



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

PC Code: 041401

DATE: February 04, 2010

SUBJECT: Verification Memorandum for EPTC for SF Bay Species

FROM: Carissa Cyran, Chemical Review Manager
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Carissa Cyran 02/04/10

Jim Tompkins 3/4/10

THRU: Thomas Moriarty, Team Leader
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Pesticide Re-evaluation Division (7508P)

Thomas Moriarty 2/4/10

TO: Rafael Prieto
Usage and Label Use Team
Biological Economic and Analysis Division (7503P)

This memorandum serves to provide additional information on the use pattern of EPTC not captured in the LUIS process. RD and SRRD's role in the verification process are to fill information gaps and provide division appropriate expertise as outlined in the LUIS Verification SOP for RD and SRRD.

SRRD provides information and status regarding changes to the use of a pesticide (such as application parameters, cancellations, or label language) that occurred as a result of the reregistration process. RD provides information regarding changes that may have occurred after the date of the LUIS label extraction. In the case a "Data Doer Only"¹ report was conducted, the CRM and PM will ensure that all highest application rates are reflected on the EFED Spreadsheet. The CRM and PM have drafted the "Registration and Reregistration Verification" section of this memo to clarify knowledge gaps a risk assessor may encounter while using the data contained in the LUIS report.

Finally, if further clarification is needed please contact Carissa Cyran and Jim Tompkins.

¹ This type of LUIS report is conducted when the AI of interest has more than 50 products. This report will contain: 1. Products actively registered to the data doer; 2. All technical registrations regardless of registrant; 3. All active California special local needs (SLN) registrations.

Registration and Reregistration Verification

Date and Scope of the RED

- December 22, 1988
- Only the chemical name, EPTC (PC Code 041401), was made apparent in the RED while no other degradate was assessed.
- The acceptance dates of two labels, 010163-00284 and 01973-00564, listed in the General Chemical Report were not the most current available. For the label 010163-00284 the acceptance date is 02/24/04 and in the LUIS report the date is 02/11/04, these are identical labels. The label 01973-00564 has the acceptance date of 12/28/01 and in the LUIS report the date is 08/03/01, these also are identical labels. The latter label was the last label for the Agency to review. BEAD identified the 12/28/01 label as a “notification” which denotes a non-substantive change to the label, in this in this case a change on label 01973-00564 was made to the product name only.

Required Through the RED Process

- Uses and application methods cancelled as part of the reregistration process:
 - Emulsifiable concentrate formulations are prohibited for residential products.
 - Application with the belly grinder is prohibited for residential products.

- Rate changes that occurred as part of the reregistration process:

The maximum EPTC application rate was reduced from 15 lbs/ai per acre to 5 lbs/ai per acre for the residential products to lessen its dermal and inhalation exposure risk (RED pg. 81). BEAD’s report confirms there are currently no residential uses for EPTC.

- Ecological mitigation measures are as follows:

Various label statements, including spray drift language, were required. Several of the statements for spray drift language are listed below:

- “Aerial Spray Drift Management Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.”
- “Do not allow this product to drift”
- “The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.
 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.

2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.”

- Aerial Drift Reduction Advisory- This section is advisory in nature and does not supersede the mandatory label requirements. INFORMATION ON DROPLET SIZE. The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).”
- “CONTROLLING DROPLET SIZE—
 - Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
 - Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
 - Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
 - Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
 - Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.”
- “BOOM LENGTH—For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.”
- “APPLICATION HEIGHT—Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.”
- “SWATH ADJUSTMENT—When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)”
- “WIND—Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.”

- “TEMPERATURE INVERSIONS—Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.”
- “SENSITIVE AREAS—The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).”

Statements thought to be of particular ecological importance are listed below:

- “Environmental Hazards--This chemical is toxic to mammals. Do not apply directly to water, or to area where water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.”
 - “Keep off sidewalks, driveways, patios, or similar surfaces”.
- The EPTC LUIS report is not a “Data Doer Only” report and includes all active Section 3 registrations, and all California Section 24(c) registrations for EPTC. PRD and RD confirmed this by reviewing the list of labels and label stamp dates used in BEAD’s LUIS data.

Product Reregistration

- The status of product reregistration for EPTC was completed on 10/15/04; therefore, all RED mitigation should be reflected on current labels.

Registration Division Review

- New actions that have occurred since the PRD Date on the BEAD LUIS Report (0/17/2008) that will impact the use or application of EPTC are as follows:
 - The registration number 10163-283 has a pending use for grass grown for seed. The maximum rate is 4.375 lbs a.i. per acre on established grass grown for seed in the fall as a broadcast application. Requested use is in Oregon, Washington, and Idaho.
 - Per RD, the PRIA date is January 13, 2011.