

**Notice of Proposed and Final Decisions
and Public Reports**

**Volume 2013-39
September 27, 2013**

**Department of Pesticide Regulation
Pesticide Registration Branch**

POST THROUGH OCTOBER 26, 2013

NOTICE OF PROPOSED DECISIONS TO REGISTER PESTICIDE PRODUCTS AND PUBLIC REPORTS

The Director of the Department of Pesticide Regulation (DPR) proposes to register the products listed below under Chapter 2 of Division 7 (beginning with Section 12751 of the Food and Agriculture Code) after **October 26, 2013** and issues this notice and these public reports in accordance with Title 3, California Code of Regulations sections 6253 and 6254. Comments concerning these proposed decisions may be directed to the Pesticide Registration Branch, Department of Pesticide Regulation, P.O. Box 4015, Sacramento, California 95812-4015 until the above date. Contacts regarding this notice should be made to the Pesticide Registration Branch at (916) 445-4400.

Description of the Action – Label Amendments

Tracking Number – (EPA Registration Number)

Applicant / Brand Name

259986 - (71711 - 19)

NICHINO AMERICA, INC.

FUJIMITE 5 EC MITICIDE/INSECTICIDE

USE: INSECTICIDE, MITICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS APPLE RUST MITES, GRAPE MEALYBUGS, AND VARIEGATED LEAFHOPPERS ON VARIOUS CROPS SUCH AS APPLES, COTTON, AND GRAPES

TYPE: SECTION 3 LABEL AMENDMENT - TO ADD CONTROL OF POTATO PSYLLID AND USE ON STONE FRUIT AND POTATOES AND TO REVISE THE DIRECTIONS FOR USE

ACTIVE INGREDIENT(S):

FENPYROXIMATE

CAS NUMBER(S): 134098-61-6

256581 - (100 - 922)

SYNGENTA CROP PROTECTION, LLC

ACTIGARD 50WG PLANT ACTIVATOR

USE: FUNGICIDE, GROWTH REGULATOR - FOR THE CONTROL OF VARIOUS DISEASES SUCH AS DOWNY MILDEW, BLACK ROT, AND SCAB ON CROPS SUCH AS CURCUBITS, COLE CROPS, AND TOBACCO

TYPE: SECTION 3 LABEL AMENDMENT - CONDITIONAL - TO ADD USE ON LOW-GROWING BERRIES

ACTIVE INGREDIENT(S):

ACIBENZOLAR-S-METHYL

CAS NUMBER(S): 135158-54-2

Notice of Proposed Decisions to Register (Continued)

Page 2

258811 - (499 - 320)

WHITMIRE MICRO-GEN RESEARCH LABORATORIES, INC.

CLEAR ZONE DOUBLE IMPACT (FARM FLY SPRAY)

USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS ANTS, BED BUGS, AND BOOKLICE IN SITES SUCH AS HOMES, KENNELS, AND SCHOOLS

TYPE: SECTION 3 LABEL AMENDMENT - TO REVISE ENVIRONMENTAL HAZARDS AND USER SAFETY REQUIREMENTS

ACTIVE INGREDIENT(S):

PERMETHRIN

PIPERONYL BUTOXIDE

PYRETHRINS

CAS NUMBER(S): 52645-53-1, 51-03-6, 121-21-1

260966 - (7969 - 199)

CALIFORNIA VEGETABLE SPECIALTIES INC

PRISTINE FUNGICIDE

USE: FUNGICIDE - TO CONTROL DOWNY MILDEW IN CUCURBIT VEGETABLES

TYPE: SECTION 18 EMERGENCY EXEMPTION - TO CONTROL SCLERONTINIA SCLEROTIUM ON CHICORY ROOT FOR THE PRODUCTION OF BELGIAN ENDIVE

ACTIVE INGREDIENT(S):

BOSCALID

PYRACLOSTROBIN

CAS NUMBER(S): 188425-85-6, 175013-18-0

This is a proposed decision to approve amended labels for certain pesticide products already registered for use in California (project). The amended labels submitted to replace the labels for currently registered products have already been reviewed and accepted by the United States Environmental Protection Agency (U.S. EPA). By law, before these labels can be approved for placement on currently registered products in California to control use, the labels must first be reviewed and accepted by U.S. EPA. The label under which a product is registered in California is controlled by, and must be essentially the same as, the label approved by U.S. EPA. DPR cannot give its final approval for the amended labels until such labels are officially accepted by U.S. EPA.

The products listed and described above are the subject of this registration action and are currently registered in California under labels that allow each product's use only for specific pests and/or at particular types of sites, and only in the manner consistent with the label requirements and instructions. The registrants of these products have now applied to amend the labels for their respective products in California by adding additional uses or types of sites, and/or setting forth additional or different conditions or instructions for use.

Mitigation and Alternatives

DPR evaluated the new labels for their potential to create adverse environmental effects to human health, water, air, and non-target species (checklist). After review of the new labels for the above-identified registered products, DPR has determined that use of each product in a

Notice of Proposed Decisions to Register (Continued)

Page 3

manner consistent with its new label will have no direct or indirect significant adverse environmental impact, and therefore no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment. Cal. Code of Regs., tit. 14, § 15252(a)(2)(B).

If DPR determines that the use of any of the registered products in a manner consistent with the amended label submitted for approval is anticipated to have a significant adverse environmental impact, the only alternative or mitigation to the project of accepting the amended label is to deny approval and maintain the registration of the product under the existing label. However, even if an adverse impact is identified, the registration project can be approved if the Director makes a written determination that the benefit of accepting the amended label in providing an additional pest control option outweighs the risk of a significant adverse environmental impact from allowing use of the product consistent with its requirements (overriding considerations determination). Cal. Code of Regs., tit. 3, § 6158.

In an overriding considerations determination, a discussion of the lack of feasible pest control options, including product alternatives, for one or more of the pest problems for which the product can be used under the amended label may be appropriate to support approval. However, that determination is not being made here as no significant adverse environmental impacts have been identified. Outside an overriding consideration determination, a discussion of product alternatives is irrelevant to a registration project.

If the proposed registration of these products under amended labels is denied (no project alternative), there will be no significant adverse environmental impact anticipated from the lack of additional pest control options. The benefit of accepting amended labels for these currently registered products is that such action may provide additional pest control options for specific pests or use sites allowing the selection of the optimal pest tool for each unique situation; or such action may result in new control measures or requirements on use that decrease the risk of adverse impact on human health and the environment.

†† This product is designated as a California restricted material based upon the increased hazard the active ingredient may pose to human health or the environment. Although the labels submitted for registration include mitigation measures and restrictions that significantly reduce the potential for a significant adverse environmental impact, restricted material products also require a permit to be issued by the local county agricultural commissioner before they can be applied. The local county agricultural commissioner is required to conduct an evaluation before issuing a permit for the use of restricted material products to determine if the specific use at a specific time and location will result in a significant adverse environmental impact. If the evaluation finds that there is a likelihood of a substantial adverse environmental impact, and there is a mitigation measure which will significantly reduce that impact, the permit shall be conditioned on the use of that measure. If, however, no mitigation is possible and there is a feasible alternative that will substantially reduce the environmental impact while still achieving the intended pest management purpose, the permit will be denied.

