



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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

PC Code: 128897

MEMORANDUM

DATE: June 25, 2012

SUBJECT: Verification Memorandum for Lambda-Cyhalothrin for SF Bay Species

FROM: Wilhelmena Livingston, Chemical Review Manager
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THRU: Anne Overstreet, Acting Branch Chief
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TO: Rochelle Richardson, Executive Assistant to the Director
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This memorandum serves to provide additional information on the use pattern of lambda-cyhalothrin not captured in the LUIS process. RD and PRD's role in the verification process is to fill information gaps and provide division appropriate expertise as outlined in the LUIS Verification SOP for RD and PRD.

PRD provides information and status regarding changes to the chemical use (such as application parameters, cancellations, or label language) that occurred as a result of the reregistration process. RD provides information regarding changes to the chemical use that may 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.

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, and (3) all active California special local needs (SLN) registrations.

If further clarification is needed, please contact Wilhelmena Livingston or Mark E. Suarez.

Registration and Reregistration Verification

Date and Scope of the TRED and REDS

- Lambda-Cyhalothrin was first registered in the United States in March 1989, therefore not subject to reregistration.

Label Uses/Rates and Mitigation

N/A

Product Reregistration

N/A

Registration Division Review

- No changes have occurred in the use patterns of the end use products since the last labels were accepted, and there are no pending actions that would impact the use or application of lambda-cyhalothrin.

Table 1. Active Registrations for Lambda-Cyhalothrin

Reg. No.	Issue Cat.	Description	Custom Description	Site	Max Rate
499-535	Restrictions	Custom	Do not apply to lactating or food animals. Do not contaminate milk, food or drinking water. Remove all animals prior to applying to housing. Do not apply or allow insecticide to drift onto animals. Do not allow animals to enter treated areas until surfaces are dry.	AGRICULTURAL/ FARM PREMISES	2/wk up to 0.06%
100-1320	Maximum Number of Applications	Custom	Do not apply more than 9.0 fl. oz. per acre per cutting.	ALFALFA	0.12 lb ai
499-473	Comments	Custom	Contains petroleum distillates.	ALL	spray can no application rate
62719-615	Diluent Type	Product may be used combined with oil.		ALMOND	0.16 lb ai/A/season
53883-70	Restrictions	Custom	Do not apply to milk rooms or feed rooms.	ANIMAL HOUSING PREMISES (INDOOR)	can be reapplied at 21 day intervals if necessary for indoor application; more frequent treatments are limited to spot treatments; for severe and residual treatment rate of 0.06% given

Reg. No.	Issue Cat.	Description	Custom Description	Site	Max Rate
71532-23	Application Method	Custom	Apply the band up to 10 ft. wide around the structure (or according to state regulations governing commercial pest control) and upwards along the foundation to 3 ft. and around windows, doors, and roof overhangs.	ANIMAL KENNELS/SLEEPING QUARTERS (COMMERCIAL)	for severe cases 0.06% application rate
228-526	Restrictions	Custom	Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.	BARLEY	do not apply more than 0.06 lb ai per acre per season
53883-248	Maximum Number of Applications	Custom	Do not apply more often than four times within any six month period.	BEEF/RANGE/FEE DER CATTLE (MEAT)	repeat as necessary (apply product at the rate of 1/3 fl oz per head of cattle weighing less than 600 lbs and 1/2 fl oz weighing more than 600 lbs) but do not apply more than once every two weeks and do not apply more often than four times within any 6 month period
100-1276	Site	Custom	Brassica Cole Crops Head & Stem Brassica: Broccoli, Chinese broccoli, Brussels sprouts, cabbage, Chinese mustard cabbage, Chinese (napa) cabbage, cauliflower, cavalo broccolo, kohlrabi are the specific sites on the label.	BRASSICA (HEAD AND STEM) VEGETABLES	do not apply no more than 0.24 lb ai per acre per growing season
62719-615	Maximum Number of Applications	Custom	If 3 applications are made at the maximum application rate of 38 fl oz, then a fourth application of a product containing chlorpyrifos is not permitted. More applications with a product containing lambda-cyhalothrin are permitted as long as no more than the maximum amount of 0.24 lb ai per acre per year is applied.	BRUSSELS SPROUTS	0.04 lb ai per acre
228-526	Restrictions	Custom	Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.	BUCKWHEAT	do not apply more than 0.06 lb ai per acre per season
773-74	Dosage	Custom	Apply product down the backline at the rate of 10ml (1/3 fl. oz) per head for cattle weighing less than 600 lbs or at a rate of 15 ml (1/2 fl. oz) per head for cattle weighing more than 600 lbs.	CALVES (MEAT)	do not apply more than once every 2 weeks and not more than 4 times per 6 month period
70506-121	Site	are the specific sites on label.	Barley, Buckwheat, Oats, Rye, Triticale, Wheat, and Wheat Hay	CEREAL GRAINS	do not apply more than 0.09lb ai /A/crop at plant
62719-615	Diluent Type	Product may be used combined with oil.		CHERRY	0.2 lb ai/A/season
100-1320	Site	are the specific sites on label.	Broccoli, Brussel Sprouts, Cabbage, Cauliflower, Cavalo Broccolo, Chinese Broccoli (gai lon), Chinese Cabbage, Chinese Mustard Cabbage (gai choy), and Kohlrabi	COLE CROPS	0.24 lb ai
70506-121	Site	are the specific sites on label.	Broccoli, Brussel Sprouts, Cabbage, Cauliflower, Cavalo Broccolo, Chinese Broccoli (gai lon), Chinese Cabbage, Chinese Mustard Cabbage (gai choy), and Kohlrabi	COLE CROPS	0.24 lb ai/A/season
71532-23	Application Method	Custom	Apply the band up to 10 ft. wide around the structure (or according to state regulations governing commercial pest control) and upwards along the foundation to 3 ft. and around windows, doors, and roof overhangs.	COMMERCIAL STORAGES/WARE HOUSES PREMISES	21 day reapplication if necessary

