October 22, 2012

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State Water Resources Control Board
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Email: commentletters@waterboards.ca.gov

SUBJECT: COMMENT LETTER – INDUSTRIAL GENERAL PERMIT

Dear State Water Resources Control Board:

Thank you for the extended opportunity, from September 21, 2012 until October 22, 2012, to submit comments regarding the 2012 Draft National Pollutant Discharge Elimination System General Permit for the discharge of storm water associated with industrial activities (Draft NPDES Industrial General Permit or Draft IGP). The Kern County Waste Management Department (KCWMD) is a public entity that owns and operates seven active landfills, eight inactive or closed landfills, and seven transfer stations or bin sites. The KCWMD recognizes the importance of protecting water quality in the State of California and has been committed to reducing our facilities’ potential contribution to storm water pollution by implementing the Best Management Practices (BMPs) at our facilities.

The KCWMD takes pride in operating these facilities in compliance with safety and environmental regulations and permits, such as the Draft IGP. As such, we support the implementation of continuous storm water quality improvement measures that are cost-effective, practical, and are known to have demonstrated water quality benefits.

Unfortunately, we are concerned that the draft permit proposed in July 2012 does not meet these objectives. Please consider the following comments.

Dual Permit Coverage

KCWMD has a number of concerns regarding simultaneous coverage under both the Construction General Permit (CGP) and the IGP. For a landfill construction project occurring contiguous to and continuous with landfill activities, landfill operators will be required to obtain dual coverage via the CGP and the IGP. KCWMD believes that if a facility has an IGP, it should not be required to obtain a CGP.

The Draft Industrial General Permit (IGP) Fact Sheet, page 16, states that “[i]n most cases, it is appropriate for new landfill construction or closure to be covered by the Construction General Permit, rather than this General Permit.” It also goes on to state that “[n]ormally, continued expansion or closure of landfill areas that occurs during active landfill operations is authorized under permits approved by a local municipal...
agency. These expansion/closure activities occur within a limited timeframe (often taking less than 90 days from beginning to end) and are not separately subject to additional local approval. These activities will generally be allowed under this General Permit...The construction or closure of a separate section of the landfill that is either subject to additional permitting by the local authorities or lasts more than 90 days is likely to require coverage under the Construction General Permit."

The dual coverage of the IGP and CGP, with conflicting training, sampling, and other compliance requirements will cause a great deal of confusion. Consider the following scenario. An operator has obtained a CGP for a landfill construction project which will occur in excess of 90 days but is located at a landfill which has an IGP. Assume this landfill construction project is situated such that the sampling points for the IGP and CGP are the same and a sample taken during a qualifying storm event has an effluent value for a single constituent that is over the IGP discharge limit, but under the CGP discharge limit. It is indistinguishable which permit should be followed to determine which discharge limit should be used and when a violation may occur.

In this instance, it is unclear as to why a CGP is necessary when the IGP requirements for landfills are sufficient. The industrial Stormwater Pollution Prevention Plan (SWPPP), reporting requirements, Best Management Practices (BMPs) etc. could be updated to reflect a change in activities, as indicated in the Draft IGP on page 33. If there is an issue of tracking the discharge from a project, a change in the IGP sample data would be an indicator and then BMPs could be adjusted.

Furthermore, it is unclear as to how the landfill owner would adequately comply with the post-construction requirements of the CGP. Post-construction requirements, such as water-balance and 70 percent vegetation etc., are clearly not applicable to an active landfill. KCWMD recommends that the IGP be used for all landfill related NPDES permitting activities at active sites or the SWRCB provide specific clarification on items such as the implementation of post-construction requirements of the CGP and other overlapping statutes of the two permits.

**Time Limit for Landfill Construction Projects**

If the above recommendation that the IGP be used for all landfill related NPDES permitting activities at active sites is not considered, the KCWMD requests the timeframe associated with the need to obtain a CGP be increased from 90 to 180 days.

