

Tracking Herbicide Movement- Post Application

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Introduction – Explain Caltrans’ Policy and Objectives of IVM, Integrated Vegetation Management. Emphasis is to suggest Post and Pre-Emergent Application Considerations for weed, tree, brush and growth management, suppression, and/or control, to help avert possible problems. Caltrans’ primary focus is for safety of applicators, support crews, and traveling public, and the environment.

By using sound ‘Application Objectives and Considerations’ before applications, the idea is to help enhance overall application efficacy. This may reduce mitigation issues, and help avoid “Off Site” movement, and then the subsequent need to track herbicide movement ‘off target’.

Caltrans IVM- Integrated Vegetation Management/ IPM:

Includes biological, cultural, mechanical, and other methods when “Practical, Feasible, and Economically sound”. Thus resulting in the proposed chemical a.i. reduction. The current focus is for lowering pesticide usage for the Caltrans A.I. Reduction “Plan”, now in it’s peak of the 20 year proposal to reduce chemical usage by 80%. These commitments are for maintenance and vegetation management for landscaped areas and roadsides. This includes esthetics, fire control and suppression, and reduced water usage. Again, the focus is to enhance development of reduced worker and public exposure to chemicals, and reduce possible adverse environmental aspects. There is a strong emphasis on “stormwater” contamination reduction.

“I.V.M Plan” objectives:

Introduce lower a.i. chemicals, manage use and include surfactants for efficacy,

Modify cultural and mechanical practices to enhance efficacy, ie, mowing, mulching, other physical weed suppression, hardscapes, mats, cobble, concrete, etc.,

Advance planning and design to limit safety issues and increase efficacy through design.

Presentation includes suggestions for tracking herbicide movement “post application”. If “issues, accusations, or complaints” arise, the objective is to repudiate ‘blame’ if complaint is not valid, analyze actual causes, or minimize subsequent settlement, and/or fines and violations. Also expecting to reduce monetary, environmental, or “collateral damages”. This would help reduce “reputation issues”, and help plan to avoid reoccurrence and reduce problem potentials in the future. The subsequent need for tracking and calculating “off-site” movement will be mitigated or reduced with prior assessment, planning, and precise documentation of chemical applications.

Documentation is imperative, as proper applications, safety and protective devices, and overall knowledge of the specific chemicals and their potential, will help divert “accusations” by

presenting fact. The appropriate appearance and implementation of care and safety, from the viewpoint of regulatory entities, and may help mitigate further losses, in event the problem becomes a 'misfortune'.

If an actual 'misapplication' occurs, or consequences from factors like weather conditions, which are out often of your control, better results of the events and attempted mitigation to avoid inherent problems, may help result in a more positive outcome.

For tracking evidence and damages, research into adjacent areas or other local applications from use reports, making observations of surroundings and layout or topography, and sampling and history of affected plant physiological, soils, and other factors may be useful. If a claim is filed for crop loss or damage with the State, D.P.R., or local County Agricultural Commissioners' Office, samples will be evaluated due to regulations. That may or may not work in your favor. The manufacturer of the product in question will help mitigate, take samples, or help investigate to avoid perceived product negativity, loss of the product(s) registration, or counter-suits and monetary damages. These companies have long running expertise and advisors for these situations. Note: Not everyone is aware of the time and costs necessary to research, develop, and register new products, and keeping them on the market is vital to the industry. Continued or sporadic problems with these products may result in revised registrations or research costs, re-registration, or complete removal from the market. Farm Advisors and other crop and soil experts also shine a light on problems that may not be chemical related. UC Davis and other scholastic entities have some sharp people along with other associated institutions, so reach out! Don't be afraid to ask, ...they can only say NO! There is a possibility of negative response for assistance though, as there may be affiliation issues with people not wanting to "cross" anyone or get involved.

Conclusion: All said factors and implementation, as seen before, will likely reduce need for tracking of chemical movement post application, but the presentation will include case history.