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**Industrial Discharges – National Academy recommends key changes** – The [new report](#) from the National Academies of Sciences, Engineering, and Medicine offers guidance to EPA to inform the next revision of the EPA 2015 *Multi-Sector General Permit for Industrial Stormwater Discharges* ([MSGP](#)). Some of the recommendations may also be applicable to other stormwater categories. [Presentation](#), [Highlights](#).

The MSGP establishes specific pollutant monitoring and benchmark thresholds for the regulated industrial sectors. The average of four quarterly sampling results determine exceedances. Exceedances of the benchmarks are not permit violations, but trigger a review of the stormwater control measures. The MSGP applies only to Native American tribal lands in California; however, the State Water Board relied heavily on the 2008 MSGP in developing the Industrial General Permit ([IGP](#)). The annual Numeric Action Levels (NALs) in the IGP are derived from and function similarly to the MSGP benchmark values. *Key findings and recommendations:*

#### **Pollutant monitoring requirements and benchmark thresholds**

- Update sector-specific fact sheets and monitoring requirements, including benchmarks; extend requirements to non-industrial facilities with similar activities (e.g., gas stations).
- Require industry-wide monitoring for pH, TSS, and chemical oxygen demand (COD), with COD ultimately replaced by total organic carbon (TOC). (CA has industry-wide monitoring for pH, TSS, and oil & grease).
- Base the benchmarks on the latest criteria designed to protect aquatic ecosystems from short term or intermittent exposures; some current benchmarks (e.g., iron) are based on chronic (longer-term) criteria.
- Suspend or remove benchmarks for iron and magnesium; there is little evidence of adverse effects to aquatic organisms at common levels.
- Allow permittees with repeated exceedances to use more complex measures, e.g., biotic ligand model (BLM) to calculate acute criteria for copper. (EPA adopted BLM-based recommended [freshwater copper criteria](#) in 2007).

#### **Stormwater sampling and data collection**

- Strengthen monitoring and analysis protocols, including a possible training program for monitoring.
- Quarterly grab sampling over 1 year is inadequate; EPA to determine minimum sample number.
- Expand the tiered monitoring approach based on facility risk, complexity, and past performance: 1) Inspection-only, 2) Industry-wide monitoring only (pH, TSS, COD), 3) Benchmark monitoring, 4) Enhanced monitoring.
- Use electronic data reporting, analysis and visualization tools (report includes California [examples](#)).

#### **Retention standards in the MSGP**

- Consider incentives to encourage industrial stormwater infiltration (or capture and use) where appropriate.
- Infiltrated water should generally be required to meet primary drinking water standards for inorganic and organic chemicals, and secondary standards for chloride and total dissolved solids; monitor in the infiltration device or at the base of the vadose zone. The Onsite Compliance Option in the 2018 [Amended IGP](#) (effective July 2020), is somewhat similar, but allows groundwater monitoring to ensure compliance with drinking water standards (the exception is dry wells which must meet the drinking water standards at the pretreatment unit).

The next MSGP update is due in 18 months, but will likely take longer. State Water Board staff are currently reviewing the Academies report and evaluating how the IGP can align with future federal requirements.