



American Mosquito Control Association

***Promoting Public Health and
Quality of Life Through
Mosquito Control***





2010-2009 Officers



Janet McAllister
President



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Vice President



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President, 2009





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Annual Meeting

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Finance

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Stephanie Whitman

Legislative & Regulatory

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AMCA Committees & Chairs

Membership

Sarah Gazi

Nominating

Doug Carlson

Public Relations

Joseph Conlon

Publications

Steve Presley

Science & Technology

Scott Gordon

Training & Member Education

Roxanne Connelly





Education and Information

- ***Journal of the American Mosquito Control Association***
 - Research articles
 - Operational and scientific Notes
 - Electronic publication

- ***AMCA Newsletter***
 - Reports from Regional Directors, Headquarters, committees and Technical Advisor
 - Recent developments
 - Membership notices

- ***WingBeats***
 - Operational Magazine





Education and Information

Publications available for purchase include:

- *Geographical Distribution of the Mosquitoes of North America, North of Mexico*
- *Bulletin #5: Manual for Mosquito Rearing*
- *Bulletin #7: Biorational Control of Mosquitoes*
- *2002 Public Health Pesticide Applicator Training Manual*
- *Mosquito Biology and Control DVD*
- *The Mosquito Crusades*





Education and Information

Webinars

Two webinars were held in 2009:

- What is an Integrated Mosquito Management Program?
- Dispelling myths about mosquito control utilizing the media

AMCA will be bringing you even more webinars over the next year.

AMCA members receive a discounted registration rate!





Education and Information

AMCA Student Competition

- Held annually at the AMCA Annual Meeting
- In 2010, 13 students from around the country participated.
- The winner received the Hollandsworth Prize in the amount of \$2,000! Two students also received monetary awards for Honorable Mention.





“PESP Partner under the
AMCA’s auspices”

Multi-State Partners

Northeast MVCA
Northwest MVCA

State Partners

California MVCA
Florida MCA
Louisiana MCA
Michigan MCA
New Jersey MCA
North Carolina MCA





AMCA Website
“Members Only” Area www.mosquito.org

- ***Search:***
 - Back issues of JAMCA
 - For a an AMCA member’s contact info
 - Past issues of the Newsletter/WingBeats

- ***Download the AMCA toolkit:***
 - Contains news release examples
 - A comprehensive communications plan
 - Examples of letters and correspondence

- ***Obtain up-to-date news articles***



AMCA[®] Legislative & Regulatory Affairs

Presence in Washington, D.C.

- Represented by law firm of McDermott, Will & Emery
- Keeps AMCA informed of important issues
- Represents AMCA at federal agency & congressional meetings
- Serves as legal counsel when needed

Technical Advisor - Joe Conlon

- Attends meetings & testifies at hearings on AMCA's behalf
- Joe provides the AMCA's voice of sound science and reason

Watch monthly E-Newsletter for updates



AMCA[®] Annual Washington Conference

- **Held annually since 1999**
- **May 9-11 at Westin Alexandria, VA**
- **Serves as an opportunity to make our presence known in Washington and influence decision makers**
- **3-day meeting with one day spent visiting legislative offices on Capitol Hill**
- **Travel assistance available**
- **Typically 80-90 attendees**





"I'm One"

Public Service Announcement

- The *"I'm One"* program was developed in 2008 to highlight awareness of the dangers of WNV.
- This 30 second video PSA includes elements of a comprehensive media communications program.
- The program highlights the importance of community collaboration to reduce the threat of mosquito-borne disease.

Go to www.mosquito.org to view *"I'm One"*





National Mosquito Control Awareness Week

*This annual event serves as a formal opportunity to
emphasize the importance of our work in:*

*“promoting public health and quality of life through
mosquito control”*

2011: June 26-July 2





NEW!!!

AMCA Young Professionals Group

At the 2010 Annual Meeting, the AMCA Board of Directors created the Young Professionals Group.

- To promote interaction among young professionals in the field of mosquito control and research. Members may be students (undergraduates/graduates) with an interest in medical entomology, mosquito control/industry employees, research scientists/post docs in government/private institutions new in the professional world (~5 years or less).
- To promote interaction between young professionals and well-established, experienced and well known professionals in the field of mosquito control and research.
- To promote already existing student activities during the AMCA annual meeting and create new activities to increase participation of AMCA Young Professionals.
- To highlight research/professional achievements of AMCA Young Professionals.

Contact AMCA Headquarters at amca@mosquito.org to get involved!



