

February 18, 2011

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**RE: Comment Letter – Revised Spray Applications Permit
Comment Letter – Revised Vector Control Permit
Comment Letter – Revised Aquatic Animal Invasive Species Permit**

To whom it may concern:

Thank you again for the opportunity to comment on the Board’s three draft general NPDES permits governing certain applications of pesticides to and above surface waters throughout the State of California. Per the instructions of the Board’s staff, these comments pertain solely to the revised portions of those permits, reflecting changes made to the versions released in September and October 2010 in response to earlier public comments.

Rather than submitting separate comments for each revised permit, the undersigned hereby submit a single set of comments directed at all three permits. Citations to the revised Spray Applications Permit will be abbreviated as “SAP,” to the revised Vector Control Permit as “VCP,” and to the revised Aquatic Animal Invasive Species Control Permit as “AAISCP.”

Revision #1: General Permit Application (SAP pp. 5-6 ¶ II.C; VCP pp. 5-6 ¶ II.C; AAISCP pp. 5-6 ¶ II.C). A 30-day comment period has been added for any Pesticide Action Plan submitted with a permit application, which must run *before* coverage can be obtained under the permit.

Comment #1: We commend the inclusion of this public comment requirement as reflecting sound public policy, and agree that its inclusion is required by Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486 (2d Cir. 2005). However, in the Spray Applications Permit, it appears that this requirement may be satisfied on a project or “*program-specific*” basis. See SAP p. 16 ¶ VII.C. A “program” of pest eradication could conceivably take years to complete, could last indefinitely, and could successively affect many diverse geographic areas such that meaningful public participation would not be achieved by a single public comment period at the outset. We believe that the Board should remove the reference to “programmatically” applications, so as to ensure that prior public notice is given of *specific applications*.

Revision #2: Fees (SAP p. 6 ¶ II.D; VCP p. 6 ¶ II.D; AAISCP p. 6 ¶ II.D). The permit application fee has apparently been increased from a nominal amount of \$136 to \$1,120

annually. See 23 CCR § 2200(b)(9), Category 3, available at http://www.waterboards.ca.gov/resources/fees/docs/fy10_11_fee_schedule.pdf.¹

Comment #2: We endorse the notion of setting permit fees in an amount sufficient to ensure the proper implementation of the program. However, we do not believe the Board has shown that the discharges at issue “require minimal or no treatment systems to meet limits and pose no significant threat to water quality,” or that the amount specified will be sufficient to properly implement the program. We note that annual fees required for comparable discharges elsewhere in section 2200, e.g., those applicable to “any discharge of toxic wastes,” are much higher. Compare 23 CCR § 2200(a) & (a)(1), Category “2.A” (\$13,321) or “3.A” (\$4,372), with SAP p. 12 ¶ III.L; VCP p. 12 ¶ III.L; AAISCP p. 12 ¶ III.L (“*The nature of pesticides is to be toxic ...*”) (emphasis added). Hence, an annual fee of \$4,732 should apply at a minimum.

Revision #3: Antidegradation Policy (SAP pp. 11-12 ¶ III.L; VCP pp. 11-13 ¶ III.L; AAISCP pp. 11-12 ¶ III.L). According to the revised permits, “compliance with receiving water limitations and other permit requirements will ensure that degradation of the State’s waters will be temporary and that the waters will be returned to pre-application conditions after project completion. Therefore, this General Permit is consistent with State and federal antidegradation policies.”

Comment #3: We are legally and factually concerned with the assertion that the permits “will ensure” that waterbodies are “returned to pre-application conditions” after completion of pesticide projects. The previous permit drafts had indicated that “[w]hile surface waters may be temporarily degraded; water quality standards and objectives *will not be exceeded*. The nature of pesticides is to be toxic in order to protect beneficial uses such as human health. However, compliance with receiving water limitations *is required*. Therefore, this General Permit is consistent with State and federal antidegradation policies.” (emphases added). We believe that the earlier statement is legally correct and should be retained. Further, the supposition that it is generally possible to return a waterbody to pre-project conditions after application of a toxic chemical is factually unsupported. We believe that such a flawed assumption simply underscores the greater need to seek out and utilize alternatives to pesticides that will protect beneficial uses without creating toxic conditions or causing water quality violations. See Comment #6, below.

