October 22, 2012

Via Electronic Mail
Ms. Jeanine Townsend
Clerk of the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Re: Airport California Monitoring Group Comments on California’s Draft Industrial General Permit; NPDES No. CAS000001

Dear Ms. Townsend and Members of the SWRCB:

On behalf of the Airport California Monitoring Group, for which I serve as group leader and regulatory consultant, please consider the following comments regarding the draft California industrial general stormwater permit (draft CA IGP) that the SWRCB released on July 16, 2012.

I. INTRODUCTION

AAAE/ARDF1 started the California Monitoring Group in 1992, the inaugural year of the California General Industrial Stormwater Permit. The original AAAE/ARDF group now refers to itself as the Airport California Monitoring Group (ACMG). ACMG has evolved in the past 20 years and credits the State’s Group Monitoring Program with fostering an efficient way for the aviation industry to develop an effective stormwater compliance program through shared resources and industry leadership.

In addition to the ACMG’s focus on shared knowledge, training, and compliance programs, it also has been an active participant in the State’s evolving stormwater permitting

1 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 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.
program. ACMG has submitted written comments or provided oral testimony regarding every industrial permit development since the SWRCB promulgated its first permit in the early 1990s. This includes testimony and comments to the SWRCB’s Blue Ribbon Panel and on each of the State’s request for comments on various proposed versions of a new industrial general permit. Two ACMG members provided testimony at the SWRCB’s March 29, 2011 hearing regarding the previous draft CA IGP.

ACMG is deeply concerned with a number of the provisions in the draft CA IGP and it offers several significant comments that will improve the existing stormwater industrial general permit for California to increase its environmental protection, achieve the SWRCB’s goals efficiently and effectively, and enhance the benefits from 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.

In general, ACMG believes that the State should more closely tailor its industrial general permit approach to that set forth by the U.S. Environmental Protection Agency’s (EPA) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). The MSGP provides an effective approach to industrial stormwater general permitting, relying extensively on non-numeric technology-based effluent limits, compliance with water quality-based effluent requirements, corrective actions, documentation, and reporting. The MSGP also provides industry-specific requirements in its 29 different “sectors.” EPA’s comprehensive, multi-tiered approach represents a well-considered balance of regulatory mandates and permitting authority oversight with site-specific flexibility, and rightfully represents the leading model for industrial stormwater general permitting across the country. The aviation industry-specific permit requirements are contained in Section 5.

The following specific comments address individual issues in the draft CA IGP and ACMG encourages the SWRCB to make appropriate permit modifications.

II. COMMENTS

A. Group Monitoring is a Valuable State Program That the SWRCB Should Retain, If Not Encourage Expanded Participation.

For roughly 70 participating airports across California, ACMG has been providing significant benefits that would be impossible but for the “group monitoring” provisions in the current industrial stormwater general permit. In addition, many of those benefits also translate into benefits to the SWRCB and Regional Boards by ACMG’s ongoing participation in the State’s evolving permit development processes, shared exchange of information that both improves the ACMG’s compliance strategies and the State’s understanding regarding airport stormwater discharges, and through real environmental protection resulting NOT from collecting

samples, but from implementing appropriate Best Management Practices (BMPs) and conducting visual inspections that help to improve the performance of those BMPs.

Airports – even the smallest general aviation airports – are complex entities. Not many of the other “industrial” facilities subject to the State’s Industrial Stormwater General Permit have “tenants” that come onto their property, generate stormwater discharges “associated with industrial activities” and then expect the landlord (airport) to accept all of the liabilities and responsibilities for those pollutant discharges. But that, in a nutshell, is what airports must face under the State’s existing permitting scheme.

Arguably, airports maintain some limited powers through their lease agreements with these tenants that allow airport managers to require that those tenants implement BMPs and conduct their businesses in ways that allows the airport to limit pollutants in stormwater discharges. In addition, ACMG has technical experts to assist with BMP selection and implementation, AND legal/regulatory assistance to help guide airports in working through their lease agreements and other potential obstacles that might otherwise inhibit appropriate environmental protections. Airport members benefit greatly from participating in ACMG, and we encourage the SWRCB to work with existing groups to fit these benefits into any final permit.

Group members subject themselves to additional scrutiny through inspections, additional training and additional reporting in order to produce better quality data and to have some additional control in the selection of BMPs for their industry. One of the significant problems cited in the State Water Board’s workshops and the in Blue Ribbon Panel Report was stormwater sample data quality. The increased QA/QC from the existing group monitoring programs has resulted in data quality far superior to the State Water Board’s existing database and this improvement in data quality is expected to continue into the new permit. The increase in data quality at group member sites can be attributed to intense training oversight and involvement by the group leader.

Group members have received a sampling reduction in exchange for these benefits that accrue to the State Water Board and the Regional Water Boards (e.g., professional data collection and control and more stringent oversight). Any decision to discontinue group monitoring appears to be wrongly focused only on the benefits group members receive without taking into account balancing these benefits with the additional benefits the State Water Board has received by using monitoring groups to generate higher quality AND industry-specific data and to reduce the inspection burden currently placed on resource-stained Regional Water Boards and MS4s. Such data could serve as a precursor to the State adopting a more industry-specific permitting approach in the next round of permitting five years from now. Airports would welcome a more “airport-specific” permit in the future because they are such unique “industrial” sites for which the State’s current “industry-wide” mandates are not always appropriate.