77th Annual Meeting

Anaheim, CA • March 20 - 24, 2011 • Disneyland Hotel

www.mosquito.org



Save The Date!

Mosquito Control and the Clean Water Act: Current Status

**Joseph M Conlon
Technical Advisor**



FIFRA vs CWA

FIFRA

Cost/benefit

Risk-based

\$7000/incident

No citizen suits

CWA

No cost/benefit

Hazard-based

\$37,500/day

Citizen suits



Pesticide General Permit: Contents

- **Coverage - Notice of Intent (NOI)**
- **Technology Based Effluent Limits**
- **Water Quality Based Effluent Limits**
- **Site Monitoring**
- **Pesticide Discharge Management Plan**
- **Corrective Action**
- **Annual Reporting and Recordkeeping**



EPA Comments

General

- **Decision-maker should be responsible for NOI**
- **Possible phase-in**
 - NOI – 3 months
 - PDMP – 6 months
- **All applicators, NOI or not, must perform IMM**
- **Regions will be arbiter**
- **Non-covered may opt-in**



Center for Biological Diversity – 44 pp.
Pace Environmental Litigation Clinic – 17 pp.
National Environmental Law Center et al – 25 pp.
San Francisco Baykeeper – 4 pp.
Massachusetts Audubon Society – 5 pp.
Beyond Pesticides – 6 pp.
Earth Care Ministry – 4 pp.
Environmental Law and Policy Center – 2 pp.
The Sierra Club – 2 pp.
Pesticide Watch Education Fund – 3 pp.
Advocates for the West – 22 pp.
Farmworker Justice – 1 pg.
Stern Shapiro Weissberg & Garin LLP – 117 pp.



Activist Comments General

- *No de minimis*
- Cannot argue that the pesticide leaves no “residue.”
- “Pollutants” include all inert ingredients.
- Require analysis of the economic values of healthy wetlands and streams



Activist Comments

General

- **Subtle effects may endanger life processes without demonstrating immediate toxic effects.**
- **Suspected human carcinogens or endocrine disruptors should be excluded from coverage.**
- **Naled should be subject to individual permitting**



Activist Comments

General

- **Public should be privy to all notices of intent to discharge pesticides, pesticide treatment planning documents, and monitoring data**
- **All dischargers should submit detailed reports on every application - reports should be made public.**



Notice Of Intent (NOI)

- **Filed electronically**
- **25(B) not exempt**
- **Pesticide application threshold?**
 - **AMCA/Activists – no thresholds**
 - **SBA – population < 50,000**
 - **RISE**
 - **10,000 acres adulticide**
 - **2,500 acres of water or 200 linear miles**



Notice Of Intent (NOI)

- **EPA**
 - 6400 acres adulticide
 - 1000 acres larvicide
- **Not required by states regardless of scale-of-operations**
 - If info can be acquired elsewhere
 - Thresholds can be higher or lower than EPA's



Impaired/Tier 3 Waters

- **AMCA - FR Notice states that, “Tier 3 waters are identified as outstanding national resource waters and generally include the highest quality waters of the U.S. Except for certain temporary changes, water quality cannot be lowered in such waters. In broad terms, EPA’s view of ‘temporary’ is weeks and months not years.”**
- **Activists - EPA should demand that an operator demonstrate, through verifiable scientific analysis, that any pesticide discharge will not further impair waters listed for any parameter.**



• **EPA - PGP should cover both impaired and Tier 3 waters**

Technology Based Effluent Limits

- **Identify the Problem.**
 - **Establish densities for larval and adult mosquito to serve as action threshold(s)**
 - **Identify target mosquito species and breeding sites**
 - **Analyze existing surveillance data**
 - **If no data for your pest management area in the past calendar year, document why current data are not available and the data you used to meet the permit conditions**



Action Thresholds

Activist Comments

- **EPA should set clear, scientifically-derived guidelines for the establishment of “action thresholds”**



Technology Based Effluent Limits

- **“In developing pest management strategies, you must evaluate the following management options, considering impact to water quality, impact to non-target organisms, pest resistance, feasibility, and cost effectiveness:**
 - **No action**
 - **Prevention**
 - **Mechanical or physical methods**
 - **Cultural methods**
 - **Biological control agents**
 - **Pesticides**



AMCA Comments

IMM

- Presuppositions - *far* too prescriptive
- Delete
 - “Calibration must ensure that the equipment’s rate of pesticide application delivers the precise quantity of pesticide needed to achieve the greatest efficacy against target pests.”
 - “Use the lowest effective amount of pesticide product per application.”



