SPECIAL HEARING
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cc: BD, DI, DWQ
e-cys: BD, CC, HMS, TH, CMW

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Ms. Debbie Irvin, Clerk to the Board
Executive Office
State Water Resources Control Board
1001 I Street, 24th Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100

RE: AAAE/ARDF Comments on the Draft Industrial General Permit (2004 Draft Permit)

Dear Ms. Irvin:

On behalf of the American Association of Airport Executives/Airports Research and Development Foundation (AAAE/ARDF), thank you for the opportunity to provide comments regarding the renewal of the current General Permit for Storm Water Discharges Associated with Industrial Activities. AAAE/ARDF has been working with staff over the last several years to develop recommendations for the renewal of the current General Permit. AAAE/ARDF previously provided comments on the revision of the 1997 General Permit in June of 2003. We also appreciated the opportunity to testify at the Sacramento Hearings and for the additional time granted by the Board for filing of these comments.

The American Association of Airport Executives (AAAE) is a not-for-profit professional organization representing airport management personnel around the world. Founded in 1928, AAAE represents airport executives and personnel at over 600 U.S. airports, including most airports in the State of California. A separate, not-for-profit technical organization, the Airport Research and Development Foundation (ARDF), provides research, technical and data support for AAAE/ARDF projects.

AAAE/ARDF has organized a California Monitoring Group since 1992, the inaugural year of the California General Industrial Stormwater Permit. The Group has evolved in the past 11 years and credits the State's Group Monitoring Program with fostering an effective way for the aviation industry to develop an effective stormwater compliance program through shared resources and industry leadership. The Group is concerned with a number of the provisions in the new draft industrial stormwater permit and it offers several significant comments that will improve the group monitoring program while maintaining the original mission of group

monitoring – improved overall environmental protection through a systematic review and analysis of industry-specific practices under the leadership of a central organizing, information-disseminating body.

Please find below our General Comments as well as our Section specific comments that we hope will help provide our perspective as it applies and impacts the aviation community in California.

GENERAL COMMENTS

1. Support of BMPs, Appropriate Monitoring and Storm Water Pollution Prevention Plans; Application of Numeric Effluent Limits Inconsistent with the USEPA's Intent

AAAE/ARDF supports the General Permit's approach of regulating stormwater discharges from industrial facilities through the use of Storm Water Pollution Prevention Plans (SWPPPs), Best Management Practices (BMPs), and appropriate monitoring requirements. This approach is consistent with both current State and USEPA guidance on managing stormwater discharges from industrial facilities.

AAAE/ARDF, however does not support the application of numeric effluent limits for stormwater discharges given the unique and variable nature of stormwater runoff events and finds it inconsistent with the intent of the USEPA. AAAE/ARDF agrees with the USEPA on this issue because the science and process to allow the application of numeric effluent limits to stormwater discharges does not currently exist. AAAE/ARDF strongly recommends the continuation of the BMP-based iterative approach to improve the quality of stormwater discharges from industrial facilities.

We strongly agree that industrial stormwater discharges should continue to be regulated through a BMP-based approach that is consistent with USEPA guidance and intent. This is fundamentally important since stormwater is highly variable, intermittent, and difficult to monitor. Further, we believe that the regulatory approach within the permit (i.e. the use of a BMP-based approach and the USEPA benchmarks as intended) will assist industrial dischargers and the regulators in implementing and evaluating the effectiveness of the stormwater pollution prevention plans and to make progress in improving water quality during the next permit term.

AAAE/ARDF believes that before permit compliance can be based on a numeric performance criteria, the development of that criteria must be accomplished though a defined and scientifically defendable process in accordance with EPA protocols, which consider factors other than analytical monitoring, and that ensures that the performance criteria is demonstrated to be economically achievable. At this time, that process has not been defined or demonstrated. Until such time that a defendable process has been

developed for establishing numeric compliance criteria, the permit must continue to be based on a BMP-based approach for demonstrating permit compliance.

2. Development and Incorporation of Numeric Effluent Limits

The 2004 Draft Permit acknowledges that, although numeric effluent limits cannot be scientifically supported in this permit, the State Board is considering adopting numeric effluent limits for the next permit term. The State Board must recognize, due to the variable nature of stormwater, the diversity between industrial categories and the lack of standardization throughout the state for data collection, QA/QC, evaluation and reporting, there will be inherent limitations within any dataset that will be collected under the proposed program.