Therefore, ACMG requests that the SWRCB maintain the existing group monitoring program in its entirety and work with existing groups to develop appropriate information to help
justify industry-specific permitting starting in five years or an industry-specific (EPA MSGP-type Sector 5) approach to permitting starting immediately.

In the alternative, ACMG strongly encourages the SWRCB to expand its proposed “compliance group” approach in the draft CA IGP to provide appropriate recognition of the benefits of industry-specific compliance activities, provide appropriate incentives to enhance industry-specific BMP assessments, and establish an appropriate pathway for pursuing industry-specific permitting in the next round of industrial general permitting. Specifically, because proposed “compliance groups” have the potential to provide meaningful input/data for specific sectors/industries, compliance group leaders should be afforded the flexibility within the new CA IGP to submit “Alternative Compliance Plans” that they would tailor for a specific industry/sector with the ultimate goal of establishing technically sound sector-specific NALs. This approach should recognize existing Monitoring Groups without mandating participation by every sector participant in the state.

Such an approach is consistent with the SWRCB’s objective to build flexibility into the CA IGP and to move towards industry-specific NALs. The Alternative Compliance Plans would set forth monitoring schedules and protocols, methods to compile BMP performance based information, and data analysis procedures with a goal of establishing industry-specific NALs within the term of the proposed permit. In addition, compliance group leaders could provide additional insight and the basis for future industry-specific permitting, providing a significant benefit to the SWRCB as it considers how to move in that direction in the future.

B. The Proposed Numeric Action Level Approach Needs Improvements and Should Better Mimic EPAs MSGP.

Ultimately, with the development of properly derived and statistically valid numeric effluent limits for stormwater discharges, ACMG could support a stormwater permitting approach with more emphasis on numeric effluent limits or action levels than is currently found in EPA’s MSGP. But developing appropriate numeric limits has proven difficult to achieve, permitting strategies that have proven successful in the industrial wastewater program are not easily replicated in the industrial stormwater program, and ACMG does not anticipate that any new significant developments to establish stormwater-specific water quality criteria are immediately forthcoming. Two recent unsuccessful efforts to establish numeric effluent limits for specific stormwater discharges are illustrative – EPA’s Construction and Development Effluent Limitations Guidelines (C&D ELG) rulemaking and the SWRCB Construction General Permit NEL.

After 10 years of research and rulemakings, EPA’s efforts to establish a numeric turbidity limit through the C&D ELG proved unsuccessful. Despite its efforts to address a single pollutant for a single industry, EPA ultimately admitted to errors in calculating the 280 NTU ELG standard it promulgated in 2009, then issued a stay of that standard, and has not made any progress in promulgating a new standard. Litigation regarding EPA’s C&D ELG likely will be settled soon, requiring modifications to the C&D ELG and the Agency’s formal withdrawal of
the numeric standard. Similarly, litigation over California’s NELs for turbidity and pH in its Construction General Permit resulted in removal of those numeric limits.³

ACMG’s purpose for examining these attempts to implement numeric limits through general permits or in ELG standards is merely to recognize how difficult the challenges are in achieving the goal of moving towards more numerically-based stormwater permits. However, these recent cases help demonstrate that there are no shortcuts on that pathway and EPA (and states like California) will need to invest in new research and studies to more fairly and accurately establish stormwater-specific water quality standards or criteria before relying more extensively on any numerically-based permitting approaches.

The SWRCB’s draft CA IGP borrows aspects from the MSGP, including benchmark monitoring requirements, but then over-inflates their importance by focusing on those benchmarks as Numeric Action Levels (NALs). While ACMG does not believe that sufficient technical and scientific analyses have been performed to establish NELs (see ACMG April 29, 2011 comments, attached), ACMG recognizes the limited role that benchmark monitoring plays in the larger MSGP permitting scheme (“benchmark thresholds used for monitoring are not effluent limits, but rather information that is primarily for the use of the industrial facility to determine the overall effectiveness of the control measures and to assist in understanding when corrective action(s) may be necessary.” 73 Fed. Reg. at 56,574, Sept. 29, 2008). To the extent that the SWRCB approach overemphasizes benchmark-type monitoring and underemphasizes other key tools (i.e., visual monitoring, the effects of background or natural pollutants, or the broader regulatory scheme EPA set forth in the MSGP), ACMG believes that the draft CA IGP should be modified to more closely mirror EPA’s established MSGP approach.

The Clean Water Act and EPA regulations are silent with regard to the concept of “action levels.” ACMG is not making a legal determination regarding their defensibility. We defer to the SWRCB to defend their use, but we caution the SWRCB to state clearly that “action levels” are never intended to be converted into compliance-based NELs or be the sole focus for asserting any permit non-compliance. Neither EPA nor the SWRCB have developed legally defensible NELs on a broad general permitting basis. EPA has promulgated a few limited stormwater-related ELG standards for specific industrial stormwater discharges, and those industries must comply with those ELG standards. But those are very isolated instances and not at issue here.