Notice of Proposed Decisions to Register (Continued)

Page 4

Description of the Action – New Pesticide Products

Tracking Number – (EPA Registration Number)

Applicant / Brand Name

253390 - (8959 - 55)

APPLIED BIOCHEMISTS

HARPOON GRANULAR AQUATIC HERBICIDE

USE: HERBICIDE - FOR THE CONTROL OF VARIOUS WEEDS SUCH AS WATER LETTUCE, WATER HYACINTH, AND ELODEA IN SITES SUCH AS FRESH WATER LAKES, FISH HATCHERIES, AND POTABLE WATER RESERVOIRS

TYPE: SECTION 3 REGISTRATION -

ACTIVE INGREDIENT(S):

COPPER ETHYLENEDIAMINE COMPLEX

CAS NUMBER(S): 13426-91-0

258452 - (432 - 1526)

BAYER ENVIRONMENTAL SCIENCE

HARMONIX INSECT SPRAY

USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS ANTS, BLOW FLIES, AND BED BUGS IN AREAS SUCH AS BASEBOARDS, CORNERS, AND AROUND WATER PIPES IN VARIOUS SITES SUCH AS SCHOOLS, FACTORIES, AND HOSPITALS

TYPE: SECTION 3 REGISTRATION -

ACTIVE INGREDIENT(S):

PYRETHRINS

CAS NUMBER(S): 121-21-1

259216 - (70299 - 7)

BIOSAFE SYSTEMS, LLC

SD DISINFECTANT

USE: ALGAECIDE, BACTERICIDE, DISINFECTANT, FUNGICIDE - FOR THE CONTROL OF VARIOUS ORGANISMS SUCH AS ESCHERICHIA COLI, PSEUDOMONAS AERUGINOSA, AND SALMONELLA ENTERICA ON HARD, NONPOROUS SURFACES IN SITES SUCH AS SCHOOLS, VETERINARY OFFICES, AND RETAIL ESTABLISHMENTS

TYPE: SECTION 3 REGISTRATION -

ACTIVE INGREDIENT(S):

HYDROGEN PEROXIDE

PEROXYACETIC ACID

CAS NUMBER(S): 7722-84-1, 79-21-0

Notice of Proposed Decisions to Register (Continued)

Page 5

258779 - (57787 - 23)

HAVILAND CONSUMER PRODUCTS, INC.

COMBAT 60

USE: ALGAECIDE, BACTERICIDE, FUNGICIDE, MOLLUSCICIDE - FOR THE CONTROL OF ALGAE, BACTERIA, MOLLUSKS, AND FUNGI IN SITES SUCH AS RECIRCULATING AND COOLING WATER SYSTEMS, PAPER MILLS, AND DECORATIVE FOUNTAINS

TYPE: SECTION 3 REGISTRATION -

ACTIVE INGREDIENT(S):

POLY(OXYETHYLENE) (DIMETHYLIMINO) ETHYLENE (DIMETHYLIMINO) ETHYLENE DICHLORIDE

CAS NUMBER(S): 31512-74-0

260303 - (2217 - 976) ††

PBI/GORDON CORPORATION

TZONE SE BROADLEAF HERBICIDE FOR TOUGH WEEDS

USE: HERBICIDE - FOR THE CONTROL OF VARIOUS WEEDS SUCH AS DANDELIONS, CLOVER, AND CHICKWEED IN TURFGRASS

TYPE: SECTION 3 REGISTRATION -

ACTIVE INGREDIENT(S):

2,4-D, ISOOCTYL ESTER

DICAMBA

SULFENTRAZONE

TRICLOPYR, BUTOXYETHYL ESTER

CAS NUMBER(S): 25168-26-7, 1918-00-9, 122836-35-5, 64700-56-7

This is a proposed decision to register certain pesticide products that already have been registered by U.S. EPA or for which federal registration is pending, under the specific labels that are now submitted for registration in California (project). The products listed and described above are the subject of this registration action and contain active ingredients already found in currently registered products, but may have different combinations and/or percentages of total ingredients, and/or be for different pests and/or types of sites. By law, all of these products must first be registered under a label approved by U.S. EPA before they can be registered for use in California. The label under which the product is registered in California is controlled by, and must be essentially the same as, the label approved by U.S. EPA. DPR cannot give its final approval for registration in California until the products are officially registered by U.S. EPA.

Mitigation and Alternatives

DPR evaluated these proposed products for their potential to create adverse environmental effects to human health, water, air, and non-target species (checklist). DPR's review of this project, the registration of the above-identified products, has determined that use of each of these products in a manner consistent with its U. S. EPA-approved labeling will have no direct or indirect significant adverse environmental impact, and therefore no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment. Cal. Code of Regs., tit. 14, § 15252(a)(2)(B).

Notice of Proposed Decisions to Register (Continued)

Page 6

If DPR determines that the use of any product proposed for registration in a manner consistent with its U.S. EPA-approved label is anticipated to have a significant adverse environmental impact, the only alternative or mitigation to the project of registering the product under the label presented is to deny registration. However, even if an adverse impact is identified, the registration project can be approved if the Director makes a written determination that the benefit of registering the product in providing an additional pest control option outweighs the risk of a significant adverse environmental impact from its use (overriding considerations determination). Cal. Code of Regs., tit. 3, §6158.

In an overriding considerations determination, a discussion of the lack of feasible pest control options, including product alternatives, for one or more of the pest problems targeted by a particular product, may be appropriate to support registration. However, that determination is not being made here as no significant adverse environmental impacts have been identified. Outside an overriding consideration determination, a discussion of product alternatives is irrelevant to a registration project.

If the proposed registration of any of these products is denied (no project alternative), there will be no significant adverse environmental impact anticipated from the lack of additional pest control options. The benefit of registering these products is that they provide additional pest control options for each specific proposed use, allowing the selection of the optimal pest tool for each unique situation.

†† This product is designated as a California restricted material based upon the increased hazard the active ingredient may pose to human health or the environment. Although the labels submitted for registration include mitigation measures and restrictions that significantly reduce the potential for a significant adverse environmental impact, restricted material products also require a permit to be issued by the local county agricultural commissioner before they can be applied. The local county agricultural commissioner is required to conduct an evaluation before issuing a permit for the use of restricted material products to determine if the specific use at a specific time and location will result in a significant adverse environmental impact. If the evaluation finds that there is a likelihood of a substantial adverse environmental impact, and there is a mitigation measure which will significantly reduce that impact, the permit shall be conditioned on the use of that measure. If, however, no mitigation is possible and there is a feasible alternative that will substantially reduce the environmental impact while still achieving the intended pest management purpose, the permit will be denied.

Notice of Proposed Decisions to Register (Continued)

Page 7

Description of the Action – New Pesticide Products Containing New Active Ingredients

Tracking Number – (EPA Registration Number)

Applicant / Brand Name

249636 - (84059 - 15)

MARRONE BIO INNOVATIONS

ZEQUANOX

USE: MICROBIAL, MOLLUSCICIDE - FOR BIOLOGICAL QUAGGA AND ZEBRA
MUSSEL CONTROL

TYPE: SECTION 3 REGISTRATION - CONDITIONAL

ACTIVE INGREDIENT(S):

PSEUDOMONAS FLUORESCENS CL 145A STRAIN TOXINS

CAS NUMBER(S): (NO CAS NUMBER)

This is a proposed decision to register certain pesticide products that contain a new active ingredient not found in any currently registered product in California (project). These products have already been registered by U. S. EPA or have a federal registration pending under the specific labels that are now submitted for registration in California. By law, all of these products must first be registered under a label approved by U.S. EPA before they can be registered for use in California. The label under which the product is registered in California is controlled by, and must be essentially the same as, the label approved by U.S. EPA. DPR cannot give its final approval for registration in California until the products are officially registered by U.S. EPA.

Mitigation and Alternatives

DPR evaluated these proposed products and their new active ingredient for their potential to create adverse environmental effects to human health, water, air, and non-target species (checklist). DPR's review of this project, the registration of certain pesticide products containing a new active ingredient, has determined that use of these products in a manner consistent with its labeling will have no direct or indirect significant adverse environmental impact and therefore no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment. Cal. Code of Regs., tit. 14, § 15252(a)(2)(B).

If DPR determines that the use of any product proposed for registration in a manner consistent with its U.S. EPA-approved label is anticipated to have a significant adverse environmental impact, the only alternative or mitigation to the project of registering the product under the label presented is to deny registration. However, even if an adverse impact is identified, the registration project can be approved if the Director makes a written determination that the benefit of registering the product in providing an additional pest control option outweighs the risk of a significant adverse environmental impact from its use (overriding considerations determination). Cal. Code of Regs., tit. 3, § 6158.

