

Landfill liability

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California's new industrial stormwater general permit has big implications for the solid waste industry.

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California's new Industrial Storm Water General Permit will drastically change the stormwater management approach at landfills, solid waste facilities, material recovery facilities, recycling centers, and hauling stations.

On July 19, 2013, the California State Water Resources Control Board (Board) released the Final Draft of the new Industrial Storm Water General Permit (IGP). The IGP is a statewide general National Pollutant Discharge Elimination System (NPDES) permit that regulates stormwater discharges from industrial activity. Currently, industrial stormwater is regulated under the IGP issued in 1997.

Federal regulations require that NPDES permits be renewed every five years. California has not revised its IGP for 16 years. Because of this time lag, in some instances, California's new IGP is catching up with the requirements imposed by other states and the federal IGP. However, because California is a leader in environmental regulation, many of the requirements in this new permit go far beyond anything introduced in other states.

For example, California's new IGP imposes strict liability for exceedances of Water Quality Objectives (WQOs), while other states continue with the "trial and error" approach to Best Management Practice (BMP) implementation. In this respect, the wave may be moving from west to east across the United States.

As proposed, the new IGP is set to take effect sometime in 2015, and would expire sometime in 2019. To the Board's credit, the new IGP is intended to minimize costs to permit applicants and to streamline the compliance process. The new IGP continues many of the existing requirements that landfills, transfer stations, recycling centers, and hauling

companies must comply with, while adding more stringent drainage area delineations and BMP evaluations. It also introduces Numerical Action Levels (NALs), Exceedance Response Action (ERA) Reporting, and ocean discharge and Total Maximum Daily Loads (TMDL) requirements, as well as strict liability for discharges that cause or contribute to an exceedance of a WQO, as defined by each of the nine regional basin plans and the statewide Ocean Plan.

The regulated solid waste facilities and their corresponding Standard Industrial Classification (SIC) codes are:

- 4953 Refuse Systems
- 4212 Local Trucking, Without Storage
- 5093 Scrap and Waste Materials

For a complete list of SIC codes, visit the Board's website at www.swrcb.ca.gov

In San Diego County, the total number of regulated facilities will rise significantly from approximately 750 to 14,000. Extrapolating this estimate statewide, the total number of industrial facilities that will need to comply with the new IGP will likely exceed 100,000.

Summary of significant changes

Training requirements – A Qualified Industrial Storm Water Practitioner (QISP), with specific credentials, training, and state certification, will be required to complete IGP documents and implement a compliance program. While the IGP outlines these training requirements, final training and testing details have yet to be established. QISP training will not be required until the exceedance response actions are triggered. QISP standing is not required to implement the program at Baseline Level (see below) or to prepare a No Exposure Certification (NEC). However, for most solid waste facilities, the likelihood of an exceedance is very high.

Moreover, demand for state-certified QISPs is likely to increase significantly in 2015 and 2016 due to the large number of facilities that will need to begin complying with the new IGP and the limited time available to develop and implement credentialing procedures. Thus, solid waste facilities should consider identifying and engaging state-certified QISPs as early as possible.



As drafted, California's new Industrial Storm Water General Permit creates strict liability for discharges of stormwater that cause or contribute to the exceedance of a Water Quality Objective.



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Monitoring requirements – Pre-storm visual observations and quarterly authorized and unauthorized non-stormwater discharge visual observations will be combined into one monthly visual observation. Monthly visual observations will be included with actual sampling events required twice in each half of the year. Litmus paper will be allowed for screening of pH exceedances. Eligibility for a Sample Frequency Reduction will require data from four storm events.

Exceedance Response Actions (ERAs) – There will be two different response action levels when water quality is affected, depending on the magnitude and frequency of the exceedance. Risk Level 1 ERA will be the initial action for the first exceedance of an instantaneous or annual average concentration. Re-occurring exceedances will trigger Level 2 ERAs. Risk Level 2 ERA requirements will include a two-step process – the discharger must develop an Action Plan and then develop a Risk Level 2 ERA Technical Report demonstrating the efficacy of the plan and the process for implementation. Level 2 will also require structural controls, such as bioswales, separators, or treatment systems. Operators should consider carefully how reports are prepared and by whom, as they will become public information and could be used as evidence in a Clean Water Act Citizen Suit.

Compliance Groups – The IGP allows dischargers from similar industries to form Compliance Groups. Participants in Compliance Groups will receive a 50-percent reduction in required sampling. A QISP must oversee a group's monitoring program. It will likely be in the best interest of solid waste facilities to consider forming Compliance Groups through their trade organizations as a means of ensuring consistent compliance at the lowest possible cost.