³ See CA Building Ind. Assoc., et al. v. State Water Resources Control Bd, CA Superior Ct. (Sacramento County) (Case No. 34-2009-80000338) (Dec. 2, 2011), finding, for example, that the CWA requires that the Board determine the degree of effluent reduction attainable through the application of the BCT technology; that at a minimum, the Board must identify available technologies, gather data characterizing the performance of the technologies under various site conditions, and then base a NEL consistent with performance data; and that the SWRCB cannot properly base a NEL on theory and inferences drawn from limited or inconclusive studies of BCT performance using best professional judgment.
The draft CA IGP converts EPA’s benchmarks into “Annual NALs” and, in the process, alters their function and impact within the general permitting scheme. For background, EPA’s benchmarks are listed in the monitoring section of the MSGP, Section 6.2. The MSGP contains a Corrective Action section that defines responses to various conditions. It requires, among other things, that if an average of four quarterly samples exceeds one of the benchmarks specifically identified as relevant to each industry sector, facilities review the selection, design, installation, and implementation of control measures to determine if corrective actions are appropriate. (MSGP § 3.2.)

Under the MSGP, facilities must document any benchmark exceedances and their response, including either: (1) the corrective action(s) taken; (2) a finding that the exceedance was due to natural background pollutant levels; or (3) a finding that no further pollutant reductions were technologically possible, or economically practicable and achievable in light of best industry practice consistent with Part 6.2.1.2 of the MSGP. (MSGP § 5.4.) (Not all industry sectors must perform benchmark monitoring; each remaining sector only compares results to specific benchmarks identified by EPA as required for that industrial sector.)

The MSGP specifically allows contributions from natural background sources to be considered. As a result, if repeated efforts to attain benchmark values through corrective actions prove unsuccessful, water quality concerns remain, and natural background or other unregulated sources of the pollutants are not contributing factors (as examples), EPA reserves the authority to mandate additional site-specific requirements or an individual permit (see Parts 2.2.1 and 1.6, respectively).

In the MSGP, EPA states unequivocally that the benchmarks are not NELs, and that they serve as just one of multiple mechanisms for quantifying BMP and stormwater program effectiveness. Similarly, in the draft CA IGP, the SWRCB recognizes that exceeding a NAL (whether a NAL in Table 5 or an alternate NAL) will not result in a permit violation. However, given the draft CA IGP’s more extensive reliance on NALs and other significant differences with EPA’s MSGP, ACMG encourages the SWRCB to make abundantly clear that exceeding any NAL cannot be the sole basis for a permit violation in the absence of specific (and previously established) ELG numeric standards.

In a number of respects, particularly in the Exceedance Response Actions (ERAs) for Level 2, the draft CA IGP uses the Annual NALs differently than EPA uses benchmarks in the MSGP. Beyond the normal benchmark monitoring, the SWRCB establishes an “instantaneous” NAL that it equates to an earlier SWRCB “Blue Ribbon Panel” recommendation that "upset values" could be set at a level that clearly justifies additional site-specific investigations. Perhaps that approach helps to illustrate that nominal benchmark exceedances often are rather inconsequential (especially because “benchmarks” are not properly derived numeric criteria but best guesses to start with), particularly for TSS and oil and grease (which along with pH make up the three parameters establishing the instantaneous NAL analysis).

But the concept of instantaneous NALs conflicts with the basic premise that stormwater discharges are highly variable and even an “upset value” does not necessarily mean that a
facilities BMPs or BMP implementation are inadequate or deficient. The concept also conflicts with the idea that benchmarks are one of many tools used to assess facility performance and should not represent a subjective compliance assessment because of the degree to which a benchmark is exceeded. It is highly foreseeable that monitoring results under certain circumstances may significantly exceed benchmarks without having to cause an entire revamping of one’s SWPPP.

Hence, if the SWRCB maintains its proposed instantaneous NAL approach, it must incorporate some mechanism to better account for the variable nature of stormwater discharges. One method would be to rely upon a geometric mean calculation to determine compliance with all NALs instead of a simple arithmetic mean. Such an approach would not add complexity to the regulated community (how to calculate a geometric mean) because the calculation mechanism could be programmed directly into SMARTS so that when a facility uploaded its sampling results over time, the SMARTS system could immediately calculate geometric means for all parameters sampled.

In addition, the SWRCB must make clear that any NAL calculations should apply only to the precise outfall previously monitored. The State should not be attempting to assess BMP performance by comparing facility-wide data or different outfall data, but rather should be able to trace sample results directly back to specific pollutant sources and BMP implementation. Any other method would make a mockery of the State’s efforts to improve sample data and meaning. ACMG also believes that data from storm events that exceed final design storm standards established for the permit (ACMG supports CASQA’s related comments) should not be used for NAL assessments.

The SWRCB’s Blue Ribbon Panel also recommended that the State improve the quality of data from its permit program and to focus, as appropriate, on industry-specific comparisons. The draft CA IGP certainly will result in additional data generation, including not only discharge data, but also storm size and storm intensity data. Collection practices also likely will improve with more training. Ultimately, ACMG would encourage the SWRCB to allow industry sectors to use such data to assess BMP performance for that industry and establish more defensible instantaneous NALs or targeted benchmarks, recognizing that they may well exceed any current benchmark numbers but will be based on more reliable data and justification.

C. **The Proposed “BAT/BCT Compliance” Assessment should be Withdrawn.**

In the draft CA IGP, the SWRCB requires permittees that exceed NALs (and move from “Baseline” to Level 1 or 2 controls) to file reports that describe how the regulated site is complying with BAT/BCT standards. This is impossible because only permitting authorities have the discretion to determine the BAT/BCT standards that would apply to the permittee. The SWRCB must remove this mandate on permittees.

