US ERA ARCHIVE DOCUMENT

SEPA R.E.D. FACTS

Nosema locustae

Pesticide Reregistration

All pesticides sold or used in the United States must be registered by EPA, based on scientific studies showing that they can be used without posing unreasonable risks to people or the environment. Because of advances in scientific knowledge, the law requires that pesticides which were first registered years ago be reregistered to ensure that they meet today's more stringent standards.

In evaluating pesticides for reregistration, EPA obtains and reviews a complete set of studies from pesticide producers, describing the human health and environmental effects of each pesticide. The Agency imposes any regulatory controls that are needed to effectively manage each pesticide's risks. EPA then reregisters pesticides that can be used without posing undue hazards to human health or the environment.

When a pesticide is eligible for reregistration, EPA announces this and explains why in a Reregistration Eligibility Document, or RED. This fact sheet summarizes the information in the RED for Nosema locustae, also called N. locustae.

Use Profile

N. locustae is a microbial insecticide used to control grasshoppers and crickets in crop fields, lawns and turf, grass way drains, fencerows and hedgerows. It is made from the spores of the protozoan, N. locustae (Canning), which is infectious to certain grasshoppers and crickets. N. locustae must be eaten by the target insect to be effective.

Regulatory History

The first pesticide product containing N. locustae as an active ingredient was registered by EPA on May 9, 1980. Currently, six registered pesticide products contain N. locustae. Although it is registered for use on crop fields, N. locustae is exempted from the requirement of a tolerance (or maximum limit) for residues remaining in or on all raw agricultural commodities. (Please see 40 CFR 180.1041.)

Human Health Assessment

Toxicity

N. locustae and other, similar microorganisms do not appear to be hazardous to humans or other mammals. The toxicology studies considered in support of N. locustae's reregistration included acute toxicity

studies, a 90-day feeding study in rats, and an abdominal cavity lining injection study in mice. No adverse effects were noted in any of these studies. *N. locustae* has been placed in Toxicity Category IV (indicating the lowest level of toxicity) for all acute effects. *N. locustae* spores seem to be inactivated by passage through the test animal since persistence does not occur in rats fed the microorganism for 90 days.

Dietary Exposure

Although people possibly could be exposed to residues of N. locustae through the diet, the amounts involved would likely be very small and would pose no known health risks. N. locustae is applied as a bait to cole crops (such as cabbage and rape) and in orchards. However, most if not all of the bait is on the soil surface and not on the crop itself, prior to harvest. Further, N. locustae is rapidly inactivated by light and warmth (temperatures over 35 degrees C.), and poses no known hazards to humans. For these reasons, N. locustae has been exempted from all tolerance requirements, as discussed earlier.

Occupational and Residential Exposure

The technical grade, liquid concentrate *N. locustae* is formulated onto a wheat bran bait. This bait is applied by ground equipment to cole crops, orchards, forests, lawns and gardens for consumption by the target pests, susceptible grasshoppers and crickets. During ground boom applications to row crops, people mixing, loading and applying *N. locustae* bait may be exposed to significant amounts of the microorganism on their skin and through inhalation. However, since *N. locustae* poses no human toxicity concerns, exposure studies are not required at this time.

Human Risk Assessment

The potential risks to humans and other mammals from dietary and nondietary exposure to *N. locustae* are considered negligible. Existing toxicology studies showed no detectable dose-related effects at any level, as well as the inability of *N. locustae* to replicate in or accumulate in the tissues of warm blooded animals. EPA requires only that any allergic reactions following exposure to *N. locustae* be reported by the registrants.

Environmental Assessment

Environmental Fate

There are no concerns with the ecological effects of this naturally-occurring microorganism, so no environmental fate studies are required. Ecological Effects

EPA received and reviewed a sufficient complement of studies to perform an ecological hazard assessment of *N. locustae*. These studies show that *N. locustae* should not have an adverse effect on avian species,

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these studies were not extended over sufficient time to evaluate fully N. locustae's ability to cause infection or disease, the long use history of this microorganism without reported adverse effects has allowed EPA to waive further data requirements. Also, no beneficial non-target insect studies were submitted. However, such insects would not likely be exposed to N. locustae at greater than naturally-occurring levels; thus, the Agency also is waiving these studies. EPA does not expect N. locustae to cause any adverse effects in non-target species.