Reg. No.	Issue Cat.	Description	Custom Description	Site	Max Rate
70506-121	Restrictions	Custom	Do not apply when turfgrass is waterlogged or when soils are saturated with water.	COMMERCIAL/INDUSTRIAL LAWNS	no more than 0.36 lb ai/A/yr
499-473	Dosage	Custom	To treat nests, inject the nest at 3-6 sites at a rate of 5-10 seconds per site. For very large nests (over 12" diameter), increase the number of injection sites.	COMMERCIAL/INSTITUTIONAL/INDUSTRIAL PREMISES/EQUIPMENT (OUTDOOR)	spray can no application rate
100-1320	Restrictions	Custom	Do not apply more than 18.0 fl. oz. product per acre after silk initiation.	CORN (UNSPECIFIED)	field, pop, seed corn 0.12 lb ai; sweet corn 0.48 lb ai
70506-121	Site	is the specific site on label.	Corn Grown for Seed	CORN (UNSPECIFIED)	field corn, pop corn, and seed corn do not apply more than 0.12 lb ai per crop from at plant and foliar applications. For sweet corn do not apply more than 0.48 lb ai/A per crop at plant and foliar application
100-1276	Diluent Type	Custom	Do not use binder or sticker type surfactants.	COTTON (UNSPECIFIED)	0.2 lb ai
100-1320	Restrictions	Custom	Do not use an adjuvant with applications of this product to cotton.	COTTON (UNSPECIFIED)	0.2 lb ai
100-1320	Restrictions	Custom	Do not use an adjuvant with applications of this product on Cucurbit Vegetables, except on cucumber, Chinese waxgourd, gherkin, and Momordica species.	CUCURBIT VEGETABLES	0.18 lb ai
100-1276	Site	Custom	Cucurbit Vegetables: Chayote, Chinese waxgourd, citron melon, cucumber, edible gourd, gherkin, Momordica species, muskmelon, pumpkin, squash (summer and winter), watermelon are the specific sites on the label.	CUCURBIT VEGETABLES	0.18 lb ai/A/season
499-473	Dosage	Custom	Release approximately one-second of product. For light infestations move injector tip along cracks while treating at the rate of three linear feet per second. For heavy infestations move injector tip along at one linear foot per second. For closed voids calculate the void's cubic area and treat at the rate of one to five seconds per three cubic feet.	DRAINAGE SYSTEMS	spray can no application rate
499-473	Dosage	Custom	Release approximately one-second of product. For light infestations move injector tip along cracks while treating at the rate of three linear feet per second. For heavy infestations move injector tip along at one linear foot per second. For closed voids calculate the void's cubic area and treat at the rate of one to five seconds per three cubic feet.	EATING ESTABLISHMENTS FOOD HANDLING AREAS (NONFOOD CONTACT)	spray can no application rate
499-473	Site	#NAME?	Inject 2 to 5 seconds of product per hole.	FENCEROWS/HEDGEROWS	spray can no application rate
499-473	Dosage	Custom	Release approximately one-second of product. For light infestations move injector tip along cracks while treating at the rate of three linear feet per second. For heavy infestations move injector tip along at one linear foot per second. For closed voids calculate the void's cubic area and treat at the rate of one to five seconds per three cubic feet.	FOOD PROCESSING PLANT PREMISES (NONFOOD CONTACT)	spray can no application rate

