

## The Clean Water Act and Mosquito Control: Past, Present, and Future - Joe Conlon

- a) History
  - i) Passed after the Cuyahoga River caught on fire
  - ii) 1972 - Restore and maintain chemical integrity of navigable waters
  - iii) 1973 - FIFRA defines navigable waters
  - iv) The government is currently seeking to remove the term “navigable waters”
- b) Comparing FIFRA and CWA
  - i) FIFRA
    - (1) Cost/benefit risk-based
    - (2) Fine - \$7000/incident
    - (3) No citizen suits
  - ii) CWA
    - (1) No cost/benefit
    - (2) Hazard-based
    - (3) Fine - \$37000 per day
    - (4) Citizen suits
- c) Pesticide General Permit (PGP)
  - i) Notice of Intent (NOI)
    - (1) Type or scale of application
      - (a) Feds have no idea what this will be
      - (b) Situation very fuzzy at the moment
    - (2) Identify the responsible entity
      - (a) Contact info
      - (b) Description of entity
      - (c) Type of discharge
      - (d) Receiving stream(s)
    - (3) 25(B) not exempt
  - ii) Technology-Based Effluent Limits (TBEL)
    - (1) IPM plan based on BMP
    - (2) Assumed to be best technology
  - iii) Water Quality-Based Effluent Limits (WQBEL)
    - (1) States that if TBELs are met, WQBELs are met
    - (2) Some very fuzzy language included
  - iv) Monitoring
    - (1) Required
    - (2) Visual??
    - (3) Enhanced??
    - (4) Frequency and timing
    - (5) No ambient water quality testing foreseen - yet
  - v) Annual reporting
    - (1) Required
    - (2) Accessible by the public
    - (3) Types, amounts, locations
- d) General NPDES permit
  - i) Based on writer’s best professional judgment

- ii) Open to public comment
- iii) EPA oversight
- e) Endangered Species Act will come into play
- f) Schedule
  - i) April/May 2010
    - (1) Draft permit
    - (2) Public comment
  - ii) Dec 2010 - final permit issues
  - iii) [www.epa.gov/npdes/training](http://www.epa.gov/npdes/training)
- g) State of Washington Draft Permit
  - i) Coverage not needed:
    - (1) Retention ponds if no discharge within 2 weeks
    - (2) >5 acres constructed water body
    - (3) Inland farm pond
    - (4) ...
  - ii) Surveys
    - (1) Larval dips
    - (2) Representative sampling
    - (3) Use of temephos restricted
  - iii) Notification
    - (1) Public notice in a newspaper  $\geq 10$  days before first application
    - (2) Must provide maps
    - (3) NWR - 24 hour notification
  - iv) Conditions for application
    - (1) Larvicide
      - (a) Must not cause long-term environmental harm
      - (b) 1 larva/pupa per 3 dips needed
      - (c) List of allowed larvicides
    - (2) Adulticide
      - (a) Not allowed for nuisance mosquito control
      - (b) Set season, April 1 - Oct 1
      - (c) ULV
      - (d) Follow label
      - (e) Authorized adulticides
      - (f) Do recognize need for resistance management
    - (3) Reporting
      - (a) File online
      - (b) Signed letter must be on file
      - (c) Keep records for 5 years
    - (4) Testing required
- h) BMP - AMCA
  - i) <http://www.mosquito.org/secure/upload/articles/BMPsforMosquitoManagement.pdf>
  - ii) Components
    - (1) Surveillance
    - (2) Mapping

- (3) Action thresholds
- (4) Physical control/source reduction
- (5) Biological control
- (6) Chemical control
- (7) Efficacy/resistance monitoring
- (8) Education and community outreach
- (9) Record keeping
- i) NPDES permit
  - i) This will be a nightmare as the environmental groups become involved
  - ii) One mosquito control agency has already been sued for spraying without a permit EVEN THOUGH NO PERMIT YET EXISTS
  - iii) Supreme Court has been petitioned about the 6<sup>th</sup> Circuit Court's decision
    - (1) If accepted, oral arguments by Oct
    - (2) If denied, mandate goes into effect 9 April 2011
  - iv) Bottom Line - we will have permits
    - (1) EPA will try to make permit as easy and unobtrusive as possible
    - (2) Environmental activities will begin filing appeals to shut down mosquito control