In an overriding considerations determination, a discussion of the lack of feasible pest control options, including product alternatives, for one or more of the pest problems targeted by a

Notice of Proposed Decisions to Register (Continued)

Page 8

particular product, may be appropriate to support registration. However, that determination is not being made here as no significant adverse environmental impacts have been identified. Outside an overriding consideration determination, a discussion of product alternatives is irrelevant to a registration project.

If the proposed registration of any of these products is denied (no project alternative), there will be no significant adverse environmental impact anticipated from the lack of additional pest control options. The benefit of registering these products is that they provide additional pest control options for each specific proposed use, allowing the selection of the optimal pest tool for each unique situation.

†† This product is designated as a California restricted material based upon the increased hazard the active ingredient may pose to human health or the environment. Although the labels submitted for registration include mitigation measures and restrictions that significantly reduce the potential for a significant adverse environmental impact, restricted material products also require a permit to be issued by the local county agricultural commissioner before they can be applied. The local county agricultural commissioner is required to conduct an evaluation before issuing a permit for the use of restricted material products to determine if the specific use at a specific time and location will result in a significant adverse environmental impact. If the evaluation finds that there is a likelihood of a substantial adverse environmental impact, and there is a mitigation measure which will significantly reduce that impact, the permit shall be conditioned on the use of that measure. If, however, no mitigation is possible and there is a feasible alternative that will substantially reduce the environmental impact while still achieving the intended pest management purpose, the permit will be denied.

Description of the Action – California Only Products

Tracking Number – (EPA Registration Number)

Applicant / Brand Name

259952 - (NO NUMBER ASSIGNED)

ECO-PAK, LLC

ECO-PAK 1031-MSO

USE: ADJUVANT - FOR USE AS AN ADJUVANT

TYPE: CALIFORNIA ONLY REGISTRATION –

258607 - (75199 - 50001)

JERSEY STATION

JERSEY STATION HYDROCHLORIC ACID 31%

USE: ADJUVANT - FOR USE AS AN ADJUVANT

TYPE: CALIFORNIA ONLY REGISTRATION -

This is a proposed decision to register certain products defined by California law as being a pesticide requiring California registration, but are not considered to be pesticides under federal law or required to be registered with U.S. EPA (project). The products listed above are the subject of this registration action and either meet the definition of a spray adjuvant as defined in

Notice of Proposed Decisions to Register (Continued)

Page 9

Food & Agricultural Code section 12758; meet the definition of a structural pest control device as defined in Food & Agricultural Code section 15300; or have been designated minimum risk pesticides that do not require federal registration under Title 7, United States Code, section 136w(b)(2) and 40 Code of Federal Regulations, section 152.25(f). The registrants of these products have now applied to register these products in California.

Mitigation and Alternatives

DPR evaluated these proposed products for their potential to create adverse environmental effects to human health, water, air, and non-target species (checklist). DPR's review of this project has determined that use of these products in a manner that does not conflict with their labels will have no direct or indirect significant adverse environmental impact and therefore no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment. Cal. Code of Regs., tit. 14, § 15252(a)(2)(B).

If DPR determines that the use of any product proposed for registration in a manner consistent with its label is anticipated to have a significant adverse environmental impact, the only alternative or mitigation to the project of registering the product under the label presented is to deny registration. However, even if an adverse impact is identified, the registration project can be approved if the Director makes a written determination that the benefit of registering the product in providing an additional pest control option outweighs the risk of a significant adverse environmental impact from its use (overriding considerations determination). Cal. Code of Regs., tit. 3, § 6158.

In an overriding considerations determination, a discussion of the lack of feasible pest control options, including product alternatives, for one or more of the pest problems targeted by a particular product, may be appropriate to support registration. However, that determination is not being made here as no significant adverse environmental impacts have been identified. Outside an overriding consideration determination, a discussion of product alternatives is irrelevant to a registration project.

If the proposed registration of any of these products is denied (no project alternative), there will be no significant adverse environmental impact anticipated from the lack of additional pest control options. The benefit of registering these products is that they provide additional pest control options for each specific proposed use, allowing the selection of the optimal pest tool for each unique situation.

Continuous Evaluation

All products proposed for registration here are subject a continuous evaluation under Food and Agricultural Code section 12824 to identify and evaluate any potential significant adverse environmental impact that may be indicated after the initial registration. Following the process outlined in Title 3, California Code of Regulations sections 6220 through 6224, action may be taken to cancel the registration under Food and Agricultural Code section 12825.

September 27, 2013

Original Signed by Ann Prichard

Dated

Ann M. Prichard, Branch Chief
Pesticide Registration Branch

POST THROUGH OCTOBER 26, 2013

**NOTICE OF FINAL DECISIONS TO REGISTER PESTICIDE PRODUCTS
AND WRITTEN EVALUATION**

Pursuant to Title 3, California Code of Regulations section 6255, the Director of the Department of Pesticide Regulation (DPR), files this Notice of Final Decisions to Register Pesticide Products with the Secretary of the Resources Agency for posting. For products conditionally registered pending the submission of specific data, the Director found that the use of the products during the time period(s) while the data are being developed is not expected to cause any significant adverse effect on the environment; there is a clear need for the products in California while the data are being developed; and that the benefits of using the products outweigh risks to human health and the environment. Conditional registration cannot be granted unless all the data required by Title 3, California Code of Regulations section 6200 and the other requirements of that section are satisfied. This notice must remain posted for a period of 30 days for public inspection. Contacts regarding this notice should be made to the Department of Pesticide Regulation's Pesticide Registration Branch at (916) 445-4400.

Tracking Number – (EPA Registration Number)
Applicant / Brand Name

258539 - (1258 - 1337)
ARCH CHEMICALS, INC.
HTH EXTENDED SKIMMER STICKS
USE: ANTIMICROBIAL, DISINFECTANT - FOR USE IN THE DISINFECTION OF SWIMMING POOL WATER IN SKIMMERS, FLOATERS, AND FEEDERS
TYPE: SECTION 3 REGISTRATION -
ACTIVE INGREDIENT(S):
TRICHLORO-S-TRIAZINETRIONE
CAS NUMBER(S): 87-90-1

257736 - (1258 - 841)
ARCH CHEMICALS, INC.
ZINC OMADINE FPS AQUEOUS DISPERSION INDUSTRIAL BACTERICIDE & FUNGICIDE
USE: BACTERICIDE, FUNGICIDE - FOR USE IN THE FORMULATION OF ANTIFOULANT PAINTS
TYPE: SECTION 3 LABEL AMENDMENT - TO REVISE THE STORAGE AND DISPOSAL STATEMENT AND DIRECTIONS FOR THE PRESERVATION OF FOAM
ACTIVE INGREDIENT(S):
ZINC 2-PYRIDINETHIOL-1-OXIDE
CAS NUMBER(S): 13463-41-7

Notice of Final Decisions to Register (Continued)

Page 2

256203 - (9804 - 1)

BIO-CIDE INTERNATIONAL, INC.

OXINE AD

USE: DISINFECTANT, FUNGICIDE - TO DISINFECT HARD, NONPOROUS SURFACES SUCH AS WALLS, FLOORS, AND CEILINGS

TYPE: SECTION 3 LABEL AMENDMENT - TO ADD USE IN HOSPITALS, LABORATORIES, MORGUES, AND INSTITUTIONS

ACTIVE INGREDIENT(S):

CHLORINE DIOXIDE

CAS NUMBER(S): 10049-04-4

256236 - (9804 - 9)

BIO-CIDE INTERNATIONAL, INC.