AAAE/ARDF recommends, that due to the regulatory approach that is being considered for the next permit term, that:

- Industrial stormwater discharges continue to be regulated within the BMP-based approach and utilize the USEPA benchmarks as a measure of program effectiveness;
- The regulatory approach proposed within the 2004 Draft Permit be allowed sufficient time to implement the program and monitor the results;
- The State Board clarify that the purpose of the additional monitoring proposed within the 2004 Draft Permit is to establish feasibility of establishing technology based effluent limits;
- The State Board clarify if the technology based effluent limits would be developed for all sub-categories of industry or a subset of those who are required to obtain coverage under the Industrial General Permit
- The Board identify the criteria that would be used to determine which categories of industry warrant the development of technology based effluent limits;
- If indeed, the establishment of technology based effluent limits should follow, the Board must adopt a the process similar to the one used by EPA when developing national effluent guidelines, which considers a number of parameters including, but not limited to:
    - existing data from previous data-collection efforts,
    - site visits to assess discharge characteristics,
    - general facility information,
    - on-site BMPs and treatment technologies,
    - industry-provided information,
    - literature searches,

- economic information, and
- water quality monitoring data.

This point is critical for the successful development of technology based limits. Anything short of this effort will cast the limits in question, impose undue hardship to our airports without a clear statement of benefits, environmental, economic or otherwise, and therefore, opening the permit to litigation.

3. Incorporation of EPA Benchmarks

AAAE/ARDF supports the BMP approach and benchmarks being applied to storm water consistent with EPA's storm water Multi-Sector General Permit for Industrial Activities. However, the proposed 2004 Industrial Permit is inconsistent with EPA's general permit in several ways that result in the 2004 draft permit being unnecessarily burdensome to dischargers without increasing beneficial impacts to stormwater quality. These differences include:

- The EPA general permit clearly recognizes the variable nature of storm water and specifies, *"An exceedance of a benchmark value does not, in and of itself, constitute a violation of this permit. While exceedance of a benchmark value does not automatically indicate that violation of a water quality standard has occurred, it does signal that modifications to the SWPPP may be necessary."* Additionally, the EPA permit refers to <u>average</u> concentrations of pollutant parameters, clearly distinguishing it from a single sample. Although the Board's Fact Sheet reflects their understanding that storm water is variable, the 2004 Draft Industrial Permit appears to ignore this variability and trigger additional monitoring and additional BMP identification and implementation based on the result of one grab sample;

- The EPA general permit further recognizes the variable nature of the storm water and the uncertainty of a grab sample result by requiring actions only with the analytical results are considerably above benchmark values. The permit states *"...analytic levels considerably above benchmark values can serve as a flag to the operator that the SWPPP needs to be reevaluated and that the pollutant loads may need to be reduced."* The 2004 draft permit triggers corrective actions with any level of exceedance beyond benchmark; and

- The EPA general permit recognizes the need for flexibility to deal with the variable nature of storm water and specifies, *"The results of benchmark monitoring are primarily for your use to determine the overall effectiveness of your SWPPP in controlling the discharges of pollutants to receiving waters".*

4. Monitoring Program

The 2004 Draft Industrial Permit imposes a new requirement that dischargers must sample for *"Parameters indicating the presence of pollutants that may be causing or contributing to an existing exceedance of a WQS in the facility's receiving waters*". It is unclear how a discharger would know what parameters are being exceeded in the receiving water. Dischargers are not required to sample the receiving water and do not have access, independent of being informed by their Regional Board, that a parameter connected with their industrial activity is causing or contributing to a violation of WQS in the receiving water.

The State Board has not acknowledged that there is a standardized process for assessing impacts on receiving waters from industrial stormwater discharges, at the point of discharge. Therefore there is no reasonable way for a discharger to discern what parameters to sample in their runoff. This requirement must be revised to limit the dischargers' sampling obligations to only those site and industry specific pollutants that are under the direct control of the discharger and that can reasonably be expected to cause or contribute to an exceedance to an impaired body of water. Moreover, it is reasonable to expect that a regional board would require this sampling when they are aware that a problem exists in the receiving water, therefore this concern is adequately addressed by existing regulation.

Section VIII.6.a of the 2004 draft permit requires a one time pollution-scan for additional parameters (i.e. metals, COD, etc) listed in Table VIII.2 (pg 25). The fact sheet (page IV) states that State Board intends to use this database to develop numeric effluent limits. It is unlikely that a one time grab sample would provide statistically valid results that can be used to develop numeric effluent limits, given the variable nature of storm water, acknowledged by both, EPA and the State Board.

AAAE/ARDF suggests that the one-time pollution scan obligation be reconsidered in the 2004 draft permit. As it is now included, it is not clear how it will be used and what its purpose is, and as mentioned above, we are not sure the goal stated can be achieved. Instead, AAAE/ARDF encourages the State Board to facilitate a discussion with appropriate stakeholders to develop a proposal and mechanism for a more appropriate statewide monitoring study of industrial storm water discharges that would yield statistically valid results should be initiated. After more careful consideration of the statistical requirements to obtain the needed data set to begin evaluating effluent limits, the State and Regional Boards have adequate authority to require sampling under Water Code Section 13267.

