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Comments on DPR Proposed Revision of Dormant Pesticide Application Requirements

The California Department of Pesticide Regulations (DPR) has issued a proposed revision of Subchapter 5 Article 1 that states,

*“SUBCHAPTER 5. SURFACE WATER
ARTICLE 1. PESTICIDE CONTAMINATION PREVENTION*

Adopt section 6960 to read:

6960. Dormant Insecticide Contamination Prevention.

(a) The operator of the property shall meet at least one of the following requirements when making dormant applications:

- (1) only apply a dormant oil, spinosad, or Bacillus sp.; or*
- (2) only apply to a hydrologically isolated site; or*
- (3) divert any runoff with an on-farm recirculating system and/or contain and hold any runoff for 72 hours before releasing into a sensitive aquatic site.*

(b) If none of the requirements in subsection (a) can be met, the following dormant insecticide application restrictions shall apply:

- (1) the operator of the property to be treated shall obtain a written recommendation from a licensed pest control adviser prior to the application; and*
- (2) the application shall not be made within 100 feet of any sensitive aquatic site; and*
- (3) wind speed shall be 3-10 miles per hour (mph) at the perimeter of the application site as measured by an anemometer on the upwind side; and*
- (4) aerial application shall only be allowed if soil conditions do not allow field entry, or approaching bloom conditions necessitate aerial application.*
- (5) No dormant insecticide application shall occur if:*
 - (A) soil moisture is at field capacity and a storm event, forecasted by the National Oceanic and Atmospheric Administration (NOAA)/National Weather Service (NWS), is to occur within 48 hours following application; or*
 - (B) a storm event likely to produce runoff from the treated area is forecasted by NOAA/NWS to occur within 48 hours following the application.”*

I have been involved in investigating and observing the results of aquatic life toxicity studies in stormwater runoff from urban and agricultural lands, and tailwater and fugitive water runoff/discharges since the mid 1990s in the Upper Newport Bay, in the

Sacramento River and San Joaquin River watersheds, and in the Delta. Dr. Anne Jones-Lee and I have published extensively on these studies. Our papers/reports on these studies are on our website, www.gfredlee.com in <http://gfredlee.com/pswqual2.htm#pesticide>

It is my conclusion that the DPR's proposed regulatory requirements presented above for application of dormant use pesticides to prevent pesticide-caused aquatic life toxicity in California's waters associated with stormwater runoff and tailwater discharges is a major step in the direction of controlling aquatic life toxicity. However, it will not necessarily prevent pesticide-caused aquatic life toxicity in the state's waters. Of particular concern is the fact that during high runoff periods, runoff will occur from areas to which pesticides have been applied. While some attempt is made to regulate pesticide runoff, the occurrence of even one toxic runoff event can have a highly significant adverse impact on an aquatic organism population. It is essential that DPR develop a regulatory program to prevent aquatic life toxicity in all the runoff waters from areas where pesticides are applied.

One of the issues of concern in Section (a) (3) is the "72 hour delay before discharge." This is not adequate time for the pesticides that are used as dormant sprays to decay to non-toxic levels. Also, will those responsible for such discharges to monitor the "on-farm recirculating system and/or contain and hold any runoff" to determine if the releases/runoff/discharges are non-toxic?

With respect to section (b), how will DPR evaluate whether the requirements set forth in these options are adequately implemented?

Overall, for the proposed approach to be effective in preventing aquatic life toxicity caused by dormant spray applied pesticides DPR must require that a comprehensive monitoring program be implemented to determine the adequacy of the proposed requirements discussed above and aquatic life toxicity in runoff/discharge waters. It is not clear what the consequences are for failing to fully comply with the proposed requirements. This information should be part of the proposed requirements.

The CVRWQCB Ag Waiver coalition monitoring program as well as the CVRWQCB Ag Waiver monitoring that has been conducted through the University of California, Davis and the SWRCB SWAMP monitoring have demonstrated that there is aquatic life toxicity in the water column and sediments of Central Valley waterbodies that is apparently due to pesticides used in the dormant season and during the rest of the year. DPR needs to expand its pesticide application requirements to include pesticide applications for other than for dormant application. This is justified based on the aquatic life monitoring data that have been collected during the past several years.

If there are questions on these comments please contact me.

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