PROOXINE

USE: DISINFECTANT - FOR THE CONTROL OF MOLD AND SLIME FOAMING BACTERIA IN SITES SUCH AS FOOD PROCESSING PLANTS, COMMERCIAL WATER FILTRATION SYSTEMS, AND ICE MAKING PLANTS AND MACHINERY

TYPE: SECTION 3 LABEL AMENDMENT - TO REVISE THE DIRECTIONS FOR USE AND PRECAUTIONARY STATEMENTS

ACTIVE INGREDIENT(S):

CHLORINE DIOXIDE

CAS NUMBER(S): 10049-04-4

259951 - (73427 - 50001)

ECO-PAK, LLC

EP BASE OIL PLUS

USE: ADJUVANT - FOR USE AS AN ADJUVANT

TYPE: CALIFORNIA ONLY REGISTRATION -

258529 - (84059 - 3 - 87865)

ENGAGE AGRO USA, LLC

REGALIA PTO BIOFUNGICIDE

USE: FUNGICIDE - FOR THE CONTROL OF VARIOUS DISEASES SUCH AS DOWNY MILDEW, RUST, AND DOLLAR SPOT ON HERBACEOUS AND WOODY ORNAMENALS AND TURFGRASSES

TYPE: SECTION 3 SUBREGISTRATION -

ACTIVE INGREDIENT(S):

REYNOUTRIA SACHALINENSIS

CAS NUMBER(S): (NO CAS NUMBER)

Notice of Final Decisions to Register (Continued)

Page 3

248748 - (59639 - 150)

VALENT U.S.A. CORPORATION

BELAY INSECTICIDE

USE: INSECTICIDE - FOR THE CONTROL OF VARIOUS INSECTS SUCH AS APHIDS, LEAFHOPPERS, AND STINKBUGS ON VARIOUS CROPS SUCH AS BROCCOLI, CABBAGE, AND BRUSSELS SPROUTS

TYPE: SECTION 3 LABEL AMENDMENT - TO ADD USE ON RICE

ACTIVE INGREDIENT(S):

CLOTHIANIDIN

CAS NUMBER(S): 205510-53-8

Written Evaluation

Pursuant to Title 3, California Code of Regulations section 6254, this notice includes a written evaluation of significant environmental points raised in comments submitted during the review and comment period required by Title 3, California Code of Regulations section 6253 for any of the products listed above.

DPR received comments from Mr. Gregory C. Loarie of Earthjustice, California Office, on behalf of the Pesticide Action Network North America, the American Bird Conservancy, VernalPools.org, and the Center for Food Safety and others raising environmental points in response to DPR's March 1, 2013 posting of a proposed decision to register Valent U.S.A. Corporation's (Valent's) product, Belay® Insecticide, EPA Reg. No. 59639-150-AA, to add a supplemental label for use on rice. Belay is a neonicotinoid insecticide containing the active ingredient clothianidin. DPR has evaluated these comments and provided a comprehensive response that is included with this notice. A summary of the points raised and DPR's responses is provided below.

COMMENT: The commenters expressed concern that use of the product on rice will have significant adverse impacts on the environment. Specifically, the product would adversely impact pollinators, aquatic invertebrates, and waterfowl.

RESPONSE: Valent initially submitted an application to DPR to amend their current Belay Insecticide label to add use on rice for the control of aphids, billbugs, chinch bugs, greenbugs, leafhoppers, rice seed midge, rice water weevil (RWW), sharpshooters, stinkbugs, and thrips. On May 2, 2013, Valent revised its proposed label limiting use of Belay on rice to the control of RWW and the suppression of rice seed midge. The product is intended for use as a pre- or post-flood treatment, and requires a water holding period of at least 14 days before the water can be discharged from the rice field.

Data indicate that the active ingredient in Belay Insecticide, clothianidin, is toxic to mysid shrimp and honeybees, slightly toxic to aquatic invertebrates like water fleas, moderately toxic to birds, and relatively non-toxic to fish and clams. The persistence of clothianidin on terrestrial systems is well-documented. However, when clothianidin is applied to a flooded rice field or a rice field that will shortly be flooded, it becomes an open, shallow, aqueous environment where

Notice of Final Decisions to Register (Continued)

Page 4

the compound will break down quickly. Moreover, the high water solubility of clothianidin makes it susceptible to photo-degradation in the water column. Since the compound breaks down rapidly in water and rice field water is required to be held on the field for at least 14 days, DPR expects very little of the applied clothianidin to be discharged into adjacent waterways. In other words, although clothianidin is toxic to aquatic invertebrates, invertebrate organisms in downstream waterways, including threatened and protected species in vernal pools, would not be exposed to toxic clothianidin residues. Just as the use of Belay is not expected to have an impact on aquatic invertebrates, it is not expected to have an adverse impact on ducks and other waterfowl that rely on such organisms for a substantial portion of their food supply.

With regard to the concerns about pollinators, the Belay label prohibits application to blooming, pollen-shedding or nectar-producing parts of plants. Rice blooms and sheds pollen from mid-July through mid-August, three months after any potential application of Belay would occur. As a result, direct exposure to bees attracted to rice blooms to gather pollen treated with Belay is not a concern. Further, there is no evidence that rice pollen would contain significant amounts of clothianidin as a result of applications made long before rice blooms and/or sheds pollen. Bee exposure from foraging on crops adjacent to rice fields, such as almonds or plums, is also unlikely. Almond flowering, the prime time for pollinator foraging, occurs between mid-February to mid-March. Applications of Belay, if necessary, would take place between mid-April and the end of May. As a result, almond and stone fruit crops have already bloomed prior to the time that Belay applications to rice would take place. Further, the Belay product label specifically addresses the issue of drift, stating, “*Do not allow this product to drift onto neighboring crops or non-crop areas....*” Therefore, it would be illegal for applicators to allow Belay to drift onto neighboring crops where bees may be foraging.

DPR performed a thorough scientific analysis of the addition of use on rice to the Belay® Insecticide label and all comments received. DPR has determined that all identified potential adverse environmental effects associated with the use of the product have been mitigated and that the product’s label instructions provide the necessary environmental protections. Therefore, DPR is proceeding with acceptance of the supplemental label for Belay® Insecticide to allow use on rice.

COMMENT: The commenters expressed concern that DPR failed to identify and evaluate alternatives to the registration action of amending the Belay label to add use on rice.

RESPONSE: Under section 6254 of title 3 of the California Code of Regulations, DPR’s certified regulatory program requires a statement of reasonable alternatives to the proposed action to reduce any significant adverse environmental impact that could reasonably be expected to occur from the registration action. DPR has determined that the registration action of amending the Belay label to add use on rice would not cause a significant adverse change in the environment, and as a result, no alternatives to the registration action are proposed. The Director, however, when making a decision whether or not to register a product, may consider whether a substantial adverse environmental impact could occur from the lack of pest control options (availability of feasible alternatives) for the proposed use of the product. *See* Cal. Code of Regs., tit. 3, § 6158. Although the lack of additional feasible alternatives to control rice seed midge and

Notice of Final Decisions to Register (Continued)

Page 5

rice water weevil could have an economic impact on the rice industry, DPR has determined that it would not cause a significant adverse environmental impact.

September 27, 2013

Dated

Original Signed by Ann Prichard

Ann Prichard, Branch Chief
Pesticide Registration Branch

POST THROUGH OCTOBER 26, 2013

NOTICE OF PROPOSED DECISIONS TO DENY PESTICIDE PRODUCTS

Pursuant to Title 3, California Code of Regulations section 6253, the Director of the Department of Pesticide Regulation (DPR), notices the Department's proposed decisions to deny the registration of the following pesticide products. Unless specified, the reason for denial is that the required data was not submitted, was determined to be inadequate, or there was a likelihood of a significant adverse environmental effect anticipated from the use of these products in a manner consistent with its label. This action will not have a significant adverse impact on the environment. Interested persons may comment on these proposed decisions up to and including the date shown on the top line of this notice to the Pesticide Registration Branch, Department of Pesticide Regulation, P.O. Box 4015, Sacramento, California 95812-4015. Contacts regarding this notice should be made to the Pesticide Registration Branch at (916) 445-4400.