Environmental and Ecological Risk Assessment

N. locustae has been tested and studied for 20 years, and has been used in the field since 1980. No adverse effects have been reported during the many years of experience with and environmental release of N. locustae. Considering this use history along with the studies reviewed, EPA can foresee no significant adverse effects on nontarget species or the environment from the registered uses of N. locustae.

Additional Data Required

EPA has waived all generic data requirements for *N. locustae*. Product-specific acute toxicity studies are required to determine appropriate labeling for reregistration.

Product Labeling Changes Required

The labels of all registered N. locustae products must comply with EPA's current pesticide labeling requirements.

Regulatory Conclusion

- All registered pesticide products containing the active ingredient N. locustae are not likely to cause unreasonable adverse effects in people or the environment, and are eligible for reregistration. These products will be reregistered once the required product-specific data and revised labeling are received and accepted by EPA.
- Registered products containing N. locustae as well as other active ingredients will be reregistered once the other active ingredients also are determined to be eligible for reregistration.

For More Information

EPA is requesting public comments on the Reregistration Eligibility Document (RED) for N. locustae during a 60-day time period, as announced in a Notice of Availability published in the <u>Federal Register</u>. To obtain a copy of the RED or to submit written comments, please contact the Public Response and Program Resources Branch, Field Operations Division (H-7506C), Office of Pesticide Programs (OPP), US EPA, Washington, DC 20460, telephone 703-305-5805.

In the future, the *N. locustae* RED will be available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, telephone 703-487-4650.

For more information about *N. locustae* or about EPA's pesticide reregistration program, please contact the Special Review and Reregistration Division (H-7508W), OPP, US EPA, Washington, DC 20460, telephone 703-308-8000. For information about reregistration of individual *N. locustae* products, please contact PM Team 18, Registration Division (H-7505C), OPP, US EPA, Washington, DC 20460, telephone 703-305-7690.

For information about the health effects of pesticides, or for assistance in recognizing and managing pesticide poisoning symptoms, please contact the National Pesticides Telecommunications Network (NPTN). Call toll-free 1-800-858-7378, 24 hours a day, seven days a week, or fax your inquiry to 806-743-3094.

September 1332



SEPA Reregistration **Eligibility Document** (RED)

Nosema locustae

REREGISTRATION ELIGIBILITY DOCUMENT

CASE NAME:

Nosema locustae

ACTIVE INGREDIENT:

Nosema locustae

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDE PROGRAMS
SPECIAL REVIEW AND REREGISTRATION DIVISION
WASHINGTON, D.C.

EPA N. locustae REREGISTRATION ELIGIBILITY TEAM

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 Application for Registration

GLOSSARY OF TERMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

CFR Code of Federal Regulations

CSF Confidential Statement of Formula

EPA U.S. Environmental Protection Agency

FDA Food and Drug Administration

FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

MCPA Microbial Pest Control Agent

MRID Master Record Identification (number). EPA's system of recording and

tracking studies submitted to the EPA.

ppm Parts per Million

RED Reregistration Eligibility Document

EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency (EPA) has conducted a comprehensive review of the available scientific data and other relevant information supporting the reregistration requirements of the microbial pesticide active ingredient *Nosema locustae* (N. locustae). EPA has concluded that the current approved uses of this microbial pesticide will not result in unreasonable adverse effects to humans and the environment. Therefore, all currently approved uses are eligible for reregistration.

In this Reregistration Eligibility Document (RED) EPA provides a summary of the scientific assessment of these data and information, conclusions of the risks associated with the current uses of this microbial pesticide, a description of these uses, and determination of reregistration eligibility for each current use. EPA also provides product labeling and data requirements that must be met by registrants to achieve product reregistration.

Products containing *N. locustae* as the active ingredient are eligible for reregistration and will be reregistered when acceptable labeling and product specific data are submitted and/or cited. Before reregistering each product, the EPA is requiring that product specific data and revised labeling be submitted by the registrants within eight months of the issuance of this document. After reviewing these data and the revised labels EPA will determine whether or not the conditions of FIFRA 3(c)(5) have been met, that is, whether product composition and labeling are acceptable and the product's uses will not cause unreasonable adverse effects to humans or the environment. If these conditions are met EPA will reregister the product. Any end-use products containing *N. locustae* in combination with other active ingredients will not be reregistered until REDs are issued for all active ingredients contained in that product.

