Management of Dilute Pesticide Rinsewaters

REDUCE - REUSE

Fill pads for pesticide application equipment can become pollution sources because the rinsewaters generated by the activity are repeatedly disposed in the same small area. Our new pesticide storage facilities will trap or contain such rinsewaters which must then be disposed in an environmentally sound, cost effective, and legal way. Since rinsewaters are dilute aqueous solutions, it is not cost effective to treat them like concentrated wastes. The following management principles are based on recommendations from the 1988 National Conferences and Workshops on Pesticide Waste Disposal and more recent discussions with NYSDEC.

1. Reduce (Don't make it in the first place!)
   A. Minimize sprays. All maintenance sprays should be according to best IPM practices.
   B. Minimize tank residuals. Review spray equipment to see if equipment modification could significantly reduce residuals or rinsing requirements. Consider inductive loading systems - they can eliminate tank (but not boom) rinsing completely.
   C. Schedule spray jobs to minimize need for equipment rinsing. Example: jobs involving the same or compatible pesticides should be done in succession.
   D. Calibrate equipment properly to accurately plan mix quantity.
   E. All container and measuring implement rinseate should be incorporated in the tank mix.
   F. Review rinse procedures for possible improvement in efficiency.

2. Reuse
   A. Use as make up water for next tank load destined for a labelled target, storing if necessary. For example: Roundup rinseate used in next Roundup tank mix.
   B. Whenever possible, apply surplus tank mix and tank rinseate to target crop, not to exceed label rate.
   C. Whenever possible rinse equipment on site immediately after use, and respray tank rinsewater.
   D. Avoid
      1. repetition in one small area
      2. proximity to wells and surface water
      3. areas with shallow depth to groundwater (or high water table).
   E. If necessary, spray on border rows or alleyways of the target crop or on a trap crop (non-adjacent planting of a labelled crop.)
   F. If necessary, collect wastewaters in "honey wagon" collection tank. Configure tank boom for optimum dispersal during respray (dribble rather than spray to avoid drift, etc.). If possible, segregate rinsewater by type

Most recent verification: 04/04/2011