Tracking Number – (EPA Registration Number)
Applicant / Brand Name

258188 - (5383 - 117)
TROY CHEMICAL CORPORATION
POLYPHASE 612
USE: ANTIMICROBIAL, FUNGICIDE - FOR INDUSTRIAL USE ONLY TO CONTROL
FUNGI IN WOOD COMPOSITE, PLASTIC, AND PAINT PRODUCTS
TYPE: SECTION 3 REGISTRATION -
ACTIVE INGREDIENT(S):
3-IODO-2-PROPYNYL BUTYLCARBAMATE
CAS NUMBER(S): 55406-53-6

September 27, 2013

Original Signed by Ann Prichard

Dated

Ann Prichard, Branch Chief
Pesticide Registration Branch

POST THROUGH OCTOBER 26, 2013

NOTICE OF FINAL DECISIONS TO DENY PESTICIDE PRODUCTS

Pursuant to Title 3, California Code of Regulations section 6255, the Director of the Department of Pesticide Regulation (DPR) files this Notice of Final Decisions to Deny Pesticide Products with the Secretary of the Resources Agency for posting. Unless specified, the reason for denial is that the required data was not submitted, was determined to be inadequate, or there was a likelihood of a significant adverse environmental effect anticipated from the use of these products in a manner consistent with its label. This action will not have a significant adverse impact on the environment. This notice must remain posted for a period of 30 days for public inspection. Contacts regarding this notice should be made to the Department of Pesticide Regulation's Pesticide Registration Branch at (916) 445-4400.

Tracking Number – (EPA Registration Number)
Applicant / Brand Name

None to report this issue Volume 2013-39.

September 27, 2013

Dated

Original Signed by Ann Prichard

Ann Prichard, Branch Chief
Pesticide Registration Branch



Brian R. Leahy
Director

Edmund G. Brown Jr.
Governor

September 13, 2013

Mr. Gregory C. Loarie, Staff Attorney
Earthjustice, California Office
50 California Street, Suite 500
San Francisco, California 94111

Dear Mr. Loarie:

Thank you for your March 28, 2013, comments on behalf of the Pesticide Action Network North America, the American Bird Conservancy, VernalPools.org, and the Center for Food Safety expressing concern regarding the Department of Pesticide Regulation's (DPR's) proposed decision to accept Valent U.S.A. Corporation's (Valent's) application to amend the label of its registered product, Belay Insecticide, EPA Registration No. 59639-150-AA (Belay), to add a supplemental label for use on rice. Belay is a neonicotinoid insecticide containing the active ingredient, clothianidin.

Specifically, your comments express concern that approving the amendment to add the supplemental label will have significant adverse effects on honeybees and other pollinators, water quality, aquatic invertebrates, and waterfowl. Additionally, your comments state that DPR's proposal is contrary to California law in numerous respects. You urge DPR to withdraw its proposed decision and to decline to register Belay for use on rice.

Product Background

DPR first registered Valent's Belay on January 20, 2009. Belay is currently registered with DPR for use on numerous sites/crops including: cotton, fruiting vegetables, cucurbit vegetables, leafy vegetables, soybeans, corn and tuberous vegetables, figs, grapes, peaches, pome fruit, pomegranates, and tree nuts. The product is labeled for the control of various pests including aphids, leaf hoppers, psyllids, white fly, flea beetle, lygus, weevil, borer, wireworm, Oriental fruit moth, and codling moth.

On September 19, 2011, Valent submitted an application to amend the Belay label. This amendment proposed to add use on rice for the control of aphids, billbugs, chinch bugs, greenbugs, leafhoppers, rice seed midge, rice water weevil (RWW), sharpshooters, stinkbugs, and thrips. On May 2, 2013, Valent provided DPR with a revised label limiting use of Belay on rice to only the suppression of rice seed midge and the control of RWW. The product is intended for use as a pre- or post-flood treatment, and requires a water holding period of at least 14 days before discharging water from the field.



Valent's request to amend the Belay label to add use on rice was evaluated by DPR scientists from the following evaluation stations: chemistry, efficacy, phytotoxicity, fish and wildlife, and the Environmental Monitoring Branch's (EM's) Surface Water Protection Program (SWPP). DPR's biologists in the fish and wildlife evaluation station found that clothianidin is extremely toxic to mysid shrimp, highly toxic to honeybees, slightly toxic to aquatic invertebrates like water fleas, moderately toxic to birds, and relatively non-toxic to fish and clams. The Environmental Hazard statement on the Belay container label notes that the product is toxic to aquatic invertebrates. The Environmental Hazard statement prohibits application of the product when weather conditions favor drift from treated areas, and notes that drift and runoff may be hazardous to aquatic organisms in neighboring areas. The Environmental Hazard statement also prohibits application to areas where surface water is present or to intertidal areas below the mean high water mark. In addition, the label's Environmental Hazard statement notes that the product is toxic to bees exposed to treatment and for more than five days following treatment, and prohibits application to blooming, pollen-shedding, or nectar-producing parts of plants if bees may forage on the plants during this time period. DPR has determined that the label's Environmental Hazards statement combined with other label mitigation measures mitigate the potential hazards to non-target organisms from the use of Belay on rice.

The product label also bears a Spray Drift Management statement that prohibits applications that would allow this product to drift onto neighboring crops or non-crop areas. The label's Spray Drift Management statement also notes that the applicator is responsible for employee practices that will minimize spray drift at the application site, that the interaction of many equipment and weather related factors determine the potential for spray drift, and that the applicator is responsible for considering all these factors when making application decisions.

The proposed supplemental label to add use on rice additionally specifies:

- *Do not apply more than 0.075 lb. ai/A as a foliar treatment per year.*
- *Regardless of the application method, do not apply more than 0.2 lb. active ingredient clothianidin/A/year.*
- *Do not apply Belay Insecticide after third tillering has initiated.*
- *Do not use Belay Insecticide treated rice fields for the aquaculture of edible fish and crustaceans.*
- *Belay Insecticide is not to be used on rice crops that contain or support crawfish or any form of aquaculture operation.*
- *Belay Insecticide is not to be used on rice crops near fish farms, shrimp, prawn or crab pond (or nursery) operations – particularly when weather conditions are conducive to drift. Exercise caution with air and ground applications near those operations to avoid product drift.*

In addition to DPR's biologists in the fish and wildlife station, scientists in EM's SWPP also evaluated the proposed Belay label amendment. In an EM evaluation memorandum dated

February 7, 2013, it was noted that the results of the surface water model (Luo and Deng, 2011a/b) indicated support for the amendment to the Belay product label, but expressed some concern about potential impacts of the product's use. After receiving Earthjustice's letter dated March 28, 2013, EM reevaluated all available data because it appeared that there were some inconsistencies in the data input and output generated by the SWPP model.

On April 5, 2013, EM issued a second evaluation memorandum which reviewed data input and re-simulated the SWPP model for Belay and its clothianidin active ingredient (enclosed). Subsequent to the reevaluation, SWPP staff reaffirmed its original recommendation to support the label amendment to add rice as a new use in California. While the data does indicate that clothianidin is stable in soils, aquatic photolysis data indicate that clothianidin has a half-life of 0.138 day in water. An aquatic field dissipation study conducted in a Northern California rice field showed that the field dissipation half-life of clothianidin ranged from 2.06 to 2.62 days. This range is much lower than the chemical's terrestrial field dissipation half-life cited as a concern in the initial memorandum. The chemical's aquatic field dissipation half-life is what is relevant to use of the product in rice where the field will be flooded after application of the product or the product will be applied to a field that is already flooded.

Rice Production/Pest Control Practices in California

In the Sacramento Valley, rice is grown on approximately 500,000 acres. The proposed label amendment for Belay would allow the product to be used on rice only to control rice seed midge and RWW. If needed, insecticide applications to control these pests usually occur between mid-April to the end of May.