Technically, actual industry-specific BAT/BCT/BPT standards can only be established through a specific process set forth in the Clean Water Act Effluent Limitations Guidelines requirements (CWA § 304(b)), and EPA has promulgated such ELGs for only a limited number
of specific stormwater discharges. Those specific ELG-based limits have been added to the draft CA IGP and ACMG does not object to that mandate. EPA’s MSGP asserts compliance with BAT/BCT/BPT standards, more-or-less as a collective analysis of all of the MSGP mandates (including BMPs provided for under the authority of 40 CFR § 122.44(k)). EPA explains its ability to satisfy BAT/BCT/BPT through the permit requirements as a whole, through a combination of the Agency’s Best Professional Judgment (BPJ) and discretion afforded it under the CWA. The bottom line is that the requirements of draft CA IGP, as a whole – not a discharger’s choice of specific BMPs – satisfies BAT/BCT/BPT, so sites cannot be expected to make “BAT/BCT/BPT determinations” for individual sites, and even the State Water Board cannot make BAT/BCT/BPT determinations for individual sites through a general permit approach.

Facilities should be able to propose an alternative NAL approach based on the their own assessment as to whether they have “reduced pollutant discharges to the extent achievable using control measures (including best management practices) that are technologically available, and economically practicable and achievable in light of best industry practice” This is the standard that EPA has adopted in the MSGP (see MSGP Section 2, introduction, and Section 6) and its Construction General Permit and, while subject to interpretation, this language affords the permittee with the ability to compare its pollutant control practices to those that are pervasive and reasonable within that particular industry. This approach also would encourage more industry-wide analyses and considerations, possibly encouraging more industry-specific permitting approaches in the future. As a backstop, ACMG reminds the SWRCB that it always retains the authority to require additional site-specific controls for water quality issues or mandate an individual permit.

D. ACMG Suggests Revisions to the Water Quality-Based Effluent Limitations Issues in the Proposed Permit.

ACMG endorses the SWRCB Findings 36-41 and the proposed TMDL Requirements in Section VII.A. ACMG also agrees that many existing TMDLs do not provide sufficient detail to provide industrial stormwater dischargers with absolute clarity regarding any obligations that they would mandate. The draft CA IGP would provide a mechanism in which such TMDLs would be further clarified and described by the Regional Water Boards in accordance with the process outlined in Finding 38. ACMG would support a simplified and fair process through which industrial stormwater-related TMDL-specific requirements would first be incorporated into the permit before those requirements are enforceable against permittees, as prescribed by Section VII.A. However, the draft CA IGP Effluent Limitation V.C. is in direct conflict with Findings 38-40 and TMDL Requirements Section VII.A. by requiring blanket incorporation by reference and immediate compliance with existing and/or future approved TMDLs in violation of Water Code sections 13000 and 13263.

In the alternative, ACMG supports the MSGP approach that addresses TMDL compliance and consistency in the permit eligibility and Notice of Intent processes. EPA’s MSGP requires sites that are applying for coverage under the permit to certify that the site is in compliance with any applicable TMDLs for any local water bodies. If a facility cannot make
such a certification, then it cannot obtain coverage. This approach, along with other narrative standards that prohibit causing a violation of a water quality standard, helps to simplify the MSGP permitting approach and reduce complexities associated with attempting to implement site-specific water quality controls in a general permitting scheme. EPA has invested significant time and energy into developing and establishing an approach that works for both the Agency and the regulated community.

EPA’s approach sets up a more balanced shifting burden from permittee to permitting authority and appears to provide more reassurance against third party actions attempting to interpret and enforce less than precise TMDLs. ACMG is concerned that the language included in Section V.C. exposes permittees to premature and inappropriate administrative or third party actions to enforce TMDL requirements before the TMDLs are clarified for application to specific industrial stormwater dischargers, and before those refined requirements are incorporated into the CA IGP, several years after it would be adopted. Further Section V.C. is not supported by the express findings of the permit, or the evidence in the administrative record.

In addition, the language in Section VI.A should not include the phrase “or contribute,” based on the same reasoning EPA relied upon to eliminate those words in promulgating the 2008 MSGP; that phrase is not required by regulations but comes from the threshold that simply shows “reasonable potential” triggering the need to simply have an effluent limit.

### E. Comments Regarding the Proposed Visual and Analytical Monitoring Requirements.

Sections XI.A.1 and 2 of the draft CA IGP set forth a complex expansion of the current permits dry weather (non-stormwater) and wet weather (storm event) inspection programs. In particular, the SWRCB has proposed a “pre-precipitation” inspection scheme that would require permittees to constantly monitor NOAA weather data, assess when there is a 50 percent chance of precipitation, and perhaps enter a “do-loop” of redundant inspections in anticipation of rain even if no precipitation actually occurs in any given month. Given that NOAA might update weather predictions several times over a 24-hour period, the requirement raises many questions about how a permittee might demonstrate compliance if the prediction for rain increased after being viewed by the permittee, as well as creating a records-keeping nightmare.

