwide, ranging from small and large industrial facilities to municipalities and airports covering several thousand acres.



LimnoTech has helped clients understand the requirements of SWPPP development to maintain compliance and avoid fines and penalties.



Willow Run (YIP) and Detroit Metropolitan Airport (DTW), Ypsilanti and Romulus, MI. Significant aboveground storage of aircraft fuels at airports owned and operated by the Wayne County Airport Authority (WCAA) required that WCAA develop and implement SPCC plans. LimnoTech performed this task for both airports.

Compliance with the Clean Water Act and the Airport's NPDES permit requires that DTW maintain a current SWPPP and Michigan Pollution Incident Prevention Plan (PIPP). LimnoTech provided specialized technical support in updating the documents and associated programs. We also developed and updated ACCESS databases of facility and pond inspection forms used in preparation of the SWPPP update. We continue to provide on-call technical assistance in addressing issues related to completion and implementation of the SWPPP and PIPP.

Toyota Technical Center in Ann Arbor, MI. The Toyota Technical Center campus provides research and development functions for Toyota Motor Corporation. On-site materials include petrochemical products, paints, solvents, and metal degreasers.

LimnoTech helped Toyota develop SPCCs and PIPPs for this facility. We inventoried the critical materials stored and used at each location, and made careful notes of observed storage and handling practices. We evaluated the storage, handling, practices, and spill potential for each substance. We used this to weigh the risk of spill against the protectiveness of existing prevention, control, and countermeasure procedures. We also developed recommendations for additional control measures and staff training.



Training Support. Training is a key element of an SPCC or SWPPP to ensure that facility staff thoroughly understand program requirements and how to prevent spills and effectively respond to spills, should they occur. We have extensive experience conducting on-site or off-site training (using web-based tools) as part of these efforts. LimnoTech also has extensive experience using webinars and developing web-based training materials to facilitate training efforts for staff working various shifts and/or at multiple locations.

For example, LimnoTech created a package of web-based stormwater training materials for the DTW Airport that not only effectively conveyed the training materials, but also included a mechanism for user certification to allow the airport to track and document training requirements.

Rouge Steel Corporation, Dearborn, MI. Rouge Steel needed to develop an SWPPP while facing challenging circumstances, including a two-month deadline to complete the SWPPP. Other challenges included the size of the site (100 acres), age (site of Henry Ford's original automobile factory), and infrastructure complexity and permitted outfalls that conveyed a combination of stormwater and process wastewater.

LimnoTech conducted an intensive 3-1/2-day site inspection, carefully mapping each outfall, surface drainage structures and directions, and the location of all significant materials that might impact stormwater quality. LimnoTech completed the SWPPP within the specified schedule and budget under the direction and supervision of a State-certified stormwater operator and licensed professional engineer.

MS4 Permit Implementation for Kansas City, MO.

LimnoTech has helped Kansas City with development and implementation of its stormwater permit since 2004. One of Kansas City's stormwater permit requirements is to develop a program to address high-risk industrial dischargers. Over 50 municipal facilities were identified across the City where activities would trigger coverage under the program and require SWPPP development.

To streamline the SWPPP development process, preserve limited staff time and resources at these facilities, and ensure that each site would submit information that would ensure compliance, LimnoTech developed an SWPPP template that could easily be completed by the site operator. We also developed a self-assessment checklist that would allow the operator to easily determine SWPPP compliance.

South Bend Regional Airport, South Bend, Indiana.

As part of environmental compliance support at the airport, LimnoTech developed an SWPPP to satisfy permit requirements. We investigated and inspected all aspects of the airport and tenant facilities pertaining to potential stormwater contamination, inventoried all polluting materials used or stored by the airport and its tenants, and identified required structural and nonstructural control measures to prepare the document.



SWPPP development includes investigation and inspection of all materials that could potentially cause stormwater contamination in the event of a spill.