Annual reports – Electronic reporting to the Storm Water Multiple Application and Report Tracking System (SMARTS) will be mandatory. The compliance data will be readily available to the public, which drastically increases the compliance exposure of solid waste facilities. A facility's Storm Water Pollution Prevention Plan (SWPPP), monitoring results, completed forms, and lab data must be uploaded as well.

No Discharge/No Exposure – There will be new "No-Discharge" eligibility requirements for dischargers eligible to file a Notice of Non-Applicability (NONA). Very few facilities will be able to take advantage of this due to qualifiers within the IGP, such as the facility does not discharge industrial stormwater, the facility is in a basin that does not discharge to a water of the U.S., or the facility does not discharge at all. An NEC can be filed if the facility can demonstrate that the industrial processes are not exposed to rain, snow, snowmelt, and/or runoff. Only a very limited number of solid waste facilities, such as entirely enclosed transfer and sorting stations, are likely to qualify to file a NEC. However, SMARTS reporting and annual re-certifications will still be required.

Implications for solid waste facilities

Landfills and solid waste facilities are unique, essential public services with their own stormwater signature. These facilities, by their very nature, are distinct from virtually all other forms of industrial activity.

The IGP will drastically change the stormwater management approach at landfills, solid waste facilities, material recovery facilities (MRFs), recycling centers, and hauling stations. There is strict liability for exceedance of WQOs, as well as NALs for discharges. In the new IGP, NAL compliance is tied to a three-tiered Risk Level system. As the risk level increases, due to re-occurring exceedances, there will also be additional elements required in SWPPPs, enhanced observations and inspections, formal Monitoring Implementation Plans, additional wet weather sampling, obtaining daily average or qualified combined samples, NAL exceedances and corrective actions, and implementing treatment control BMPs.

Risk Levels will be assigned based on EPA benchmarks. For example, a site at Baseline Risk Level 0, with total suspended solids (TSS) in runoff data from two consecutive storm events that exceed the benchmark values (100 mg/l) on the annual average, or exceed the instantaneous maximum (400 mg/l), or the exceedance of two benchmarks in the same storm event, will be elevated to Risk Level I. However, even if the facility does not exceed a benchmark, it still may be in violation if the discharged stormwater causes or contributes to the exceedance of a WQO.

For example, in Region 9 the WQO for suspended and settleable solids is as follows: Waters shall not contain suspended and settleable solids that cause nuisance or adversely affect beneficial uses. Thus, even if the discharge is determined to be below the benchmark standard, the operator will need to demonstrate that suspended and settleable discharges are not causing or contributing to the failure of a water segment to achieve its designated beneficial uses. Such proof will likely require very sophisticated sampling and bioassay techniques.



At Risk Level I, more sampling, reporting, inspecting, and implementing additional procedural BMPs are required. When a site becomes a Risk Level 2, the discharger must address the problem with structural treatment BMPs (Figure 1). Although there will be no mandatory minimum penalties for the exceedance of NALs, a mandatory minimum penalty will be imposed for failure to prepare and implement a corrective action report. These risk levels mean more field evaluations, enhanced BMPs, additional monitoring, SWPPP revisions, and electronic reporting to ensure compliance.

The one-way system of escalating Risk Levels, combined with strict liability for exceedance of WQOs, will dramatically change how stormwater is managed at solid waste facilities. At this time, the Draft IGP will assign a Risk Level of Baseline, 1, or 2, based on EPA benchmarks. For example, a site at Baseline with an annual average TSS in runoff data that exceeds the benchmark values (100 mg/l) or that experiences the exceedance of an Instantaneous Maximum NAL of 400 mg/l will then become Risk Level 1. At Risk Level 1, more sampling, reporting, inspecting, and implementing of Operational BMPs is required. Similarly, sites can be escalated from Risk level 1 to 2.

An invitation for lawsuits

As drafted, the IGP creates strict liability for discharges of stormwater that cause or contribute to the exceedances of a WQO. The IGP further requires permit holders to place all documentation and data concerning contaminants in their discharges on the SMARTS public website. It is a very short step from reporting elevated levels of contaminants in the discharged stormwater to an allegation by a Citizen Suit plaintiff that discharge is causing or contributing to the exceedance of a WQO, particularly when the receiving water is already identified as being impaired under Section 303(d) of the Clean Water Act.

This makes Citizen Suit enforcement much easier because the data can be readily viewed by the general public and, because it is posted by the discharger, practically irrefutable. Moreover, failure to report the data is a violation of the Clean Water Act, enforceable by Citizen Suit. If, for example, a discharger fails to submit timely ERA reports or upload its SWPPP, the discharger could be sued for violations of the Clean Water Act. Other examples include failure to report unauthorized stormwater discharges, failure to monitor and report pollutants, and failure to submit timely annual reports.

A copy of the Final Draft of the IGP, along with related documents, can be found on the Board's website at www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

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