Activist Comments

IPM

- Dischargers must evaluate each and every IPM alternative before the decision to use pesticides may be lawfully made
 - EPA should publish guidance on what constitutes a sufficiently rigorous level of “evaluation.”
 - EPA should prepare a checklist of pertinent requirements
 - Incorporate this checklist into the permit
 - require applicators to sign off on the completion of each task under the penalty of perjury.



AMCA Comments

IMM

- **“Best Professional Judgment”**
 - **Pest management area determination - Entities should be given the authority to determine what constitutes a “pest management area”.**
 - **Emphasize “best professional judgment” in the assessment of environmental conditions criteria to lessen litigation opportunities.**
 - **Maintain pesticide application equipment in proper operating condition**



Activist Comments

IPM

- **EPA should not rely on best professional judgment.**
 - **Develop guidelines for preferred IPM strategies**
 - **EPA should determine which specific control technologies are the best available**
 - **EPA should mandate specific control measures.**
- **Require least toxic alternative**



Activist Comments

IPM

- Incentives to integrate *non-toxic* management methods as a final goal
- Incorporate strong *disincentives*, financial and regulatory, to uses with highest risk, such as aerial spraying, or applications directly to water.
- Bti is effective, and should be preferred over methoprene - particularly where drainage to coastal waters will occur.



Activist Comments

IPM

- **EPA should allow meaningful input from concerned members of the public before any discharge occurs.**
- **Most applications of pesticides occur at fairly regular, predictable intervals**
- **30-day comment period on TBELs.**



Activist Comments

Emergencies

- “Emergency” should be determined only by an *environmental agency*
 - not be determined by a government agency with no primary mandate to protect the environment
 - certainly *never* by the applicator.
- Administrative processes leading to the “emergency” declaration subject to adequate public notice and comment protections
 - specify that a permit violation occurs when such a declaration is invalidated (by the agency or a court) after the fact.



Activist Comments

Emergencies

- **EPA should specify that any reasonably foreseeable event can never constitute an “emergency,”**
 - Mere “economic loss” does *not* qualify.
- **Restrict emergency applications for mosquito control to emergencies declared by state public health authorities**
 - Include requirements for monitoring of impacts to sensitive ecological receptors such as fish.
 - Limit pesticide applications, especially adulticiding, to situations where risk of human disease is high



Water Quality Based Effluent Limitations (WQBEL)

- **Narrative**
 - “Your discharge must be controlled as necessary to meet applicable water quality standards (WQS).”
 - “If at any time you become aware, or EPA determines, that your discharge causes or contributes to an excursion of applicable water quality standards, you must take corrective action as required.”
- **Compliance w/FIFRA and permit meets WQS**



Monitoring

- **Required**
 - **“visual monitoring” of “application area”**
 - **During application in daylight – except aerial/truck**
 - **During post application efficacy check**
 - **Unanticipated death/distress of non-targets**
 - **Disruption of wildlife habitat, recreational, or municipal water**
 - **No ambient water quality testing**
 - **Floating idea of “largest of large” sampling for research**
 - **AMCA states that EPA should pay**



AMCA Comments

Monitoring

- **Ambient water testing would not provide meaningful results and should not be required.**
- **Visual monitoring to detect egregious nontarget mortality within the treatment area should be conducted next day by competent authority as determined by either the county or the state.**



Activist Comments

Monitoring

- **The EPA should develop national recommended water quality criteria for pesticides covered by the permit.**
- **Require in-stream monitoring after pesticide applications, to include degradates.**
- **Require ecological monitoring for large-scale repeated applications of Bti to wetlands.**



Activist Comments

Monitoring

- **Require post-application ambient monitoring for any pesticide discharges that are made on a scheduled, programmatic basis by government agencies (such as annual springtime mosquito spraying by local vector control districts).**



Activist Comments Monitoring

- **These discharges are wholly predictable, and such monitoring thus can generally be made a part of the routine planning and budgetary process.**
- **Moreover, agencies generally should have (or have the wherewithal to obtain) the financial resources and expertise to such perform monitoring.**



Pesticide Discharge Management Plan General

- **Within 90 days of NOI**
- **Documents implementation of permit requirements**
- **Can reference pre-existing IMM plans**
- **Not subject to challenge**
- **States not required if info elsewhere**



“Best Management Practices for Integrated Mosquito Management”

- Mosquito Surveillance**
- Mapping**
- Action Thresholds**
- Physical Control or Source Reduction**
- Biological Control**
- Chemical Control**
- Monitoring for Efficacy/Resistance**
- Education and Community Outreach**
- Record-keeping**