ACMG has always supported a robust visual inspection program and believes that more useful information can be obtained during visual inspections during both dry and wet weather than any data collected through sampling of stormwater discharges. As a compromise approach, ACMG suggests that the SWRCB merely mandate monthly dry weather and wet weather inspections. The dry weather inspection can serve as both a check for illicit discharges as well as a “pre-precipitation” inspection of BMPs in case it rains later that month. If it rains, the permittee then would conduct a wet weather inspection to assess BMP performance. This would significantly reduce reporting and paperwork issues, as well as simplify the overly complex proposed approach.
For analytical monitoring requirements relating to NAL assessments, permittees should be empowered to reduce the number of outfalls that they sample if a few outfalls are generally representative of the facility as a whole. The draft CA IGP is unclear how a facility would utilize a sample location reduction, but the State should allow significant flexibility and site-specific control over sample collection locations, as long as each sampled storm event has a consistent sample approach.

Existing facilities with a consistent sampling history also should be able to use past sample results to help justify a reduction in sample frequency under any new CA IGP.

**F. Suggested Improvements to the Training and Qualified Industrial Stormwater Practitioner (QISP) Requirements.**

ACMG has several concerns regarding the draft CA IGP training and QISP mandates that require modification or clarification. First, the SWRCB has not created a QISP training program yet and there is no commitment from the SWRCB to have such a program up and running by a date certain. Therefore, it makes promulgating such a requirement, let alone commenting on the specifics of such a requirement, almost impossible. The fact that the SWRCB has indicated that certain licensed professionals in California may automatically be certified is both illogical and not very reassuring. For example, mere PE certification does not mean that such individual is more capable of developing a SWPPP for an airport than any existing airport representative within ACMG, let alone the three professional group leaders and consultants of the existing group, none of which is a California licensed PE. And yet the success and environmental protection demonstrated by the ACMG group is self-evident. Hence, existing Group Leaders and retained consultants should receive the same deference as those licensed professionals in the draft CA IGP.

Another alternative that would help to streamline the training and certification of airport personnel would be to “grandfather” any airport environmental manager with at least three years of stormwater compliance experience within the ACMG group as QISP level II. At the very least, any of these individuals should be allowed to take and pass a certification exam without having to sit through what could be a waste of as much as a week’s worth of classes to demonstrate that they already are “stormwater trained” individuals.

Finally, ACMG supports CASQA’s recommendation that Group Leaders receive expedited Trainer of Record certification to provide QISP I training.

**G. Comments to Clarify the Duly Authorized Representative for SMARTS.**

The draft CA IGP unnecessarily limits and complicates how airport representatives will be able to comply with any requirements to use the SWRCB’s electronic application and report tracking system, called SMARTS. Airports are more complex entities and operations than typical “industrial” sites subject to the CA IGP. Limiting the ability to utilize the SMARTS system – especially if the SWRCB eliminates the ability to submit paper copies of application
and reporting documents – to certain municipal officials (in the case of most airports) or “duly authorized representatives” that must also oversee operations at the airport is far too limiting. Airports need greater flexibility and ought to be able to designate any “duly authorized representative” to assist with SMARTS uploading and reporting.

By designating an individual as a “duly authorized representative,” the airport representative is in fact certifying that such individual has the appropriate connection to the airport and, at least for stormwater permitting considerations, can “represent” the interests of the airport in terms of uploading documents and reports into the SMARTS system. In the alternative, of course, the SWRCB could continue to allow traditional paper submissions or electronic submissions via CD, DVD, flash-drive or other electronic media. The important aspect is to allow greater flexibility in allowing permittees to designate any appropriate duly authorized representative of their choosing.

III. CONCLUSION

ACMG appreciates the opportunity to provide these comments on the draft CA IGP. Please call or email with questions.

Very truly yours,

Jeffrey S. Longsworth
ACMG Group Leader

cc: Matt Lentz, AMEC
Sarah Hoffman, Environmental Compliance Options

Enclosures
April 29, 2011

Via Electronic Mail
Ms. Jeanine Townsend
Clerk of the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Re: Airport California Monitoring Group Comments on California’s Draft Industrial General Permit

Dear Ms. Townsend and Members of the SWRCB:

On behalf of the Airport California Monitoring Group, for which I serve as group leader and regulatory consultant, please consider the following comments regarding the draft industrial general stormwater permit that the SWRCB released on January 28, 2011.

I. INTRODUCTION

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\(^1\) 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 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.
State’s request for comments on various proposed versions of a new industrial general permit. Two ACMG members provided testimony at the SWRCB’s March 29, 2011 hearing regarding the draft Industrial General Permit.

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II. COMMENTS

A. **Group Monitoring is a Valuable State Program That the SWRCB Should Retain. If Not Encourage Expanded Participation.**

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Arguably, airports maintain some limited powers through their lease agreements with these tenants that allow airport managers to require that those tenants implement BMPs and conduct their businesses in ways that allows the airport to limit pollutants in stormwater discharges. In addition, ACMG has technical experts to assist with BMP selection and implementation, AND legal/regulatory assistance to help guide airports in working through their lease agreements and other potential obstacles that might otherwise inhibit appropriate environmental protections. Airport members benefit greatly from participating in ACMG, and we encourage the SWRCB to work with existing groups to fit these benefits into any final permit.
Group members subject themselves to additional scrutiny through inspections, additional training and additional reporting in order to produce better quality data and to have some additional control in the selection of BMPs for their industry. One of the significant problems cited in the State Water Board's workshops and the in Blue Ribbon Panel Report was stormwater sample data quality. The increased QA/QC from the existing group monitoring programs has resulted in data quality far superior to the State Water Board's existing database and this improvement in data quality is expected to continue into the new permit. The increase in data quality at group member sites can be attributed to intense training oversight and involvement by the group leader.