I. INTRODUCTION

In 1988, the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) was amended to accelerate the reregistration of products with active ingredients registered prior to November 1, 1984. The amended Act provides a schedule for the reregistration process to be completed in nine years. There are five phases to the reregistration process. The first four phases of the process focus on identification of data requirements to support the reregistration of an active ingredient and the generation and submission of data to fulfill the requirements. The fifth phase is a review by the U.S. Environmental Protection Agency (referred to as "the Agency") of all data submitted to support reregistration.

FIFRA Section 4(g)(2)(A) states that in Phase 5 "the Administrator shall determine whether pesticides containing such active ingredient are eligible for registration" before calling in data on products and either reregistering products or taking "other appropriate regulatory action." thus, reregistration involves a thorough review of the scientific data base underlying a pesticide's registration. The purpose of the Agency's review is to reassess the potential hazards arising from the currently registered uses of the pesticide; to determine the need for additional data on health and environmental effects; and to determine whether the pesticide meets the "no unreasonable adverse effects" criterion of FIFRA.

This document presents the Agency's decision regarding the reregistration of N. locustae. The document consists of six sections. Section I is the introduction. Section II describes N. locustae, its uses, data requirements and regulatory history. Section III discusses the human health and environmental assessment based on the data available to the Agency. Section IV discusses the reregistration decision for N. locustae. Section V discusses the reregistration requirements for N. locustae. Section VI is the Appendices which support this Reregistration Eligibility Document. Additional details concerning the Agency's review of applicable data are available on request.

EPA's reviews of data on the set of registered uses considered for EPA's analysis may be obtained from the OPP Public Docket, Field Operations Division (H7506C), Office of Pesticide Programs, EPA, Washington, DC 20460.

II. <u>CASE OVERVIEW</u>

A. <u>Chemical Overview</u>

The following active ingredient is covered by this Reregistration Eligibility Document:

Chemical Name:

Nosema locustae

Office of Pesticide Programs

Chemical Code: 117001

B. Use Profile

The following is information on the registered use with specific use sites and application methods. A detailed table of eligible uses of *N. locustae* is in Appendix A.

Type of Pesticide: Microbial insecticide

Mode of Action: Protozoan infection; infectious disease. Product must be eaten by insect to be effective.

Use sites:

TERRESTRIAL FOOD + FEED CROP: Agricultural crops/soils (unspecified), vegetables.

TERRESTRIAL FEED CROP: Rangeland.

TERRESTRIAL NON-FOOD + OUTDOOR RESIDENTIAL: Ornamental lawns and turf.

TERRESTRIAL NON-FOOD: Fencerows/hedgerows.

Pests: Grasshoppers and Mormon crickets.

Formulation Types Registered:

Bait/solid: 0.05% to 0.1% A.I.

Bait/liquid: 0.05% A.I.

Methods and Rates of Application:

The solid baits are applied by aircraft, ground spreader, or shaker can at rates up to 0.001 lb A.I. per acre. Liquid formulations and some of the solids are diluted and mixed with bran. The treated bran is applied at 1 lb per acre by aircraft, ground spreader, or shaker can.

Use Practice Limitations: None.

C. Regulatory History

The first registration of a product containing N. locustae was issued May 9, 1980. N. locustae is a microbial pesticide, made from the spores of the protozoan of the same name. There are presently six registered products containing N. locustae. These products are solid bait and liquid formulations which are used to control grasshoppers and crickets in crop, fields, lawns and turf, and fencerows and hedgerows.

III. SCIENCE ASSESSMENT

EPA has reviewed the scientific data base for *N. locustae* primarily relying on data submitted by the registrants and information from published literature. These are cited in Appendix C.

A. Product Identity/Chemistry Assessment

The active ingredient consists of spores from the protozoan, N. locustae (Canning), a microsporidian belonging to the family Nosematidae, which is infectious to certain grasshoppers and crickets. The life cycle of N. locustae includes a spore stage characterized by spores of unicellular origin, a single sporoplasm and usually one long tubular polar filament through which the sporoplasm emerges. Following ingestion by a susceptible host, N. locustae spores penetrate the midgut epithelium, the vegetative forms replicate in the fat body, and upon depletion of host tissue, sporulation occurs releasing viable spores. N. locustae infections are generally diagnosed by the presence of spores in the fat body of susceptible hosts. Spores which measure $3.5-5.5\mu$ (mean of 5.2μ) in length by $1.5-3.5\mu$ (mean of 2.8μ) in diameter may be ellipsoidal, slightly-bent or kidney-shaped and refractive to light. Triangulate and elongate megaspores $(8.0\mu$ in length) are also common.