Pesticide Discharge Management Plan Components

- **Pesticide Discharge Management Team**
- **Problem Description**
- **Control measures**
- **Surveillance**
- **Schedules and procedures**
 - **Spill prevention/response**
 - **Equipment maintenance**
 - **Adverse incident response plan**
 - **Pesticide monitoring**



Problem Description

- **Treatment area – description and boundaries**
- **Mosquito management objective**
- **Target species**
- **Action thresholds**
- **Applicable WQS and data source**



Description of Control Measures

- **Name of pesticide and EPA registration number**
- **Procedures for determining lowest effective amount and frequency of application**
- **Document why larviciding is not primary method**



Description of Control Measures

- **Water quality/non-target/resistance feasibility/cost effectiveness**
 - **No action**
 - **Prevention**
 - **Mechanical/physical methods**
 - **Cultural methods**
 - **Biological control**



AMCA Comments PDMP

- **Subject to interpretative challenge by entities not acknowledging the expertise of mosquito control professionals.**
- **Will be source of litigation**



Activist Comments

PDMP

- **“Where local residents find a given PDMP to be insufficiently thought through, these affected persons should be given the opportunity to convince EPA to impose tougher restrictions, or to disallow the pesticide discharge altogether.”**



Surveillance

- **Must document procedures for conducting pre and post-application surveillance**
 - **Where**
 - **When**
 - **How**
 - **Why, Why Not**



Schedules and Procedures

- **Spill prevention/response**
- **Equipment maintenance/calibration**
- **Adverse incident response procedure**
- **Pesticide monitoring**
 - **Process for determining monitoring location**
 - **Schedule and procedures for monitoring**
 - **Person(s) responsible for monitoring**



AMCA Comments

Adverse Incidents

- **Revision of Control Measures**
 - “Use the lowest amount of pesticide produce per application and optimum frequency of pesticide applications necessary to control the target pest, consistent with reducing the potential for development of pest resistance;” should be eliminated.
- **Adverse Incident Documentation and Reporting**
 - What constitutes a bona fide adverse incident?
 - The verbiage “directly or indirectly” as pertaining to toxic or adverse effects on humans or domestic animals is vague - “indirectly” should be eliminated.



Activist Comments

Adverse Incidents

- EPA should not rely on an applicator's lay assessment (as persons not studied in aquatic toxicology or zoology) as to whether an observed condition qualifies as a "toxic" effect.



Reporting and Recordkeeping

- **Annual Reports**
 - **Documents pesticide application activities**
 - **Generic ingredients only**
 - **Adverse Incident**
 - **Identify permit violations**
 - **To help modify permit to protect water quality**



Reporting and Recordkeeping

- **Records**
 - May include logs, adverse incidents
 - IMM plans, annual reports
 - Can be state-specific if other agencies are collecting info
 - Accessible by public via request to EPA



Pesticide General Permit:

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State-Issued NPDES Permits

- **EPA final permit: 27-31 December**
- **EPA to assist states w/permit and outreach**
- **Permit writer's best professional judgment**
 - **Judgments may differ**
 - **EPA maintains oversight**
- **Citizens can challenge NPDES permits**



“Here we find EPA close to admitting that FIFRA rules, and damn CWA or ESA! The public can only wonder why applicators should have to bother with a permit when the FIFRA labeling requirements seem to be covering all the bases already.”

Californians for Alternatives to Toxics



Legislative Relief

- **S.3735 - Senate Agriculture Committee**
 - **Blanche Lincoln (D-AR) - Chair**
 - **Saxby Chambliss (R-GA) - ranking Republican member**
- **H.R. 6087 - House Committee on Agriculture**
 - **Frank Lucas (R-OK) - ranking Republican member**
- **Amends Section 3(f) of FIFRA (7 U.S.C. 136a(f))**
 - **Additional permits not required for pesticide applications made in accordance with FIFRA**



Legislative Relief

- **H.R. 6273**
 - **House Committee on Agriculture - Collin Peterson (D-MN), Chairman**
 - **FIFRA jurisdiction**
 - **House Committee on Transportation and Infrastructure**
 - **CWA jurisdiction**
 - **The bill currently has 15 co-sponsors.**



Assistance

- **PGP website**
 - www.epa.gov/npdes/agriculture
 - **NOI/Recordkeeping templates**
- **AMCA blast emails**
- **AMCA Webinar**
 - **February**