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B. **ACMG Opposes Numeric Action Levels and Numeric Effluent Limits Until the State Provides Independent Technical, Cost-Benefit and Legal Justifications.**

The draft Industrial General Permit proposes a permitting scheme based on a list of numeric values (benchmarks) from US Environmental Protection Agency’s (EPA) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)\(^2\) and an unsupported declaration that such values should be adopted as both Numeric Actions Levels (NALs) and technology-based Numeric Effluent Limits (NELs). Use of EPA’s benchmark values as NELs or NALs is inconsistent with EPA’s intended use of the benchmarks and the draft Industrial General Permit fails to provide independent or other justification that would support numeric effluent limitations. In fact, EPA’s 2008 MSGP states clearly that it currently is infeasible to establish effluent limitations for industrial stormwater discharges. Additionally, the approach taken in the draft Industrial General Permit is inconsistent with the recommendations of the state-convened Blue Ribbon Panel that evaluated the feasibility of NELs.

EPA states unequivocally that the MSGP benchmarks are not effluent limits. In fact, benchmarks are designed as an evaluation tool to use in monitoring the effectiveness of a site’s SWPPP.

EPA notes that Part 6.2.1 emphasizes that the benchmark thresholds used for monitoring are not effluent limits, but rather information that is primarily for the use of the industrial facility to determine the overall effectiveness of the control measures and to assist in understanding when corrective action(s) may be necessary.\(^3\)

Under EPA’s permitting approach, if average annual values (not counting natural background contributions) are higher than benchmarks, then additional monitoring, reporting, and corrective actions are required, but only for particular constituents selected for particular industry sectors that are risk-based. EPA’s position is clear—the only use of benchmarks it would support is one based on the MSGP 2008 permitting scheme. States that expand or modify EPA’s benchmark monitoring approach must defend their approach independently.

EPA regulations allow non-numeric limits, when developing numeric limits is infeasible. 40 CFR § 122.44(k). Since the last time the State Water Board considered reissuing the Industrial General Permit, EPA itself has exhaustively reviewed the question of whether numeric limits are feasible in an Industrial MSGP. In 2008, after thousands of pages of administrative record review, several Federal Register notices, and extensive public comment, EPA concluded it was not feasible to establish NELs.

ACMG does not believe that the State has conducted any new or contrary studies that have added to the current knowledge base for regulating industrial stormwater that would justify the use of the EPA benchmark values as NELs or NALs. ACMG does not support the inclusion of EPA’s benchmarks as either NALs or NELs in the draft Industrial General Permit because this use would be inconsistent with EPA’s stated intended use of the benchmark values.

C. Proposed Increased Inspections and Monitoring Requirements Are Overly Burdensome, Represent Unfunded Mandates for Public Airports, and the SWRCB has Not Identified Any Commensurate Benefits.

The technical challenges and errors in the permit language, as well as the complexity and dispersed nature of inspection and monitoring requirements, are likely to cause significant confusion and difficulty demonstrating compliance for dischargers. The draft Industrial General Permit appears to require approximately 400 more documented inspections annually than what is currently required. ACMG notes that EPA’s 2008 MSGP maintained a quarterly inspection regime, but noted that in certain circumstances monthly inspections could be warranted. The draft Industrial General Permit does not identify the rationale for the number of increased inspections. Absent such a rationale, ACMG cannot propose an alternate program that would more be more practical.

The draft Industrial General Permit similarly proposes significant increases in stormwater sampling requirements. Baseline sampling has doubled the number of storm events that need to

\(^3\) 73 Fed. Reg. at 56,574 (Sept. 29, 2008).
be sampled. The elimination of the option for dischargers to sample representative discharge locations, however, will result in a significant increase the baseline sampling by increasing the number of locations many dischargers must sample, as well as increased staff efforts and analytical costs, without any identifiable increase in protectiveness of water quality. The increased sampling efforts and frequency escalate for facilities with land disturbing activities (sampling each day of the qualifying event), and daily sampling for every storm for facilities in Tier 3.

Eliminating the option to reduce the number of locations sampled based on representative substantially identical drainage areas poses many potential challenges. Airports have used this representative sampling approach to work around structural and safety issues with specific outfalls. Representative sampling provides a cost effective method to sample substantially similar drainages; elimination of which increases costs without increasing water quality protection.

Increased inspections and sampling pose significant challenges to airport managers and environmental staff (which often serve many other onsite staffing needs in conjunction with environmental responsibilities). In many cases, a single staff person oversees more than one airport. Humboldt County staff testified at the SWRCB hearing regarding their consistently admirable environmental performance overseeing two airports under the current permitting scheme. However, the increased sampling and inspection requirements in the permit would overwhelm that staff person and create a significant financial impact for little or no environmental benefit. Many other ACMG members have provided similar information and concerns.