Revision #4: Receiving Water Limitations & Receiving Water Monitoring Triggers (SAP pp. 14-15, 22 ¶¶ IV.A, VII, IX.C.1.d; VCP pp. 14-16, 22 ¶¶ IV.A, VII, IX.C.1.d). The revised Spray Applications and Vector Control Permits set a numeric receiving water limitation for discharges of malathion. Other pollutants, however, continue to be governed by numeric “monitoring triggers,” which may lead to the re-opening of the

¹ Although the permits cite to “section 2200(b)(8),” we assume the Board actually means “section 2200(b)(9),” since the former subsection applies only to “wet weather municipal facilities” and sets forth no “categories.”

permit. In the Vector Control Permit, exceedances of these triggers also gives rise to a duty to re-evaluate Best Management Practices (“BMPs”).

Comment #4: We endorse the Board’s usage of the malathion limits, but urge the Board to consider similar limits for dangerous pesticides like carbaryl and naled. We agree with the earlier sets of comments submitted by the National Marine Fisheries Service (“NMFS”) calling for more restrictive limits on the discharge of these pesticides, and note that their use has been found to cause significant harms. See EPA Office of Pesticide Programs, Reregistration Eligibility Decision for Naled (July 31, 2006), pp. 32-33, available at http://www.epa.gov/pesticides/reregistration/REDS/naled_red.pdf; NMFS, ESA Section 7 Consultation Biological Opinion re: EPA Registration of Pesticides Containing Carbaryl, Carbofuran, and Methomyl (Apr. 20, 2009), pp. 373-79, available at <http://www.nmfs.noaa.gov/pr/pdfs/carbamate.pdf>.

Also, we urge the Board to impose a BMP re-evaluation requirement on pesticide applicators subject to the Spray Applications Permit whose discharges exceed applicable numeric monitoring triggers.

Revision #5: Public Notice Requirements (SAP p. 16 ¶ VIII.B; VCP p. 17 ¶ VIII.B; AAISCP p. 15 ¶ VII.B). As soon as a pesticide application is scheduled (for Spray Applications) or at the start of the calendar year (for Vector Control or Aquatic Animal Invasive Species Control applications), the discharger must notify potentially affected governmental agencies and the public by posting a notification on “its website.”

Comment #5: We agree that prior notification is an important requirement in general, but believe it to be completely inappropriate that *the discharger* is allowed to choose *which* website. See also SAP p. 19 ¶ VIII.C.16; VCP p. 19 ¶ VIII.C.14; AAISCP p. 17 ¶ VII.C.14. Concerned residents shouldn’t have to scan the entirety of the Internet to learn of toxic discharges in their neighborhoods; rather, *all* planned discharges should be posted on a *single* website that can be easily found (preferably, the Board’s), and these data should be searchable *by location*, if possible.

We also believe that the SAP requirement that such notice be given prior to scheduled applications (as opposed to once a year) is appropriate for inclusion in the VCP and AAISCP as well – these pesticides are no less dangerous, and the public has no less of a right to know about them before they occur. Moreover, there should be a requisite lead-time before any application may occur (e.g., 2-4 weeks), so that dischargers cannot creatively “schedule” their applications to occur, say, the very next day.

Revision #6: Pesticides Application Plan (“PAP”) & Aquatic Pesticides Application Plan (“APAP”) (SAP pp. 16-17 ¶ VIII.C.14; VCP pp. 18-19 ¶ VIII.C.12; AAISCP p. 17 ¶ VII.C.12). In the revised permits, the discharger’s PAP/APAP includes a mandate to use the least toxic pesticide (if an alternatives analysis indicates that pesticides must be used), and to use the lowest amount of pesticide effective.