Based on the data and information submitted all physical and chemical properties data have been satisfied; consequently, no additional generic product identity data will be required.

B. Human Health Assessment

1. <u>Toxicology Data Base</u>

There is some preliminary evidence that N. locustae and other similar microorganisms are not hazardous for mammals or humans. The toxicology data considered to support the reregistration of N. locustae included acute studies, a 90-day feeding study, and an intraperitoneal injection study in mice. No adverse effects were noted in any of these studies. Although a pattern of clearance was not demonstrated in the acute toxicology studies the results from the intraperitoneal study suggested that the N. locustae spores were inactivated during passage through mice. Such inactivation was demonstrated using tissues and peritoneal lavage fluid from treated mice which, upon bioassay, did not produce the characteristic symptoms of the disease in grasshoppers. The subchronic and chronic studies with microbial pest control agents (MCPAs) are required when acute exposure studies indicate unusual persistence of the active microbial ingredient in the tissues, organs, or body fluids of the test animal, in the absence of any signs of toxicity or pathogenicity. Therefore, the lack of pathogenicity and toxicity in the 90-day feeding study with N. locustae indicate that even if unusual persistence were occurring, repeated dosing would not result in an adverse outcome. It is more likely, however, that the lack of adverse effects in the 90-day study support also the lack of persistence of N. locustae in the test animal.

Additional studies in support of the toxicology data base included injection of rabbits with *N. locustae* by the intracerebral or intraocular routes which did not result in any detectable illness at the clinical, gross or histological levels. Based upon review of the submitted data base all relevant toxicology requirements have been satisfied.

A summary of the toxicology data base is provided below. The Guideline Reference Numbers are as specified in Subdivision M of the Pesticide Testing Guidelines (October, 1982).

Toxicology Data Base

<u>Guideline</u>	<u>Study</u>	<u>Results</u>	Acute Toxicology
<u>Number</u>			<u>Category</u>
152 A- 10	Acute Oral LD ₅₀ (rat)	>2.3x10 ⁸ spores	ľV
152A-11	*Acute Dermal LD ₅₀ (g. p.)	> 2.3x10 ⁸ spores	ΓV
152A-12	Acute Inhalation (rat)	10.2 mg/L N. locustae	IV
152A-13	*Primary Eye Irrit. (rabbit)	$2.29 \times 10^3 / 0.1 \text{ ml}$	IV
152A-14	*Primary Dermal Irrit. LD ₅₀	> 2.3x10 ^s spores	IV
152 A -15	*Delayed Hypersensit. (g.p.)	Approx. 10 ⁷ spores/inj.	Sensitizer
	Intraperitoneal (mice)	No Adverse Effects	Acceptable
152A-20	*90-Day Feeding (rat)	No Adverse Effects	Supplementary**
152 B-33	*Intracerebral (mice/rabbits)	$2.9 \times 10^{8} / \text{ml}$	
152B-33	*Intraocular (mice/rabbits)	$2.9 \times 10^8 / \text{ml}$	₹4

^{*}Currently, not required to support the registration of the TGAI of a microbial pesticide.

C. Exposure Assessment

1. <u>Dietary Exposure</u>

N. locustae is exempted from the requirement of a tolerance for residues in or on all raw agricultural commodities (40 CFR 180.1041). Such an exemption was based on the toxicology data base, the long and safe historical use of the MPCA, and the rapid inactivation of the microorganism by light and temperature. Residue studies therefore are not required.

2. Occupational and Residential Exposure

In Section II the Agency provided a brief description of the types of product formulation, application methods and sites. The technical grade material or liquid concentrate is formulated onto a wheat bran bait which is applied by ground equipment to cole crops, orchards, forests, lawn and gardens for consumption by the target pests (susceptible grasshoppers and crickets). Although small amounts of *N. locustae* will become free from the bran bait, this amount is considered insignificant when compared to exposure

^{**}Classified as Supplementary because the spore dose level in the diet was not provided.

during manufacturing. However, the efficacy of the product depends upon rapid ingestion of the protozoan on the bait and the ability of the microorganism to replicate in the target pest. Following application of *N. locustae* most, if not all, of the bait will be on the soil surface and not available on the crop prior to harvest.