As the State Water Board proceeds with modifications to the draft Industrial General Permit pursuant to the comments that it receives, the ACMG also would like the SWRCB to consider the potential unfunded mandate within the meaning of California’s Government Code. ACMG has not had sufficient time to research and comment on all aspects of previous Commission on State Mandates decisions regarding all aspects of the SWRCB’s implementation of the federal and state stormwater permitting programs. We believe that many of the new mandates, including inspection and sampling increased frequencies and related costs, may represent unfunded mandates.

D. **Any New Permit Must Begin to Recognize the Impacts of Background and Non-Industrial Pollutants on Monitoring and Inspection Reports.**

Natural background should be added to the list of sources of pollutants in stormwater discharges that would not trigger corrective action. Setting aside NALs or NELs and the nightmare that background pollutants would create under any such scheme, the State should make sure it focuses its industrial permitting program on “stormwater associated with industrial activity” and the pollutants generated there from; not pollutants from other unregulated activities either at an airport or neighboring properties.
ACMG Comments on Draft Industrial General Permit
April 29, 2011
Page 6 of 12

The January 28, 2011, draft Industrial General Permit ignores the lessons learned by EPA and excludes any discussion of natural background conditions. EPA’s 2008 MSGP recognizes that permittees should not be held responsible for pollutants generated by the natural background conditions. Monitoring for a particular pollutant discharged from an industrial site may be waived if the permittee documents that the presence of a pollutant of concern in its discharge is attributable to natural background pollutant levels and not to the activities of the permittee. The MSGP also contains provisions allowing dischargers to eliminate corrective actions and subsequent monitoring requirements if the exceedance of benchmarks is attributable solely to natural background levels of that pollutant. In addition, the MSGP provides for a determination that a discharge of pollutants, although not solely due to natural background, cannot be further reduced using control measures that are technologically and economically practicable.

EPA had not allowed for a consideration of natural background in the 2000 version of the MSGP, but through experience came to recognize that there could be circumstances when their benchmark values reasonably might not be able to be achieved because of high natural background levels certain constituents in soils or groundwater, or from vegetation and wildlife sources. Similar provisions should be included in the Industrial General Permit.

This is an important issue of many airports. For example, Sulphur Creek runs directly through Hayward Executive Airport. The airport has a total of eight outfalls to the creek. Past sampling has shown that water flowing to the airport has more pollutants than flowing from it. In other words, samples show that water is cleaner exiting our airport than entering. Hence, while the airport is clearly providing environmental benefits to Sulphur Creek, it may still face significant liability for pollutants out of its controls IF the State were to adopt a NAL or NEL approach and certain of those “upstream” pollutants still exceeded a benchmark value. Such a scenario points out the need to recognize and account for background pollutant levels as well as the illogical result that would manifest itself under any corrective action mandate that did not account for such pollutants.

E. **Conditional Exclusions for No Discharge Should More Closely Reflect the Underlying Framework of the NPDES Permitting Scheme.**

ACMG applauds the SWRCB in recognizing that sites (or, in our case, airports) that have virtually no discharge should not have to expend a disproportionate cost on inspections, documenting the lack of discharge, and lamenting how to collect samples from discharges that do not occur absent highly unusual circumstances.

However, the SWRCB proposal to rely on the 100-year 24-hour storm event is, in our opinion, completely missing the mark for providing the exclusion in the first place. Quite literally, the SWRCB is telling small public airports that might not discharge but for, say, the 50-year 24-hour storm event that it is okay to invest scarce local public monies on an annual basis for the likelihood of, say two discharges per century.

Truckee Tahoe, Mojave, and other airports in the ACMG group rarely if ever create stormwater discharges to waters of the State. Even if they discharged stormwater ONCE over a
5-year permit term, the SWRCB should ask itself whether it is reasonable to expend significant public resources on permit compliance for the sake of compliance, risk citizen suit liability, and also require the State and Regional Boards to invest in reviewing their compliance, when such resources would be better directed towards other ongoing needs in their communities and at the airports?

Therefore, ACMG suggests that, based on the fact that the NPDES permit term is five years, those airports that statistically are not likely to discharge during 5-yr/24 hr. storm event (therefore, not likely to discharge at all under any given NPDES permit) should be excluded from the State’s NPDES stormwater permit program. No fees or administrative hurdles are necessary other than, perhaps, a certification regarding the discharge conditions at the airport.

F. Mandating Minimum Best Management Practices May be Highly Problematic for Airports.

The language of the introduction to Section VIII is overly restrictive, as written, allowing a discharger to vary from a specific BMP only if it is “inappropriate”. ACMG notes that many of the listed minimum BMPs may be needed for many “typical” facilities, but not all facilities (or airports). Attention to these BMPs can be achieved while still retaining some flexibility to allow the necessary application of appropriate standards in tailoring site-specific BMPs to each regulated site.

To make BMPs truly mandatory would require findings by the State Water Board that the BMPs actually represent BCT for conventional pollutants and BAT for other pollutants. Each of these standards requires specific consideration, in varying respects, of costs and technological feasibility. Because the State Water Board has not performed or provided such a detailed analysis, leeway must be provided in the selection of BMPs to allow appropriate implementation of the BAT and BCT standards. ACMG also notes that there is no legal requirement under the Clean Water Act that a zero pollutant load be achieved, and because some mandatory BMPs, such as covering storage areas, are designed to completely eliminate discharges from a particular area, it is impossible to state an alternative that provides strictly “equivalent reduction” of pollutants.