It is KCWMD's opinion that the 90-day limit seems arbitrary and no justification for the establishment of this limit is provided in the Draft IGP. During the 2011 Draft IGP comment period, this same issue was raised. The response from the SWRCB stated that it was addressed in the permit. However, it is our perspective that the SWRCB did not adequately address the issue; instead, at best, the response was unclear and the request for additional days was denied.

It is KCWMD's experience of routine landfill closure construction projects that a minimum of 180 working days is necessary to complete such a project. This time frame excludes any form of dirt work that is continually going on due to landfill operations. Therefore, KCWMD recommends that for landfill closure projects occurring in less than
180 days at a landfill that has an active IGP, the existing IGP should be used to control the storm water run-off activities during the closure construction process.

Furthermore, earthwork activities associated with typical landfill liner construction include the excavation of the future waste cells to be lined. A future waste cell is typically excavated as part of the ongoing landfill operations as the excavated material is used as part of the existing landfill cover. Therefore, the excavation of future waste cells to be lined should not be considered a landfill liner construction project and should be excluded from the provisions of the CGP.

Any other work activities associated with landfill construction exceeding the recommended 180 working days would be required to obtain and comply with a CGP.

**Removal of Conditional Exclusion – No Discharge Certification**

The previous 2011 Draft of the IGP included the following No Discharge Certification conditional exclusion:

“Dischargers who have facilities designed to contain a 100 year 24-hour storm event and three (3) consecutive 20 year 24 hour storm events in a month are not found to have a potential to discharge pollutants, and therefore pose no threat to water quality.”

This conditional exclusion provided a benefit and the removal is completely contradictory to the goal of the IGP intention. It is KCWMD’s recommendation that this conditional exclusion be put back into the IGP.

**Lack of an Explicitly Defined Compliance Storm Event**

The 2011 Draft IGP Fact Sheet, “[establishes a 10-year, 24-hour (expressed in inches of rainfall) Compliance Storm Event for TSS. In addition, all treatment BMPs for any other pollutants shall be designed for a 10 year, 24 hour storm event.”

The 2012 Draft IGP has been revised under the Design Storm Standards for Treatment Control BMPs section to read, “[all treatment control BMPs employed by Dischargers shall be designed to comply with design storm standards as follows:

Volume-based BMPs: Dischargers shall, at a minimum, design volume-based, treatment control BMPs to effectively treat the storm water volume generated from the 85th percentile 24-hour storm event.”

KCWMD feels the 2012 Draft IGP Design Storm Standards do not clearly define the upper limit for a BMP system design. BMP’s are most efficient and economical when they target small, frequent storm events that over time produce more total run off than larger, infrequent storms. Therefore, the compliance storm event criteria enables the designer to focus on the more frequent storm events, as intended by the IGP.

Therefore, KCWMD recommends that the Compliance Storm Event be clearly defined, as it was previously done in the 2011 version of the Draft IGP.
Discharges Not Covered by Permit/Notice of Non Applicability

KCWMD is unclear on what the required storm event for the Notice of Non Applicability (NONA) demonstration consists of. Also, the term "any circumstance" stated in sub-note 7 on page 14 of the 2012 Fact Sheet needs to be quantified.

From the standpoint that the intent of the IGP is to protect waters of the United States by minimizing the impacts of storm water discharges, KCWMD argues the relevance of utilizing a very low frequency storm event for a NONA demonstration. KCWMD reasons that the NONA demonstration should focus on eliminating impacts of storm water discharges from high frequency storm events (i.e. those most likely to occur more often) by implementing focused BMPs that are practical and known to be effective.

In order to clarify this, KCWMD recommends the SWRCB define the frequency of a storm event to be used for the NONA demonstration.

Applicability of Effluent Limitations Guidelines to Landfills

The 2012 Draft IGP Part V. EFFLUENT LIMITATIONS, paragraph B reads:

"Industrial storm water discharges from facilities subject to storm water ELGs in Subchapter N shall not exceed those effluent limitations. The ELGs for industrial storm water discharges subject to Subchapter N are found in Attachment E of this General Permit."