Comment #6: We applaud the inclusion of this requirement as perhaps the single most important protective feature in each permit, although its utility will obviously depend on how rigorously it is enforced by the Board and others. We note that the requirement still stops short of mandating that the least toxic alternative be used in every case (i.e., pesticide use *only* as a last resort) – the permits only require that an alternatives analysis be *performed*, but do not appear to dictate a result. In practice, the implementation of the NPDES permitting program for pesticides discharged to and over water should lead both to the development of newer aquatic pesticides that do their work without leaving residues and to increased reliance on less toxic means of pest control. Especially since no specific “best technology” analysis appears to have been done in determining these BMPs (in lieu of setting numerical effluent standards), we submit that a more rigorous requirement is necessary to satisfy both the Clean Water Act’s “technology-forcing” mandate, see generally Weyerhaeuser Co. v. Costle, 590 F.2d 1011, 1025 (D.C. Cir. 1978); NRDC v. EPA, 859 F.2d 156, 208-09 (D.C. Cir. 1988), and the legislative intent of the Act’s drafters, see generally S. Rep. No. 92-414, at 99 (1971) (statement of Sen. Dole) (emphasizing the importance of “develop[ing] *alternative means* of pest, weed and fungal control,” reducing “[o]ff-target applications,” and developing “pesticides which *degrade after application and leave no toxic or hazardous after-products.*”) (emphases added), reprinted in 1972 U.S.C.C.A.N. 3668.

Revision #7: Standard Provisions (SAP p. 20 ¶ IX.A.3; VCP p. 21 ¶ IX.A.3; AAISCP p. 19 ¶ VIII.A.3). For “water[s] classified as Outstanding National Resource Waters or as ... impaired by unknown toxicity,” the requirement that a project-specific antidegradation analysis be done before spraying has been removed.

Comment #7: It is unclear from the Board’s Response to Comments why this provision has been removed, and what is the legal basis for doing so. The wisdom of removing protections for pristine waterbodies (such as Lake Tahoe and Mono Lake), or for those impaired waterbodies wherein the potential harm from the pesticide application is necessarily unknown, seems suspect. We request that the project-specific antidegradation analysis requirement for these waterbodies be reinstated.

Revision #8: Special Studies, Technical Reports, and Additional Monitoring Requirements (SAP p. 22 ¶ IX.C.2; VCP p. 23 ¶ IX.C.2; AAISCP p. 21 ¶ VIII.C.2). If toxicity testing yields a finding of increased toxicity, or if chemical monitoring triggers are exceeded, the discharger must identify corrective actions to bring those levels down.

Comment #8: We believe this to be an improvement over the previous version, which simply required the discharger to undertake “additional investigations.” Still, nowhere do the permits indicate *who decides* what corrective actions a discharger has to take, and what the *enforcement mechanism* is for this requirement. We ask the Board to please clarify these points.

Revision #9: Corrective Action (SAP p. 24 ¶ IX.C.4.a.iii(a); VCP p. 25 ¶ IX.C.4.a.iii(a); AAISCP p. 23 ¶ VIII.C.4.a.iii(a)). In the SAP, the “corrective action” requirement for failing to “[u]se the lowest amount of pesticide produce per application and optimum frequency of pesticide applications necessary to control pests, consistent with reducing the potential for development of pest resistance” has been eliminated, and replaced with the VCP and AAISCP versions, which apply only when the discharger fails to “[f]ollow the [FIFRA] label instructions for the product used.”

Comment #9: We understand that the Board’s intent here could be to make the SAP provision even more stringent (e.g., if the relevant FIFRA labels already require the lowest effective use, and mandate even broader limitations), but we find it unwise to take the focus away from requiring the use of the *least amount of pesticide necessary* in every case. We respectfully submit that the Board should require corrective action to be taken under *both* circumstances.

Revision #10: Corrective Action Deadlines (SAP p. 25 ¶ IX.C.4.b; VCP p. 25 ¶ IX.C.4.b; AAISCP p. 22 ¶ VIII.C.4.b). The revised permits require any “corrective action” to be taken within 60 days after the mishap triggering it, and always prior to the next pesticide application.