Reg. No.	Issue Cat.	Description	Custom Description	Site	Max Rate
62719-615	Application Method	Custom	Apply as a cut stump drench.	FOREST PLANTINGS (REFORESTATION PROGRAMS)(TREE FARMS, TREE PLANTATIONS, ETC.)	0.06 lb ai per acre
70506-121	Restrictions	are the specific sites on label.	Conifer and Deciduous Trees: Plantations and Nurseries	FOREST PLANTINGS (REFORESTATION PROGRAMS)(TREE FARMS, TREE PLANTATIONS, ETC.)	do not apply more than 0.24 lb ai /A/yr
100-1320	Restrictions	Custom	Do not use an adjuvant with applications of this product on Fruiting Vegetables, except to chili pepper or pimento.	FRUITING VEGETABLES	0.36 lb ai
100-1238	Dosage	Custom	Apply 1.5 teaspoons over and around each ant hill.	GOLF COURSE TURF	no max rate but use directions 0.06 lb ai per acre
228-526	Restrictions	Custom	Do not apply more than 0.03 lb a.i. (0.125 lb) per acre per cutting for pasture, rangeland and grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03 lb a.i. per acre which have not been cut between applications.	GRASS FORAGE/FODDER/HAY	do not apply more than 0.09 lb ai per acre per season/ do not apply more than 0.03 lb ai per acre per cutting for pastures, rangeland and grasses grown for seed
100-1238	Maximum Number of Applications	Custom	Make no more than 6 general applications per year. More frequent treatments should be limited to spot treatment.	GRASSES GROWN FOR SEED	no max rate but use directions 0.06 lb ai per acre
53883-70	Restrictions	Custom	Do not apply to furniture surfaces or mattresses where people will be laying or sitting.	HOUSEHOLD/DOMESTIC DWELLINGS CONTENTS	can be applied at 21 day intervals if necessary
100-1238	Application Method	Custom	Apply 3 to 5 foot band of granules next to the structure foundation.	HOUSEHOLD/DOMESTIC DWELLINGS OUTDOOR PREMISES	make no more than 6 applications per year
100-1320	Site	are the specific sites on label.	Legume Vegetables: Edible Podded (only); Canavalia ensiformis - jackbean, Canavalia gladiata - sword bean, and Glycine max - soybean (immature seed).	LEGUME VEGETABLES	0.12 lb ai
100-1320	Site	is the specific site on label.	Lettuce (Head and Leaf)	LETTUCE	0.3 lb ai
499-471	Restrictions	Custom	Application of this product in the food areas and/or food processing areas of food handling establishments other than as a spot and/or crack or crevice treatment is not permitted.	MEAT PROCESSING PLANT PREMISES (NONFOOD CONTACT)	spray can no application rate
228-526	Comments	Custom	Spray to control migratory insects which may threaten crops.	NONAGRICULTURAL UNCULTIVATED AREAS/SOILS	do not exceed 0.2 lb ai per acre per year (otherwise follow crop table)
70506-121	Site	Custom	Follow General Use Directions, rates, and spray recommendations found elsewhere in this label for the adjacent crop outlet and target pests.	NONAGRICULTURAL UNCULTIVATED AREAS/SOILS	do not apply more than 0.2 lb ai /A/yr do not graze livestock in treated areas