The RWW, *Lissorhoptus oryzophilus*, is the most serious invertebrate pest of California rice. Adult RWWs feed on the emerging leaves of the rice plant. While feeding, the adult RWW lays eggs in the rice sheaths of plants with two to six leaves. The eggs hatch in five to seven days. The first instar feed on the leaf tissue for a few days and then drop down through the water and soil to feed on rice roots, where significant damage can occur. Generally, the heaviest infestations and the most serious damage occurs within 15 to 20 feet if the margins of the fields and levees; but, moderate damage can occur in areas 20 to 35 feet from levees.

The rice industry relies on both chemical and cultural controls to manage RWW. Between the late 1970s and 2000, chemical control of RWW relied on carbofuran. With the cancellation of carbofuran and methyl parathion for use in rice, pyrethroids have become the most significant insecticide in California on rice. There have been anecdotal reports from rice growers of resistance to pyrethroids. Insecticides currently available for RWW control include lambda-cyhalothrin (pyrethroid), zeta-cypermethrin (pyrethroid), and diflubenzuron (insect growth regulator). These products control RWW adults by disrupting their life cycles, but have no toxicity against RWW larvae, which is the primary cause of damage. These products would be applied between mid-April to the end of May, the same application time period as Belay.

From seedling to the four-to-five leaf stage (two weeks after planting - April/May), three additional pests can cause considerable harm to rice: tadpole shrimp, crayfish, and rice seed midge. The rice seed midge can hinder seedling establishment. Upon flooding a field, thousands of adult seed midges arrive in a swarm and deposit eggs on the water surface. The eggs hatch in one to two days and the larvae feed on rice seeds and seedlings, as well as on algae. They often destroy the seed before it can germinate in the water.

Rice fields consist of large acreage divided into smaller fields known as checks. Keeping the rice checks small allows for better water management and more direct pesticide application. The area separating each check is a berm/levee made from compacted soil. As noted above, most RWW damage occurs within 20 feet of the berm; with moderate damage occurring 20 to 35 feet from levees. In general, insecticides are applied by ground within 40 to 50 feet from the levee and aerial applications are made within approximately 30 feet of the levees. Thus, if insecticides are used, they are only applied to a limited portion of any given rice field. For control of the RWW and rice seed midge, these applications would be made shortly before or after the field is flooded up to the four to five leaf stage.

Response to Comments

Comment: DPR's Proposal will have Significant Adverse Impacts on the Environment

Your letter states that DPR's proposed decision to accept the amendment to add rice to the Belay Insecticide label will have significant adverse effects on the environment. You state that there is abundant scientific evidence that registering Belay for foliar applications on rice will have significant adverse impacts on the environment.

1. Impacts to Pollinators

Your letter states that the evidence is overwhelming, and that neonicotinoids, including clothianidin, are acutely and chronically toxic to honeybees and other pollinators. You also state that there is increasing evidence that neonicotinoids are contributing to the honeybee "colony collapse disorder" crisis. Bee pollination of agricultural crops is estimated to account for about one-third of the U.S. diet. Unlike many crops, rice is wind-pollinated and does not rely on bees. However, you state that scientists have found that bees often collect and consume pollen from rice and other wind pollinated crops. Based on this information, you state that foliar applications of clothianidin to rice are likely to have a significant direct adverse impact on honeybees and other pollinators.

You also mention that numerous crops that depend upon bees for pollination are grown in close proximity to rice fields in the Sacramento Valley. Almonds were specifically mentioned. The concern is that aerial and ground applications of Belay to rice in the Sacramento Valley will result in significant drift of the pesticide onto nearby almond and

plum orchards and adversely impact pollinators. In addition, the Sacramento Valley is home to a number of honeybee queen-rearing operations that provide queens for beekeepers all over California and the U. S.

DPR Response: DPR's fish and wildlife evaluation station carefully considered the request to register Belay, containing clothianidin, for use on rice. This review focused on the toxicity of Belay to non-target organisms, including possible adverse effects on honeybees. Due to data indicating that neonicotinoids can be acutely toxic to honeybees and other pollinators, the Belay label prohibits application to blooming, pollen-shedding or nectar-producing parts of plants. While there is scientific data that neonicotinoids can be acutely toxic to honeybees, DPR does not have definitive data confirming that neonicotinoids are contributing to "colony collapse disorder."

Rice is a self-pollinated crop. Unlike corn, a cross-pollinated crop, rice does not rely on wind or insects for pollination. Rice blooms and sheds pollen from mid-July through mid-August, three months after any potential application of Belay would occur. As a result, direct exposure to bees attracted to rice blooms to gather pollen treated with Belay is not a concern.

Further, there is no evidence that rice pollen would contain significant amounts of clothianidin as a result of applications made long before rice blooms and/or sheds pollen, nor is there evidence that bees actually forage on rice. The Lin et al study (Lin et al, 1993), which was conducted in the mixed agronomic environment in Taiwan, reported that only 6 percent of the pollen load removed by foragers was rice pollen. The low percentage is likely due to the small size of rice pollen, which may have been picked up by wind and become attached to bees as they fly through the air. This is in contrast to the situation in the corn growing regions of the U.S. where up to 82 percent of the pollen removed by returning foragers was corn pollen (Krupke et al, 2012).

Bee exposure from foraging on crops adjacent to rice fields, such as almonds or plums, is also unlikely. Almond flowering, the prime time for pollinator foraging, occurs between mid-February to mid-March. As stated above, applications of Belay, if necessary, would be made between mid-April and the end of May. As a result, almond and stone fruit crops have already bloomed prior to the time that Belay applications to rice would take place. This minimizes any risk that drift from a Belay application would impact bees foraging on those crops. In fact, clothianidin is registered for use on stone fruits, but prohibited to use during bloom. Further, the Belay product label specifically addresses the issue of drift, stating, "*Do not allow this product to drift onto neighboring crops or non-crop areas....*" Therefore, it would be illegal for applicators to allow Belay to drift onto neighboring crops where bees may be foraging.

In addition, under the Apiary Protection Act passed in 1987 (Food and Agricultural Code sections 29000-29321), DPR implemented regulatory provisions that provide a mechanism for beekeepers to protect their operations from pesticides toxic to bees. Title 3, California Code of Regulations, sections 6650-6656, established a beekeeper notification system. Under the

notification program, beekeepers register with the county agricultural commissioner and may request to be notified of any application of a pesticide toxic to bees within one mile of their operation. Persons intending to apply any pesticide toxic to bees to a blossoming plant must, prior to the application, ask their local county agricultural commissioner if there are any beekeepers with apiaries within one mile of the application site that have requested notice. If there is a request for notification, the applicator must provide at least 48 hours advance notice to the beekeeper(s) of the time and place the application is to be made, the crop and acreage to be treated, the method of application, the identity and dosage rate of the application to be applied, and how the person performing pest control may be contacted by the beekeeper. Further, application of these pesticides, with minor exceptions, are prohibited during the time citrus is blooming in Fresno, Kern, and Tulare counties.

Based upon the above information, DPR has determined that foliar applications of clothianidin to rice to control RWW and rice seed midge are not likely to have a significant direct or indirect adverse impact on honeybees and other pollinators.

In addition, by letter dated May 2, 2013, the California Rice Commission (CRC) informed DPR that if Belay is approved on rice, the CRC plans to contact beekeepers and rice growers in California rice growing areas and develop best management practices for rice growers and pesticide applicators. The CRC further informed DPR that it has already reached out to Dr. Eric Mussen, Extension Apiculturist, University of California at Davis, to aid in this process.

2. Impacts to Aquatic Invertebrates

Your letter expresses concern that clothianidin is water soluble, extremely persistent, and highly toxic to aquatic invertebrates. As a result, you argue that Belay use on rice has a great potential to result in significant adverse impacts to the aquatic environment. Specifically, you refer to invertebrates in the rice fields and in the downstream waterways that receive water discharged from rice fields. Your letter also expresses concern that the use of clothianidin on rice in the Sacramento Valley will have an adverse impact on several species of imperiled and federally protected aquatic invertebrates that inhabit vernal pool ecosystems in the Sacramento Valley.