Based on the application methods, significant dermal and inhalation exposure to the mixer/loader/applicator exists, i.e. ground boom applications to row crops. However, due to the lack of toxicological concerns for *N. locustae*, no exposure data are required at this time.

3. Risk Characterization

The potential risks to human and/or mammals from both nondietary/dietary and occupational exposures are considered insignificant as supported by the existing toxicology data base. Such data clearly demonstrated the lack of detectable dose-related effects at the clinical, gross or histological levels and the inability of the microorganism to replicate or accumulate in the tissues of the treated animals. In addition, *N. locustae* has not been shown to replicate at temperatures above 35°C or able to infect and/or replicate in warm blooded animals. Although *N. locustae* was a sensitizer when injected into guinea pigs, a dermal sensitization study is no longer required for microbial pest control agents because it is assumed that injection of foreign proteins is likely to elicit a response and that dermal application would elicit no response. The reporting of any allergic reactions following exposure is currently required by the revised 1989 Microbial Pesticide Guidelines (Subdivision M of the FIFRA Testing Guidelines, NTIS PB 89-211676).

D. Environmental Assessment

1. Environmental Fate

Since there are no ecological effects concerns from this naturally-occurring microorganism, no environmental fate data are required. These studies are in Tier II and are only needed if there are significant adverse effects seen in the Tier 1 ecological effects studies.

2. Ecological Effects

Sufficient studies were received to perform an ecological hazard assessment. Although not all the studies were performed in accordance with the revised 1989 Microbial Pesticide Guidelines (Subdivision M of the FIFRA Testing Guidelines, NTIS PB 89-211676), (e.g. few controlled studies were carried out long enough to detect subchronic infection or delayed pathogenicity), the Agency would not expect any adverse non-target effects from this protozoan. No adverse effects have been reported from the many years of experience with environmental releases of this microorganism. N. locustae has been tested and studied for 20 years, and has been registered and used in the field since 1980. Considering this experience, in conjunction with acceptable acute studies, the Agency foresees no significant adverse

effects on nontarget species or the environment from the registered uses of N. locustae.

Ecological Effects Data Base

<u>Data</u> <u>Requirements</u>	<u>Test</u> <u>Substance</u>	<u>Effects</u>	<u>Citation</u>	<u>Fulfills</u> <u>Güideline</u> <u>Requirements?</u>	Waiver for Data Granted?
154-16					
Avian Acute Oral					
Quail	TGAI	$LD_{50} = >2,000 \text{ mg/kg}$	247757	no (core-acute)	yes
Pheasant	TGAI	no mortality	408143-04	no (supplemental)	N/A
Duck	TGAI	no mortality	Patuxent Wildlife	no (supplemental)	yes
Avian injection			ddiilo		
Pheasant	TGAI	no mortality	408143-05	no (supplemental)	N/A
154-19 Fish					
Trout LC ₅₀	TGAI	no mortality	408143-06	yes (core)	NT (A
Trout LC ₅₀	TGAI	no mortality	247757	yes (core)	N/A N/A
154-20					
Aquatic Invertebrate Daphnia magna	TGAI	no mortality	247757	no (supplemental)	yes
154-24					,
Honeybee	TGAI	no mortality	article	no (supplemental)	yes
154-22					
Non-target Plant			none submitted	no	yes
154-23					
Non-target Insect	****		none submitted	no	yes

3. Environmental and Ecological Risk Assessment

These studies show that *N. locustae* should not have an adverse effect on avian species, aquatic invertebrates, and honeybees on an acute basis. The lack of adverse effects reported from the many years of use and study of *N. locustae* in the field allows for sufficient confidence to waive the subchronic infection and delayed pathogenicity data requirements. In addition to the above studies, no pathogenicity or toxicity was documented to freshwater trout.

No beneficial nontarget insect studies were submitted. It is unlikely that nontarget insects would be exposed to *N. locustae* at greater than naturally-occurring levels since the spores and mycelium are formulated on wheat bran bait and applied directly to areas where grasshopper infestation occurs, preferably when the grasshoppers are still nymphs. These studies are waived. Nontarget plant studies were not submitted. These studies are also waived since the Agency is not aware of any association of *N. locustae* with plant diseases despite extensive analysis of agricultural diseases by academia, government and industry.