Reg. No.	Issue Cat.	Description	Custom Description	Site	Max Rate
228-526	Restrictions	Custom	Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.	OATS	do not apply more than 0.06 lb ai per acre per season
56336-51	Application Method	Custom	Hang the device in the trees on a branch that is not likely to break or be pruned before the end of the season. Hang the device in the trees as high as practical. Wear gloves when hanging the device.	OLIVE	hanging device, not max application rate
228-526	Site	Custom	Onion (Bulb) is the specific site on the label.	ONION	do not apply more than 0.24 lb ai per acre per season
70506-120	Site	Custom	Ornamentals in residential landscaped areas and landscaped areas around institutional public, commercial and industrial buildings, parks, recreational areas, and athletic fields (including trees, shrubs, flowers, evergreens, foliage plants and groundcovers) are the specific sites on the label.	Ornamentals	Do not apply more than 0.36 lb of ai per acre per year
100-1238	Dosage	Custom	Apply 1.5 teaspoons (converted to 0.25 ounces) over and around each ant hill.	ORNAMENTAL LAWNS AND TURF	make no more than 6, applications per year, up to 0.06 lb ai per acre per
100-1276	Restrictions	Custom	Do not exceed 0.012 lb a.i. post bloom of lambda-cyhalothrin containing products per acre per growing season.	PECAN	0.12 on label 100-1320
100-1320	Maximum Number of Applications	Custom	Make no more than 4 applications per season.	POME FRUITS	0.2 lb ai
228-526	Restrictions	Custom	Do not apply more than 0.2 lb. a.i. (0.83 lb) per acre per year. Do not apply more than 0.16 lb. a.i. (0.67 lb.) per acre per year post bloom.	POME FRUITS	do not apply more than 0.2 lb ai per acre per year; don't apply more than 0.16 lb ai per acre per year post bloom
70506-120				Turfgrass: for lawns around residential, institutional, public, commercial and industrial buildings, parks, recreation areas and athletic fields+E364	Do not apply more than 0.36 lb of ai per acre per year
70506-121	Restrictions	Custom	Do not use treated rice fields for the aquaculture of edible fish and crustacea.	RICE and wild rice	do not apply more than 0.12 lb ai per acre per season. Do not apply more than 0.8 lb ai within 28n days of harvest or more than 0.04 lb ai within 21 days of harvest
100-1320	Site	are the specific sites on label.	Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem only), Canna (edible), Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen, Ginger, Leren, Sweet Potato, Tanier, Turmeric, and Yam (bean and true).	ROOT AND TUBER VEGETABLES	0.12 lb ai
228-526	Restrictions	Custom	Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.	RYE	0.06 lb ai per acre per season
70506-121	Site	is the specific site on label.	Conifer and Deciduous Trees: Seed Orchards.	SEED ORCHARD TREES	do not apply more than 0.24 lb ai per acre per

Reg. No.	Issue Cat.	Description	Custom Description	Site	Max Rate
					year
70506-121	Maximum Number of Applications	Custom	Do not apply more than 0.02 lb. ai. (2.56 fl. oz. or 0.16 pts. of product) per acre per season once crop is in soft dough stage.	SORGHUM	do not apply more than 0.08 lb ai per acre per season
228-526	Restrictions	Custom	Do not graze or harvest treated soybean forage, straw, or hay for livestock feed.	SOYBEANS (UNSPECIFIED)	0.06 lb ai per acre per season
100-1320	Maximum Number of Applications	Custom	Make no more than 4 applications per season.	STONE FRUITS	0.2 lb ai
70506-121	Site	are the specific sites on label.	Apricot, Chickasaw Plum, Damson Plum, Japanese Plum, Nectarine, Peach, Plum, Plumcot, Prune, and Sweet and Tart Cherry.	STONE FRUITS	do not apply more than 0.2 lb ai per A/yr; do not apply more than 0.16 lb ai per year per acre post bloom
70506-121	Maximum Number of Applications	Custom	Do not apply more than 0.09 lb. ai. (11.52 fl. oz. or 0.72 pts. of product) per acre per season after bloom initiation.	SUNFLOWER	do not apply more than 0.12 lb ai /A/season; don't apply more than 0.09 lb ai /A/season after bloom initiation
228-526	Restrictions	Custom	Do not apply more than 0.12 lb. a.i. (0.5 lb) per acre per season. Do not apply more than 0.09 lb. a.i. (0.375 lb.) per acre per season after bloom initiation.	SUNFLOWER	do not apply more than 0.12 lb ai /A/season; don't apply more than 0.09 lb ai /A/season after bloom initiation
34704-1000	Site	are the specific sites on label.	Tobacco (Air Dried): Burly Tobacco and Flue Cured Tobacco	TOBACCO	100-1320 max rate is 0.09 lb ai
100-1320	Maximum Number of Applications	Custom	Make no more than 4 applications per season.	TREE NUTS	0.16 (or 0.12 lb ai post bloom)
19713-572	Restrictions	Custom	Do not apply more than 0.16 lb. a.i. (20.48 fl. oz) per acre per year. Do not apply more than 0.12 lb. a.i. (15.36 fl. oz.) per acre per year post bloom.	TREE NUTS	same as on 100-1320
228-526	Restrictions	Custom	Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.	TRITICALE	don't apply more than 0.6 lb ai per acre per season
228-526	Restrictions	Custom	Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment. Do not feed treated straw to meat or dairy animals within 30 days after the last treatment.	WHEAT	don't apply more than 0.6 lb ai per acre per season
499-473	Dosage	Custom	Drill holes 8 to 10 inches apart to ensure thorough coverage. Inject 5 to 10 seconds per hole.	WOOD PROTECTION TREATMENT TO BUILDINGS/PRODUCTS INDOOR	spray can no application rate