Comment #10: We commend the Board for making this provision both stronger and more explicit.

Revision #11: Definitions (SAP p. A-4; VCP p. A-4; AAISCP p. A-4). The definition of “residual pesticides” has been changed to “those portions of the pesticides that remain in the water *after* the application and its intended purpose (elimination of targeted pests) have been completed” (emphasis added).

Comment #11: We submit that this interpretation is inconsistent with the ruling of the U.S. Sixth Circuit Court of Appeals in National Cotton Council, which struck down EPA’s earlier rule purporting to exempt applications of aquatic pesticides from the NPDES permit requirement altogether. As that court noted, in expressly holding that pesticide residuals are “added” by the point source applications introducing them to water, the “pesticide residue or excess pesticide – even if treated as distinct from pesticide – is a pollutant” *at the moment of discharge*. National Cotton Council of America v. EPA, 553 F.3d 927, 940 (6th Cir. 2009); *see also id.* at 938 (“excess and residue pesticides have *exactly the same chemical composition* and are discharged from the same point source at *exactly the same time* as the original pesticide”) (emphasis added). This definition of “residual pesticides” is also inconsistent with multiple appellate court rulings that Congress intended water pollution to be controlled through “point source” regulation *whenever feasible*, e.g., United States v. Earth Sciences, Inc., 599 F.2d 368, 373 (10th Cir. 1979); that a point source “adds” a pollutant when it “introduces” that pollutant to the waters “*from the outside world*,” e.g., Catskill Mountains Chapter of Trout Unlimited v. City of New York, 273 F.3d 481, 491 (2d Cir. 2001); *cf.* South Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 541 U.S. 95, 103 (2004); and that there is no implied NPDES exemption for

discharges made for *allegedly beneficial purposes*, e.g., Minnehaha Creek Watershed Dist. v. Hoffman, 597 F.2d 617, 627 (8th Cir. 1979).

Accordingly, the Board should clarify that no applicator otherwise covered by the permits may escape regulation by arguing that the pesticide in question has such a lengthy “intended purpose” timeframe that, in effect, it leaves no “residue.” Likewise, the Board should reject any implication that the protective provisions of these permits apply only at some indeterminate point “after” the discharge occurs. In particular, there is no basis – in law or in policy – for the notion that in-stream water quality standards may be violated during the pendency of a pesticide application, as certain portions of the permit suggest. See, e.g., AAISCP p. 14 ¶ IV.C (noting that the prohibition against causing or contributing to violations of water quality standards “shall apply *outside* the treatment area *during* treatment, and *in* the treatment area *after* treatment has been completed”) (emphasis added).

Revision #12: Monitoring Reports (SAP p. B-5 ¶ V.C.2; VCP p. B-5 ¶ V.C.2; AAISCP p. B-5 ¶ V.C.2). Discharge Monitoring Reports (“DMRs”) are allowed to be in a form “as agreed to by the discharger and the [Board’s] Deputy Director,” instead of a standardized form.

Comment #12: We believe that this can only lead to abuse, as shrewd applicators seeking to avoid scrutiny may attempt to report their monitoring data in a way that understates or obscures the true nature of discharges documented. Such ad hoc DMRs are also likely to be less readily understood by concerned residents who may wish to perform an oversight role in ensuring compliance. The Board should propose a standardized DMR form for public comment, and require that it be used by all dischargers (even if such a form cannot be developed in time to be included with the finalized permits themselves).