This requirement indicates that all facilities that are included in Subchapter N will be held to strict effluent limitations. KCWMD staff asked the following question during the SWRCB Webinar on September 5, 2012: "On page 21 of the draft IGP, it states "Industrial storm water discharges from facilities subject to storm water ELGs in Subchapter N shall not exceed those effluent limitations. What happens if an exceedance occurs?" The response from SWQCB staff was: "Subchapter N is the federal Narrative or Numeric Effluent Limitations for specific industrial operations. If there is a number applicable to a facility and it is exceeded it is a NEL and is subject to enforcement, MMP, etc..." Subchapter N includes over 40 separate industrial categories where the US EPA has established effluent limitation guidelines (ELGs) for new and existing industrial wastewater discharges. In total, these 40 categories (not including construction) represent less than 10 percent of the facilities subject to this IGP. Landfills are included in the facilities that are subject to Subchapter N. KCWMD believes that it is not appropriate to hold the landfill industry to strict effluent limitations for the following reasons:

1) It is not reasonable to hold a small subset of facilities to strict effluent limits when the findings of this draft IGP indicate that numeric effluent limitations are infeasible. This draft IGP indicates: "35. This General Permit requires Dischargers to implement BMPs, including treatment controls where necessary, in order to support attainment of water quality standards. The use of BMPs to control or abate the discharge of pollutants is allowed by 40 C.F.R. section 122.44(k)(3) because numeric effluent limitations are infeasible and BMPs are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the Clean Water Act. (40 C.F.R. § 122.44(k)(4).)"
The benchmark concentrations are extremely low. The limit for total suspended solids of 88 mg/L maximum daily and 27 mg/L monthly average will not be economically attainable (see following comment). These low values may be appropriate for facilities that are in urban areas with lined drainages and/or are discharging to drainages that have a high risk for impact of wetlands. All of our landfills are located in rural areas that have unlined drainages, which have inherently high sediment loads and very low risk for impacting any wetlands. Many other landfills in the State have a similar situation. These landfills should not be subject to these extremely low effluent limitations.

2) The EPA has also consistently held the position that it is difficult, if not infeasible, to assign NELs broadly to all industrial stormwater discharge. This position is clearly and thoroughly explained in the EPA Multi-Sector General Permit (MSGP) Fact Sheet, Section VI.A.4, pages 38 and 39. Below are a few pertinent quotes from the referenced section:

"Numeric effluent limitations are not always feasible for industrial stormwater discharges as such discharges pose challenges not presented by the vast majority of NPDES-regulated discharges. Stormwater discharges can be highly intermittent, are usually characterized by very high flows occurring over relatively short-time intervals, and carry a variety of pollutants whose source, nature and extent varies. See 55 FR at 48,038; 53 FR at 49,443. This is in contrast to process discharges from a particular industrial or commercial facility where the effluent is more predictable and can be more effectively analyzed to develop numeric effluent limitation…"

"The variability of effluent and efficacy of appropriate control measures makes setting uniform effluent limits for stormwater extremely difficult. The record for this permit indicates that there is a high level of variability among discharges, in terms of both flow rates and volumes and levels of pollutants, since the volume and quality of stormwater discharges associated with industrial activity depend on a number of factors, including the industrial activities occurring at the facility, the nature of precipitation, and the degree of surface imperviousness. Due to the dissimilarity among the 29 different industrial sectors covered by this permit, and among the individual facilities within the different industrial sectors, the sources of pollutants in stormwater discharges differ with the type of industry operation and specific facility features…"

3) It is KCWMD’s opinion that Subchapter N benchmarks values should not be used as IGP NELs without a detailed evaluation and explanation of their suitability to serve as such. The EPA MSGP benchmarks serve a specific purpose, as quoted from the EPA MSGP below:

"The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are primarily for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional
corrective action(s) may be necessary to comply with the effluent limitations in Part 2"

"The MSGP benchmarks assist the discharger in determining whether additional corrective action(s) MAY be necessary. The MSGP further indicates that it is possible that "no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice."