AAAE/ARDF is also concerned that as the permit is drafted, the new reporting requirement will place an additional burden on the Regional Board staff members, who will have to review and approve site specific BMPs. Without site-specific knowledge, staff will be placed in the unenviable task of making site-specific BMP determinations,

exposing both staff and the regulated facility to unnecessary liability. The reporting requirements will also have a large impact on group leaders of monitoring groups that are the keystone of technical and compliance assistance under the current permit structure. This impact is due to the requirement that group leaders, once free to provide assistance and advice, will now be required to become enforcement officers for the State Board by having to "turn in" violators, instead of the role they current play, of technical assistance and advisors. We urge the State Board to work with the regulated community to devise a balanced approach where group monitoring members can continue to get the greatest benefit possible at a group monitoring program which is that of technical and compliance assistance and still provide the State Board with assurances that action is being taken.

SECTION SPECIFIC COMMENTS

Section V. Provisions

7.g. The requirement to revise both the SWPPP and the Monitoring Plan within 14 days of RWQCB approval is inconsistent with the 90 day SWPPP revision requirements identified throughout the draft permit. Two weeks does not allow enough time for an effect revision of two in depth and detailed programs. The revision requirement in this section should be extended to a 90-day period, providing revision period consistency throughout the permit.

Section VII SWPPP Requirements

8.i.1. The weekly inspection of the entire facility required by the Good Housekeeping BMP is excessive and is an undue burden. Good Housekeeping inspections should be required on an as needed basis that is determined by the site specific pollutant assessments. The draft permit requires so many inspections on such a frequent basis that the SWPPP personnel will have no time for compliance with the many other requirements of this draft permit. Clarification as to whether this inspection must be documented and the records retained is needed. The State Board must remain conscious that small businesses in the State will be unduly impacted by such requirements.

8.i.7 The requirement to divert storm water flows from non-industrial areas of the facility may, in some cases be all but impossible and or in many cases require a complete overhaul to the storm conveyance system at a cost that would force facilities out of business. This requirement as written should be removed from the draft permit. Again, AAAE/ARDF is deeply concerned this requirement will have on small businesses in the

State. These types of requirements, like the numeric limits, should be studied as part of a detailed review before being required in a permit.

8.ii.2 The weekly inspection of equipment and systems for potential leaks is again excessive and in many cases would require that storm water personnel spend all their time checking equipment, not allowing for implementation of other important compliance BMPs. These inspections should be based on pollutant assessment evaluations and conducted on an as needed basis. Clarification as to whether this inspection must be documented and the records retained is needed. These requirements should be tied to the need and circumstances set forth in the permittee's individual SWPPP, not a cross-the-board requirement without obvious benefits.

8.iv.5 Daily cleaning and inspection of outdoor material handling equipment and containers is not a feasible requirement. SWPPP personnel in most cases have significant responsibilities other than storm water compliance. Many small businesses cannot afford for staff members to spend an unnecessary amount of time on daily and weekly inspections. These inspections frequencies again should be based on pollutant assessments and potential for storm water impact set forth in each regulated facility SWPPP. The inspection frequency requirement should be on an as needed basis to be determined by potential impact. Clarification as to whether this inspection must be documented and the records retained is needed.

9.d.vii. All required reporting forms must be made available at the time of final permit release. Understanding the many forms needed for correct permit documentation requires training and is a significant part of the group monitoring program. If reporting forms are not available prior to group monitoring plan compilation, the group leaders must be allowed to develop alternative forms.

Section VIII Monitoring

3.a The requirement to observe ALL discharge locations is redundant, costly and not necessary to accurately inspect the water quality leaving the site. Sites with more than 6 outfall locations should be allowed to select representative locations for storm water visual inspections. Selecting representative locations for observations or rotating inspected outfalls throughout the wet season months provides the site inspector with ample data to determine whether there are water quality issues to be addressed. Inspecting a smaller number of representative outfalls during a storm event also allows the inspector time to address any observed issues promptly. Inspectors have been trained to track visual pollutants back to the source at the time of observation. This important practice cannot be accomplished if the inspector is under pressure to observe ALL outfalls within the 1st hour of discharge time requirement.

3.e. The limited SWPPP staff cannot be held responsible for recording weather. The record keeping requirements of the draft permit are already extensive and adding a weather tracking requirements does not improve the ability of the SWPPP staff to conduct required observations or in anyway benefit runoff water quality. RWQCB or other interested parties can obtain very specific weather records from a number of sources (accuweather.com for example) other than facility staff. This requirement should be removed from the draft permit.

3.f. Conducting pre-storm inspections of the entire facility and all drainage areas will take time and resources away from BMP implementation and other more effective pollution prevent practices. SWPPP personnel have other job requirements that are not related to storm water and cannot be expected to monitor the weather to the extent required by this mandate. Weather predictions are inaccurate and Dischargers cannot afford to spend limited labor time anticipating storms and conducting pre-storm inspections particularly for storms that do not occur. Again, the State should consider carefully the impacts this provision and others like it will have on the State's small business community.