As demonstrated through the following airport-specific examples, airports cannot be expected to operate as required by the Federal Aviation Administration (FAA) and other agencies with jurisdiction over airport operations within a rigid BMP scheme that the SWRCB would apply across all industrial sectors.

Airports are unique industrial facilities on many levels that differ from traditional industrial, commercial or municipal facilities. For example, the safest airports are those designed with flat impervious surfaces with little to no landscaping, fast draining concrete drainage and no physical obstructions or bird attractants. In fact, FAA regulations prohibit many common BMPs used by the industrial dischargers such as; raised curb, gutters, ditches, open basins (water storage devices), debris creation areas and any non-frangible objects having nothing to do with
airfield navigation on operational areas. Any BMP mandates that conflict with FAA regulation will create public safety concerns and liabilities for airports and their tenants.

The following examples may help to illustrate these concerns:

**AIRPORTS AND DETENTION BASINS**

Detention basins may be excellent stormwater BMPs, but they are often incompatible with airport operations. FAA has strictly prohibited golf courses (with related ponds/basins) and other detention basins within 2 - 5 miles of a runway due to their tendency to create bird hazards and wildlife attractants. Golf courses and detention basins are mentioned here because these tend to be some of the BMPs often suggested to airports by municipal and/or stormwater regulators as valid BMPs.

FAA Federal Aviation Regulations AC 150/5200-33B, 2-7(a) states the following:

**2-7. GOLF COURSES, LANDSCAPING AND OTHER LAND-USE CONSIDERATIONS.**

a. Golf courses. The large grassy areas and open water found on most golf courses are attractive to hazardous wildlife, particularly the Canada geese and some species of gulls. These species can pose a threat to aviation safety.

FAA Regulation section 1-4 also states:

**1-4. PROTECTION OF APPROACH, DEPARTURE, AND CIRCLING AIRSPACE.** For all airports, the FAA recommends a distance of 5 statute miles between the farthest edge of the airport’s Airport Operational Area (AOA) and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace.

The situation that everyone wants to avoid is depicted by this picture⁴:

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⁴ All pictures were provided by ACMG members and are used with their permission.
AIRPORTS AND CONFLICTING DRAINAGE PREFERENCES

Another example of environmental drainage preferences that conflict with FAA regulations are open drainage channels. Open drainage is incompatible with airfield operational areas. However, this type of development is often emphasized by stormwater and/or environmental regulators when reviewing airport airfield projects.

FAA AC 150/5300-13, Paragraph 403 states:

*The safety area shall be:*

“(1)...cleared of potentially hazardous ruts, humps, depressions, or other surface variations... (4) free of objects, except for objects that need to be located in the...safety area because of their function.”
The FAA AC 150/5200-33B, Section 2-3(a) states:

"...Where constant flow of water is anticipated ...the detention facility should include a concrete or paved pad and/or ditch/swale in the bottom to prevent vegetation that may provide nesting habitat."

AIRPORTS, JET BLAST AND JET SUCTION EFFECTS

FAA AC 150/5300-13, Paragraph 801, states:

"Jet blast affects all operational areas of the airport...Blast velocities greater than 30 M.P.H. can cause loose objects ...to become missiles capable of causing injury to personnel..."

Typical BMPs can produce very dangerous Foreign Object Debris (FOD) which can be scattered over the airfield or sucked into jet engines and props.
Paved surfaces on airports not only provide overrun protection, but also provide the best surfaces to minimize FOD exposure. Fiber rolls, silt fences, straw waddles, turf matting, landscaping etc, are incompatible uses with many airfield operations.

![Image of BMP systems](image1)

The typical BMP systems above work well for non-airport industrial, commercial and municipal applications, but can be incompatible on an airfield.

FAA AC 150/5300-13, Paragraph 303, states:

"...A natural surface, e.g., turf, normally reduces the possibility of soil erosion and engine ingestion of foreign objects. Soil with turf not suitable for this purpose requires a stabilized or low cost paved surface"  

**UNDERGROUND DETENTION BASINS**

One BMP that’s compatible with airport use is the underground detention basin. It allows both storage and treatment of stormwater on airports. However, although underground detention basins are compatible with airport operations, they are often financially impractical due to the extremely “flat" nature of airport design. Because underground detention basins are by definition below ground level, and they would require a certain degree of slope (or falling terrain) in order to maintain a proper flow velocity and ability to “daylight” back into a discharge channel, this option is problematic. Due to strict FAA grade requirements, meaning, regulations maintaining “flat” airfield design requirements, underground detention basins on airports must be kept extremely shallow and, therefore, the expense can quickly outweigh the practicality of the original benefit.

![Image of underground detention basin](image2)
Underground detention basins require significant slope (or "fall") for proper function. Airports are very flat which make these basins difficult or often impractical to utilize.

FAA AC 150/5300-13 states the following:

"The maximum longitudinal grade is 2 percent for Aircraft Approach Categories A and B... Minimum longitudinal grades are desirable."

III. CONCLUSION

The ACMG appreciates the opportunity to comment on the draft Industrial General Permit. As the SWRCB moves forward with redrafting the permit, the ACMG volunteers its insight and participation in any workgroups or other information exchanges with staff that might provide further insight and perspective from airports regarding the unique challenges that airport staff face in complying with the States NPDES stormwater permitting program.

Please call with questions.

Very truly yours,

[Signature]

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