Revision #13: General Monitoring Provisions (SAP p. C-2 ¶ I; VCP p. C-3 ¶ I.A; AAISCP p. C-2 ¶ I.A). In the Spray Applications Permit, dischargers are allowed to change monitoring locations and to not mention this change until the submission of their annual reports. In the other two permits, “All samples shall be taken at the anticipated monitoring locations specified in the Discharger’s or Coalition’s PAP, *unless otherwise specified.*”

Comment #13: Regarding the Spray Applications Permit, the previous version required *prior* notification of such changes in all cases. We submit that the previous requirement should be retained to ensure that dischargers do not propose one monitoring scheme at the beginning of each year only to ignore it for the rest of the year. Regarding the other two permits, it is unclear what “otherwise specified” means here. We believe the best course is to require that all monitoring be done only at the specific locations set forth in the PAP or APAP (as with Spray Applications), since this is the information that the Board and members of the public will have evaluated in deciding whether even to *allow* the initial discharge. To the extent that the Board believes Vector Control or Aquatic Animal Invasive Species Control applications to

be of a different nature, the Board should clarify that any *potential* monitoring locations also must be spelled out in the discharger's PAP or APAP, as other provisions of those permits seem to indicate. See VCP p. C-11 ¶ IV.A; AAISCP p. C-9 ¶ IV.

Revision #14: Monitoring Locations (SAP p. C-3 to C-4 ¶ II.A; VCP p. C-4 ¶ II.A; AAISCP p. C-3 to C-4 ¶ II.A). The permits allow the use of “representative monitoring locations to characterize water quality for all waters of the US within the Discharger’s boundaries for each environmental setting (agriculture, urban, and wetland),” which “must be similar in hydrology, pesticide use, and other factors that affect the discharge of residual pesticides to surface waters as a result of applications to the areas being represented in that environmental setting.” Presumably, this provision applies both to chemical testing and toxicity testing.

Comment #14: In the Response to Comments for each permit, the Board describes this monitoring scheme as a “risk-based” approach that “uses the data to determine whether more or less monitoring is warranted.” E.g., SAP, Resp. to Cmt. #4.3, p. 28. “Since the location that receives the most applications will likely show the highest concentrations of residuals, it makes sense to include that location in the monitoring program. If testing at this location shows no exceedance of receiving water limitations, we can conclude that areas that receive fewer applications would also show no exceedance of receiving water limitations. If the most-heavily applied locations shows exceedances, the process is repeated until it can be determined which locations can be excluded from monitoring. For locations that show exceedance and, therefore, should not be excluded from monitoring, the discharger shall evaluate its application methods and BMPs and consider alternatives to the pesticide.” Id.

We have several questions respecting these statements, and how they relate to the requirements set forth in the permits themselves. First, is the “location that receives the most applications” the same as a “representative monitoring location” (and, if these are separate concepts, where in the permit are the provisions requiring monitoring at the “location that receives the most applications”)? Second, does the monitoring scheme described in the above paragraph apply only to chemical testing, or does it apply to toxicity testing as well? Third, how exactly does one determine the “location that receives the most applications” (e.g., is it based on a specific historical time period)? Fourth, why is it true that “the location that receives the most applications will likely show the highest concentrations of residuals” and that “areas that receive fewer applications would also show no exceedance of receiving water limitations” (e.g., cannot areas receiving fewer applications also receive a greater absolute quantity of pesticides)? Fifth, are there not reasons to require monitoring at “the location that receives the most applications,” as well as at other locations, *beyond* ensuring that a numerical receiving water limitation is not exceeded (e.g., a *narrative* receiving water limitation requiring “no toxics in toxic amounts,” compliance with which may depend on what aquatic animals are present in a given area)?

Under state and federal law, the monitoring provisions in an NPDES discharge permit must be sufficient to allow agency enforcers and concerned citizens to determine readily whether the discharger is in compliance with applicable permit terms, including prohibitions against violating numeric and narrative in-stream water quality standards. As the above questions suggest, it remains unclear precisely how the Board envisions the “representative monitoring” provisions to operate once the permits are in effect. We request that the Board please clarify these monitoring provisions.

Revision #15: Sample Types (SAP p. C-4 ¶ II.B; VCP p. C-4 ¶ II.B; AAISCP p. C-4 ¶ II.B). In the revised Spray Applications Permit, the Board appears to have removed any requirement for “*post-event*” visual, physical, or chemical monitoring. The revised Vector Control and Invasive Species Permits still require “*post-event*” monitoring, but only whenever *the discharger* determines, apparently on a case-by-case basis, that the pesticide “project” is “complet[e].” The additional requirement in previous permit drafts that the discharger must perform this monitoring “within one week after the application event” has been removed.