DPR Response: The persistence of clothianidin on terrestrial systems is well-documented. However, when clothianidin is applied to a flooded rice field or a rice field that will shortly be flooded, it becomes an open, shallow, aqueous environment where the compound will break down quickly. This is supported by the submitted aqueous photolysis which indicates a half-life of 0.138 day or less than 4 hours. In addition, a Northern California field dissipation study, which factors in actual environmental conditions, showed an aqueous half-life of about two days for rice-cultivated fields and about two and a half days for non-cultivated fields. Moreover, the high water solubility of clothianidin makes it susceptible to photo-degradation in the water column. Since the compound breaks down rapidly in water and rice field water is required to be

held on the field for at least 14 days, DPR expects very little of the applied clothianidin to be discharged into adjacent waterways. In other words, although clothianidin is toxic to aquatic invertebrates, invertebrate organisms in downstream waterways, including threatened and protected species in vernal pools, would not be exposed to toxic clothianidin residues.

Belay is *intended* to control aquatic invertebrates in rice. Therefore, clothianidin will likely impact the limited groups of aquatic invertebrates that colonize treated rice fields. Like most insecticides, clothianidin controls a broad range of insect pests. Some level of loss is to be expected on non-target invertebrates. Aquatic invertebrates that inhabit rice fields generally tend to recolonize quickly after rice pesticide applications. From the perspective of water quality protection, DPR focuses its regulatory efforts toward the protection of the rich fauna of aquatic invertebrates that inhabit adjacent habitats and waterways. California's Regional Water Quality Control Boards protect these water bodies as they have been designated as having beneficial uses. The California rice industry works closely with water quality agencies to prevent the release of water containing pesticide residues into receiving waters of the state.

Some rice growing areas will co-occur near vernal pools or similar areas that are considered ecologically sensitive. The proposed Belay label contains specific restrictive and cautionary language relating to the application of this product on rice, particularly when used near sensitive aquatic areas. The direct application or drift of Belay onto a vernal pool would be a violation of the label. The CRC has indicated that it will monitor surface water for clothianidin under the Irrigated Lands Regulatory Program administered through the Central Valley Regional Water Quality Control Board.

3. Impacts to Waterfowl

Your letter states that the use of clothianidin on rice is likely to have a significant adverse impact on ducks and other waterfowl that use the Pacific Flyway as a migration route and visit California rice fields. Aquatic invertebrates make up a substantial portion of the food consumed by waterfowl in rice fields, and you express concern that the impact of clothianidin on aquatic invertebrates will have a corresponding adverse impact on waterfowl.

DPR Response:

As stated above, even though clothianidin can be toxic to aquatic invertebrates, since the compound breaks down rapidly in water and rice field water is required to be held on the field for at least 14 days, invertebrate organisms in downstream waterways, including threatened and protected species, would not be exposed to toxic clothianidin residues. As the use of Belay is not expected to have an impact on aquatic invertebrates, it is not expected to have an adverse impact on ducks and other waterfowl that rely on such organisms for a substantial portion of their food supply. Further, pesticides that are currently used to control the rice seed midge and the RWW

also are intended to, and do, kill aquatic invertebrate pests in the rice fields. In this respect, use of Belay will not cause a substantial change in the environment. Moreover, migratory waterfowl do not arrive in the Sacramento Valley until around November, long after any application of Belay, and the return flight to the north ends around April. It is not anticipated that there will be any direct exposure to waterfowl of clothianidin. In addition, no indirect exposure to waterfowl is expected from the consumption of aquatic invertebrates that may have recolonized fallow rice fields during the late fall and winter.

Comment: DPR Has Failed to Analyze Alternatives

Your letter states that the California Environmental Quality Act (CEQA) requires that a certified regulatory program's documentation include "a description of the proposed activity with alternatives to the activity." You note that the California Supreme Court has ruled that, "the public agency bears the burden of affirmatively demonstrating that, notwithstanding a project's impact on the environment, the agency's approval of the proposed project followed meaningful consideration of alternatives." In addition, you state that DPR's own regulations direct the agency to give "special attention" to the "availability of feasible alternatives" during the registration process. DPR defines the term "feasible alternative" to mean "other chemical or non-chemical procedures which can reasonably accomplish the same pest control function with comparable effectiveness and reliability, taking into account economic, environmental, social, and technological factors and timeliness of control.

You state that contrary to CEQA and DPR's own regulations, DPR's public report that accompanied DPR's proposed decision to accept an amended Belay label does not identify and evaluate alternatives to the proposal. Instead, the public report concludes that no alternatives analysis is necessary based on legal boilerplate developed by DPR in the wake of recent litigation involving methyl iodide, Pesticide Action Network North America v. Dep't of Pesticide Regulation, No. RG10553804 (Alameda Co. Superior Ct.). Your letter then refers to a letter dated February 13, 2013, in which you state that DPR's new boilerplate regarding alternatives mischaracterizes the law and fails to comply with CEQA.

DPR Response: DPR meets its CEQA obligation by complying with the statutes and regulations that have been approved by the Public Resources Agency as a certified regulatory program. As a certified regulatory program, DPR's registration actions are exempt from Chapter 3 of CEQA that sets forth the environmental review process required for State agency projects, in this instance the registration of an amended label. California Code of Regulations, Title 3, section 6254, part of DPR's certified program, requires a statement of reasonable alternatives to the proposed action to reduce any significant adverse environmental impact that could reasonably be expected to occur from registration. If DPR were to determine that a registration action (project), such as a label amendment, would cause or likely cause a significant adverse change in the environment the only alternative action in this instance would be to not register the amended label (no project alternative).

The alternative of another product that may address the same pest problem as the product proposed for registration is distinctly different from the alternatives available to the agency in carrying out its project. The agency project does not involve selecting a pesticide for use in a particular instance, but making a decision on whether a particular product should be added to the other available pest management tools without having a substantial adverse environmental impact. As stated in California Code of Regulations, Title 3, section 6158, the availability of feasible alternatives [products] may be considered, where applicable, when making the decision whether or not to register a product. That section goes on to clarify that the availability of alternative products may be appropriate to consider in certain circumstances. It requires the Director to consider whether a substantial adverse environmental impact would occur from the lack of pest control options (a lack of feasible product alternatives) for the proposed use of the product under consideration for registration. However, as noted in the proposed notice to register, not registering Belay is not anticipated to have a significant adverse environmental impact.

Here, the lack of additional feasible alternatives to control rice seed midge and RWW could have an economic impact on the rice industry, but would not cause a significant adverse environmental impact. There are other pest control options currently available and used for controlling RWW and rice seed midge:

- Diflubenzuron: an insect growth regulator with limited usefulness in the control of RWW. The chemical has a 14-day water hold. Diflubenzuron functions by sterilizing adult females, causing them to lay nonviable eggs, thus reducing the larval populations. It also is toxic to newly laid eggs, i.e., those that are less than 4 days old.
- S-cypermethrin: a pyrethroid insecticide that can be used for adult RWW control. The chemical has a 7-day water hold. S-cypermethrin kills adult RWW, thereby reducing the number of eggs deposited and the resulting larval population.
- Lambda-cyhalothrin: a pyrethroid insecticide that can be used for adult RWW control. The chemical has a 7-day water hold. Lambda-cyhalothrin kills adult RWW, thereby reducing the number of eggs deposited and the resulting larval population.

Belay has several benefits that could weigh in favor of registration even if a significant adverse impact had been identified: it is effective under a variety of growing conditions; it targets all life stages of the RWW, including larvae, the most damaging stage, not just adults; and alternating its use with other products would lessen the possibility of developing resistance that could require the use of more or harsher chemicals. Further, the number of acres treated with an insecticide for RWW control is not expected to increase with the registration of the amended Belay label.