IV. RISK MANAGEMENT AND REREGISTRATION DECISION FOR N. Locustae

A. <u>Determination of Eligibility</u>

Section 4(g)(2)(A) of FIFRA requires the Agency to determine, after consideration of relevant data concerning an active ingredient, whether products containing the active ingredient are eligible for reregistration. The Agency has completed its consideration of these data and other factors and has determined this information is sufficient to support reregistration of products containing N. locustae as an active ingredient. The reregistration of particular products is addressed in Section V of this document.

Although the Agency has concluded that products containing *N. locustae* are eligible for reregistration, the Agency may take regulatory actions in the future that would affect the continued registration of *N. locustae*-containing products if significant information about this active ingredient and/or its products comes to the Agency's attention. Such regulatory action could include requiring the submission of additional data if the data requirements for registration (or the guidelines for generating such data) change.

B. Additional Generic Data Requirements

The generic data base supporting the reregistration of products containing *N. locustae* has been reviewed and determined to be substantially complete for reregistration. No further generic data are required.

C. <u>Labeling Requirements For Manufacturing-Use Products Of N. locustae</u>

No manufacturing-use products are registered.

V. ACTIONS REQUIRED BY REGISTRANTS OF END-USE PRODUCTS

A. <u>Determination Of Eligibility</u>

Based on the reviews of the generic data for the active ingredient N. locustae, the products containing this active ingredient are eligible for reregistration. Section 4(g)(2)(B) of FIFRA calls for the Agency to obtain any needed product-specific data regarding the microbial pest control agents after a determination of eligibility has been made. The Agency will review these data when they have been submitted and/or cited and determine whether to reregister individual products.

1. Product Specific Data Requirements

The Agency is requiring certain product chemistry and toxicology studies to be submitted for end-use products. These specific data requirements are stated in Attachment C.

2. <u>Labeling Requirements For End-Use Products</u>

The labels and labeling of all products must comply with the Agency's current regulations and requirements. Follow the instructions in the Product Reregistration Handbook with respect to labels and labeling.

APPENDIX A

Use Patterns Subject to Reregistration

	·									
A PPENDIX A	Case	4104 [Nos	4104 [Nosema locustae],	e], Chemi	Chemical 117001	1 (Nosema	a locustae]	<u>e</u>]		
SITE Application Type, Application Travey, Application Equipment	Form	Merman Application Nate	Maximum Application Nate	Mex # Appa	May 7 Appe @ Max Rate	Min biterval Batween Appe. (2 Max Hata	Hautmood fratry interval		Georgiaphic Trinifikosis	Una. Linkshipes
						(Daye)	(Daya)	Affire	(heallowed	
USES ELIGIBLE FOR REREGISTRATION										
FOOD/FEED USES					:					
Agricultural Crops/Solls (Unspecified) Use g	Use group: foo	od + feed crop							A A A A	
Bait application, when needed, aircraft	B/S	Unspecified	0.001 lb Al/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, by hand	B/S	Unspecified	0.001 lb Al/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, epreader	B/S	Unspecified	0.001 lb Al/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, apreader	B/L	Unspecified	Al cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, unspecified on label	S/8	Unspecified	0.0005 lb Al/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Rangeland Use gro	oup: terre	Use group: terrestrial feed crop								
Bait application, when needed, aircraft	B/S	Unspecified	0.001 lb Al/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, by hand	8/8	Unspecified	0.001 lb AI/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, spreader	8/8	Unspecified	0.001 lb Al/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, spreader	9/1	Unspecified	Al cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, unspecified on label	8/8	Unspecified	0.0005 lb AI/A	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Vegetables (Unspecified) Use gr	Use group: terr	estrial food +	feed crop							
Bait application, when needed, by hand	B/S	Unspecified	0.0001 lb Al/1000 sq ft.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, by hand	8/8	Unspecified	At cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
Bait application, when needed, spreader	B/S	Unspecified	Al cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Norns
Bait application, when needed, shaker can	8/8	Unspecified	Al cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None
										!