4.f. As stated above, we do not support the incorporation of the Benchmark limits in this permit. Here are some specific comments on issues associated with the Benchmark limits:

- The specific conductance limit is an appropriate number. The EPA national multi sector permit benchmark table does not set a limit for specific conductance. Specific conductance is an indirect measure of the presence of dissolved solids. EPA has set a **drinking water standard** for Total Dissolved Solids (TDS) at 500 mg/l. The linear correlation between TDS and Specific conductance can be used to estimate a relative specific conductance standard based on the TDS drinking water standard. Using a conversion factor established by City of Boulder/USGS Water Quality Monitoring program (http://ben.boulder.co.us/basin /data/FECAL/info/TSS.html) the specific conductance EPA drinking water standard would be between 666 - 909 umhos/cm. The CA draft permit has established a benchmark that is 3 to 4 times lower than that for safe drinking water. The specific conductance limit must be an appropriate number for storm water runoff not a number that is 3 times more stringent than potential EPA drinking water standards.

- Specific Conductance is a broad indicator test not a specific toxic substance. The limit set in this permit lacks scientific basis used with other specific toxins to determine water quality impairment. *Standard Methods for the Examination of Water and Wastewater* states "the conductivity of **potable waters** in the United States ranges generally from 50 to 1500 μmhos/cm."

- Lastly, the resulting Specific Conductance values in the storm water runoff are impacted by many factors that are beyond the discharger's control, gases and dusts in the air, acidity of the rain, geology of the drainage areas, and sea water infiltrate. The specific conductance limit must be increased to a number appropriate for widely variable storm water runoff scenarios.

- The draft permit requires Dischargers with benchmark exceedances of any parameter to collect and analyze samples from the next two consecutive qualifying events. Permit language must be added to clarify that the samples collected after an exceedance must only be analyzed for the parameter of exceedance. This requirement is resource intensive and clarifying that the samples are only to be collected and analyzed for the parameter of exceedance will reduce the sample collection, labor, shipping and analysis costs.

6.a. The State Board must clarify whether the one time pollutant scan apply to Monitoring Groups as well. If the pollutant scan is required by Monitoring Groups the rotating sampling schedule should allow for half of the facilities to sample in the 2007/2008 permit year and the other half to conduct the pollutant scan in the 2008/2009 permit year, or follow the 40% requirement now in place, where 40% of the facilities are sampled each year.

6.b. Clarification is needed concerning the semi volatile organics reference made in the discussion of the one time pollutant scan. The method quoted in this section is SM 5210B which is a Biochemical Oxygen Demand method not a semi volatile organics method. Review of Table VIII.2 indicates that no semi volatile organics method is listed. The NPDES approved method for semi volatiles is EPA 8270.

7.a. The requirement to sample ALL discharge locations is redundant, costly and not necessary to monitor the water quality leaving the site. Dischargers with more than 4 outfall locations should be allowed to select representative locations for storm water sampling. Sites with 4 or more drainage outfalls would be required to collect samples at a minimum of 4 outfalls, selecting locations that represent the water quality leaving the site. Collecting runoff samples from more than 4 locations within the first hour of discharge time requirement is difficult and may reduce the validity of the samples taken. Most facilities have one or two samplers that are responsible for sample collection and one set of sampling equipment. It is not feasible to require multiple sampling teams and multiple sets of sampling equipment. In addition, as discussed above in the general comment section of this submission, storm water sampling data is of questionable scientific use due to the nature of storm water sampling. There is no end benefit to the receiving waters of California in requiring the discharges to spend limited time and monies on sampling all outfall locations.

7.b. Allowing Dischargers to combine runoff into composite samples will put an end to any drainage area information the samples collected could possibly provide. Compositing runoff will add more variability to already unscientific inconsistent results; making the implementation of the required corrective action BMPs difficult and possibly ineffective. Instead of allowing composite sampling the permit should allow for the selection of representatives samples for Dischargers with more than 4 outfall locations, with a minimum of 4 locations sampled at each facility.

13.a. Finally, the State Board needs to provide clarification on how a "transmitted" certification could be originally signed.

Conclusion

AAAE/ARDF is concerned that this draft permit does not accomplish the goal of improving compliance and by consequence better environmental protection. We support a permit system that will help permittees achieve better compliance and give the State a better handle on environmental protection. AAAE/ARDF asks that before the State Board issues a permit that incorporates numeric standards and unduly burdensome requirements on the small business community that it works with the regulated community to better understand the impact such an approach may have.

Sincerely,

Claudio H. Ternieden

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American Association of Airport Executives