Comment: DPR's Reevaluation Is Contrary to Law

DPR Response: DPR disagrees with your comments that it is violating the law by the manner in which it carries out its reevaluation program. However, DPR will not respond to these allegations in the context of this specific registration decision. Under the regulations that govern DPR's registration process, before a final decision can be made on a registration action, DPR must respond to any significant environmental points raised during the comment period. As this comment is strictly a legal argument, and not a significant environmental point raised, DPR will not respond to this comment. *See California Code of Regulations, Title 3, section 6254(b).*

Conclusion

DPR performed a thorough scientific analysis of the label amendment for Belay® Insecticide to add use on rice to Belay® Insecticide. All identified potential adverse environmental effects associated with use of the product have been mitigated. The labeling instructions provide the necessary environmental protections. Therefore, DPR plans to proceed with registration of the Belay® Insecticide for use on rice.

Thank you for providing your comments regarding DPR's proposed decision to accept the amended label for Belay® Insecticide to add use on rice. If you have any questions, please contact me.

Sincerely,



Ann M. Prichard, Chief
Pesticide Registration Branch
916-324-3931

Enclosure

cc: Ms. Polly Frenkel, DPR Chief Counsel

Mr. Gregory C. Loarie

September 13, 2013

Page 11

bcc: Mr. Charles Andrews, Associate Director
Dr. Marylou Verder-Carlos, Assistant Director
Mr. David Duncan, Branch Chief, Environmental Monitoring
Ms. Liz Pelham, Environmental Program Manager 1
Mr. Marshall Lee, Environmental Program Manager I
Ms. Leilani Hansen, Senior Environmental Scientist
Mr. Richard Bireley, Senior Environmental Research Scientist
Ms. Susan Sutherland, Regulatory Scientist



EVALUATION REPORT – PESTICIDE

Date: April 5, 2013

Surface Water: Nan Singhasemanon
Staff Environmental Scientist

Tracking ID No. : 248748 (updated)
Product Name/ID No. : Belay (V-10170 2.13 SC)
Applicant : Valent U.S.A. Corporation
EPA Reg. No. : 56939-150
Document No. :
Active Ingredient : Clothianidin
Use : Insecticide
Registration Action : Label Amendment (Use Addition – Rice)
Area of Review : Water Quality and Aquatic Toxicity
Registration Specialist : Susan Sutherland

- Data/Information Support Registration Data/Information Support Conditional Registration
- Data/Information Does Not Support Registration No Registration Action Required

Introduction:

Valent U.S.A. has requested DPR approval of an amended label for its Belay insecticide product. The amendment is for the addition of rice as a use site for Belay for broad spectrum control of rice field pests such as billbugs, chinch bugs, green bugs, leafhoppers, rice seed midges, rice water weevils, sharpshooters, stinkbugs, and thrips. The active ingredient for Belay is clothianidin or (E)-1-(2-chloro-1,3-thiazol-5-ylmethyl)-3-methyl-2-nitroguanidine. For rice, the product can be applied by ground or aerially. The application rate is 0.075 lbs. a.i./acre. The amendment allows for both pre and post-flood treatments. For both treatments, the required minimum water holding time is 14 days before discharge. Additional application directions and restrictions are established for use in rice water weevil control, foliar treatments and use near aquaculture operations.

Surface Water Protection Program (SWPP) staff previously evaluated this product and recommended support of the label amendment in February 2013 (Newhart, 2013). However, a recent review of the February 2013 evaluation for Belay showed that the model output matrix (i.e., Table 4) seemed inconsistent with actual model results. The purpose of this memo is to 1) document the verification of the input data, 2) confirm the model output matrix and SWPP’s decision to support the label amendment, and 3) serve as an update to the February 2013 evaluation.

Summary:

SWPP staff maintains its recommendation to support the label amendment for Belay insecticide to add rice as a new use in California. The determination is based on the data submitted by

Valent U.S.A. Corporation and evaluated by DPR Registration Branch's Fish & Wildlife and Chemistry Sections (Alspach, 2003 and Shelgren 2002) and SWPP modeling results (Luo and Deng, 2011a, 2011b; Tables 1-5)

Since the accuracy of data used in model simulations is critical, staff reviewed the Shelgren (2002) and Alspach (2003) evaluation reports again for correctness. One inconsistency was discovered in the Alspach (2003) report. This involved the reporting of the soil anaerobic aquatic metabolism half-life as both 26.7 days and 2.67 days.

In the previous SWPP evaluation of Belay, the output matrix indicated that the aquatic persistence is "intermediate" and the risk quotient is "high". Recent simulations of the model using the same data (with both of the available soil anaerobic aquatic metabolism half-lives), predicted that both the aquatic persistence and the risk quotient are actually "low" (Table 4). Note that all simulations for Belay were done with the required minimal 14-day holding time to maintain conservativeness.

Staff also ran the "adsorbed phase" module of the model even though the soil adsorption coefficient (Koc) trigger point of >1,000 has not been met to see what predictions for this phase (i.e., sediment) would be. Staff also identified a suitable "lowest toxicity value in sediment" so that a risk-based result would be possible. The resulting model output matrix is presented in Table 5. The SWPP model generated an identical output matrix for the adsorbed and dissolved phase.

Registration Evaluation for Surface Water Protection: Modeling Data Summary

Table 1

Inputs [1]: Physiochemical properties and environmental fate data	
327	water solubility (mg/l)
345	OC-normalized soil adsorption coefficient (l/kg[OC])
999	hydrolysis half-life (HL) (day)
533	aerobic soil metabolism HL (day)
NA or stable	anaerobic soil metabolism HL (day)
282	field dissipation HL (day)
NA or stable	aerobic aquatic metabolism HL (day)
26.7 & 2.67	anaerobic aquatic metabolism HL (day)
2.62	aquatic dissipation HL in water (day)
NA or stable	aquatic dissipation HL in sediment (day)

Table 2

Inputs [2]: acute toxicity to aquatic organisms	
53	the lowest toxicity in water (ppb)
38	the lowest toxicity in sediment (Mug/kg, 1%OC assumed)

Table 3

Inputs [3]: use pattern and application rate

High	exposure potential to surface water (high/low)
Rice	tested use pattern
Rice	USEPA modeling scenario
0.084	the maximum application rate per season/year (kg/ha)

Table 4

Outputs [1]: dissolved phase	
High	runoff potential
Low	aquatic persistence
Very High	aquatic toxicity
Low	risk quotient
Support	model-based recommendation

Table 5

Outputs [2]: adsorbed phase	
High	runoff potential
Low	aquatic persistence
Very High	aquatic toxicity
Low	risk quotient
Support	model-based recommendation

Conclusion:

In this review of data input and re-simulation of SWPP model for Belay and its clothianidin active ingredient, staff confirmed that the addition of use for rice to the Belay label is still supported. At this point, staff is unable to determine why the initial model output matrix contained two outputs that did not agree with what the model generated.

The Alspach (2003) evaluation expressed some concerns on the stability of clothianidin in soils. SWPP's initial evaluation also made this observation on persistence (Newhart, 2013). However, the Alspach (2003) evaluation specifically considered only reported soil half-lives since its initial evaluation of Belay in 2003 was specifically on terrestrial use on apples and pears. The current 2013 evaluation is focused on the use of Belay on flooded rice fields. Considering this use pattern, aquatic metabolism and dissipation data are more relevant to understanding the environmental fate in rice fields than terrestrial metabolism and dissipation data.

Furthermore, Alspach (2003) noted that aqueous photolysis (half-life of 0.138 day in water) is the only significant mechanism for the environmental dissipation of clothianidin. Staff expects this factor to come into play in the fate of clothianidin in rice fields. A more recent aquatic field dissipation study conducted in a Northern California rice field showed that the field dissipation half-life ranged from 2.06 to 2.62 days for cropped and non-cropped fields. This range is much lower than the terrestrial field dissipation range of "282 days to stable" discussed in the Alspach (2003) evaluation. The fast aquatic field dissipation, which accounts for photolysis, and the 14-

Clothianidin Evaluation (update)
ID # 248748
5/April/2013

day water holding period likely contributed significantly to the SWPP model predictions of low aquatic persistence and low risk quotient.

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