4) Sacramento Superior Court Judge Lloyd G. Connelly invalidated the NELs contained in the CGP for stormwater runoff. The ruling was issued following a lengthy series of briefings in a lawsuit brought by California Building Industry Association (CBIA), Building Industry Legal Defense Foundation (BILD), and California Business Properties Association (CBPA) as petitioners. Back in 2009, the SWRCB chose a 500 NTU NEL for turbidity (sediment runoff) and 6-9 pH units as the NEL for pH, claiming that they were relying on three different studies to support the NELs chosen. The Court, however, found the studies to be too limited or inconclusive, and concluded that the NELs lacked substantial evidentiary support. Judge Connelly opined that data could have been collected to support NELs if the SWRCB had followed the request of the petitioners made during the administrative process to use Numeric Action Levels (NALs) as a means to gather appropriate data. The Court ruled that the NELs were subject to a balancing of the factors specified for consideration under federal law (not state law), and that the SWRCB was required to comply with the cost-benefit factors set forth in the federal Clean Water Act in establishing NELs. The Court concluded that the NELs are invalid and unenforceable unless and until the SWRCB can produce the data that demonstrates that available technologies will actually achieve the NELs.

Feasibility of Effluent Limits to Determine Adequacy of Best Management Practices and/or Environmental Impacts

1) Effluent limits are not listed for arsenic, chromium, aniline, and pyridine. KCWMD is unclear how the analytical results for these analytes will be used to determine issues with particular facility BMPs. The use of arsenic as an evaluation indicator is not appropriate in the Kern County area since arsenic is indigenous in local soils. The purpose of using this parameter as an indicator is marginalized thus should not be used as an effluent parameter in certain scenarios.

2) The effluent limit for zinc is 25 times lower than the State's drinking water maximum contaminant level (MCL). The need to measure potential impacts of facility activities with local surface water quality is understood; but establishing a standard that is below drinking water standards is too stringent, especially since zinc is ubiquitous, discharge at or near the effluent concentration limit would theoretically not have a toxicity impact and the potential of unnecessary response to an exceeded limit.
3) The TSS limit of 88 mg/L is extremely low and would not be an appropriate limit to validate potential storm water discharge issues. Using an 88 mg/L effluent limit to verify the adequacy of BMPs and prevention measures is not appropriate given the actual impact of exceedance at this level. For instance, for a five-acre open ground site with 30 percent run-off yield and one inch of rain at a TSS discharge rate of 88 mg/L, the total sediment weight migrating off site would be approximately 30 pounds, or half of a five-gallon bucket. For one-tenth of an inch of rain on a one acre site, six-tenths of a pound of sediment would be discharged assuming the same run-off yield for such a low rainfall depth.

In a particular case for a KCWMD transfer station comprising of approximately one and one-half acres of open ground, to limit the TSS of the discharge to the proposed limit, best management practices for one to ten pounds of sediment discharging off-site would have to be considered. The nearest body of water is two miles away and across a major freeway. This transfer station represents about 0.01 percent of the area around the nearest body of water. Almost all of the area near and around the body of water is open ground, thus KCWMD could potentially have to add or modify BMPs for a discharge of one to ten pounds of sediment from 0.01 percent of the area while having no regard to the impacts of sediment produced from the other 99.99 percent.

Depending on the numerous variables such as topography, length of discharge travel, amount of rain, and most importantly the volume of the ultimate body of water destination; it seems that establishing hard limits or a “one size fits all” approach with effluent limits may not be amicable among like businesses. Discharge limits for industries into municipal sewer systems are typically higher than the proposed effluent discharge limits.

4) The compound p-cresol, or 4-methylphenol, typically co-elutes with 3-methylphenol in methods EPA 625/8270. There would be no definitive differentiation between the two compounds. Because 3-methylphenol and 4-methylphenol cannot be differentiated, KCWMD recommends the sum of these isomers be compared to the listed effluent limit and the effluent limit be adjusted accordingly.

Thank you, again, for the opportunity to comment on the Draft IGP. We sincerely hope the SWRQB will modify the proposed IGP or address concerns as requested in these comments. If you have any questions regarding these comments or require further information, please contact Eric Greenwood at (661) 862-8918 (ericg@co.kern.ca.us).

Sincerely,

Douglas E. Landon
Director