Comment #15: Regarding the Spray Applications Permit, we submit that post-event monitoring is just as important for some of the dangerous pesticides covered by that permit (e.g., malathion, naled, carbaryl), as the other two permits. Indeed, this permit only applies to *government* applicators like the USDA Forest Service and the CDFA (SAP p. 5 ¶ II.B) – why should these entities be subject to *less* restrictive protections than *private* applicators? We request that the Board reinstate the post-event monitoring requirement in the SAP.

Regarding all three permits, we believe that removing an absolute timeframe for post-event monitoring invites abuse. If the discharger is allowed to determine when “project completion” occurs, he or she will simply wait to perform any sampling until long after any environmental harm has occurred, or the pesticide has fully dissipated (regardless of whether that pesticide is still performing any pest elimination function). See also Comment #11, above. We ask that the one-week post-event monitoring timeframe be reinstated.

Revision #16: Toxicity Testing Requirements (SAP p. C-4 to C-8 ¶ III; VCP p. C-4 to C-10 ¶ III; AAISCP p. C-4 to C-8 ¶ III). The staff recommends five different options for toxicity testing, including performing no such testing, but recommends Option D for each permit. Option D appears to provide that “after a discharger has shown six consecutive samples of no toxicity, monitoring for toxicity will be discontinued,” until “[a] new application method is used, a BMP is changed, or an alternative product is used.” E.g., SAP, Resp. to Cmt. #4.3, p. 28. Unlike earlier versions, Option D also appears to allow dischargers to forsake taking further “background” samples if the first sample comes back negative.

Comment #16: As we stated in earlier comments, we strongly urge the Board to require some form of toxicity testing in these permits. These pesticides are *known*

toxicants that can cause serious water quality problems and other adverse environmental effects, but – unlike for most industrial point source discharges – no “end-of-pipe” treatment technologies or numerical effluent limitations are being required or imposed to ameliorate these harms. Moreover, given that the permit only requires chemical testing for *active* pesticide ingredients, a rigorous toxicity monitoring scheme will be crucial in protecting against the risks posed by *inert* ingredients (which can be greater than the risks posed by active ingredients), and by *additive or synergistic* toxicological effects (both with other pesticides and with other constituents in the receiving water). See generally EPA Office of Pesticide Programs, Pesticide Regulation Notice 97-6 (Sept. 17, 1997), available at http://www.epa.gov/opppmsd1/PR_Notices/pr97-6.html; Letter from U.S. Fish & Wildlife Service to EPA re: Atrazine Risk Assessment (June 27, 2002), pp. 2-3, available at <http://www.eswr.com/104/fwsatrazineletter.pdf>.

As for Option D specifically, we are mindful that the Board wishes not to impose undue burdens or meaningless monitoring requirements on pesticide applicators. At the same time, we believe that *some* form of periodic toxicity monitoring should be required even where a discharger is able to establish a modest track record of not causing or contributing to toxic conditions. This is good policy for several reasons. First, the underlying characteristics of the waterbody may change over time, which may give rise to additive or synergistic toxic effects not captured by earlier sampling. Second, further toxicity monitoring ensures that the discharger does not, intentionally or inadvertently, alter the methods or chemicals applied in a way that may be deleterious to water quality. Third, an ongoing toxicity monitoring requirement allows private citizens concerned about discharges in their local waterbodies to perform their own in-stream monitoring, and to cross-check the results they obtain with what the discharger has reported to the Board, as an effective and supplemental assurance that relevant receiving water limitations are not being violated.

Lastly, given the need for an accurate assessment of toxicological risks, we urge that the more stringent requirement on “background” sampling from the earlier draft permits be retained.

Once again, we thank you for the opportunity to comment. Please feel free to contact us with any questions you may have.

Sincerely,

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