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APPENDIX A - Case		1104 [Nose	4104 [Nosema locustae], Chenical 117001 [Nosema locustae	el, Cheniic	al 11700	1 [Nosem	a locustae	1		
SITE Application Type, Application Triming, Application Component	F	Minimum Application Rate	Mazemum Application Rete	addy a very	Max f Apps (6 Max Hate	Mic External detroment Apper (2) Max. Hate	Restructed tracy finterval	selections.	स्त्र सन्त्र) - अनुर्वास	Use
					·	(Deye)	(Days)	Allowast	Papellawad	
NONFOOD/NONFEED USES										
Fencerows/hadgerows Use gro	Use group: terr	estrial non-food crop	crop							
Bait application, when needed, spreader	B/S	Unspecified	Al cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified Unspecified	$\overline{}$	None
Ornamental lawns and turf Use gr	Use group: teri	restrial non-food	restrial non-food + outdoor residential	ntial						
Beit application, when needed, by hand	8/8	Unspecified	0.0001 lb Al/1000 sq ft.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified Unspecified		None
Bait application, when needed, by hand	8/8	Unspecified	Al cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None :
Bait application, when needed, spreader	8/8	Unspecified	Al cannot be calculated.	Unspecified	Unspecified Unspecified	Unspecified	Unspecified Unspecified Unspecified	Unspecified		None
Bait application, when needed, shaker can	8/8	Unspecified	Al cannot be calculated.	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	None

Abbreviations used

max=maximum; min=minimum; apps=applications B/S=Bait/Solid; B/L=Bait/Liquid Al=active_ingradient; A=acre

Header: Form: Rate:

APPENDIX B

Generic Data Requirements for Reregistration and Data Citations Supporting Reregistration

GUIDE TO APPENDIX B

Appendix B contains listings of data requirements which support the reregistration for the pesticide covered by this Reregistration Eligibility Document.

Appendix B contains generic data requirements that apply to the pesticide in all products, including data requirements for which a "typical formulation" is the test substance.

The data tables generally are organized according to the following format:

- 1. Data Requirement (Column 1). The data requirements are listed in the order in which they appear in 40 CFR Part 158. The reference numbers accompanying each test refer to the test protocols set out in the Pesticide Assessment Guidelines, which are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.
- 2. <u>Bibliographic citation</u> (Column 2). If the EPA has acceptable data in its files, this column lists the identifying number of each study. This normally is the Master Record Identification (MRID) number, but may be a GS number if no MRID number has been assigned. Refer to the Bibliography Appendices for a complete citation of the study.

APPENDIX B

Generic Data Supporting Guideline Requirements for Reregistration of N. locustae

	Requirement	Citation
PRODUC	CT CHEMISTRY	
151A-10	Product Identity	42243201
		42245801
151A-11	Manufacturing Process	42243201
		42245802
151A-12	Discussion of Formation of	•
	Unintentional Ingredients	42243201
		42245803
151A-13	Analysis of Samples	42243202
		42245804
151A-15	Certification of Limits	42243202
	·	42245804
151A-16a		42245805
151A-16b	,	42245805
151A-16c		42245805
151A-16d	=	42245805
151A-16e	Ph	42245805
151A-16f	Stability	42245805
151A-16g	Storage Stability	42245805
151A-16h	Viscosity	42245805
151A-16i		42245805
151A-16j	Corrosion Characteristics	42245805
TOXICO	LOGY	
152A-10	Acute Oral Toxicity/Pathogenicity	74175
		135114
152A-11	Acute Dermal Toxicity	72638
		42245806
152A-12	Acute Pulmonary Toxicity/Pathogenicity	74176
		42245807
152A-13	Acute Intravenous Toxicity/Pathogenicity	141791
	-	42245808
		42245809
		42260101

152A-14	Primary Eye Irritation/Infection	42245810
		42260101
152A-15	Hypersensitivity Incidents	42245811

ECOLOGICAL EFFECTS

154A-16	Avian Acute Oral Pheasant Duck & Pheasants	42245812 94269008
154A-17	Avian respiratory Pheasant	42245813
154A-19	Freshwater fish Trout	42245814
154A-20	Aquatic Invertebrate Daphnia magna	42314901
154A-24	Honeybee	42245815
154A-22	Non-target Plant	waived
154A-23	Non-target Insect	waived

ENVIRONMENTAL FATE

EPA waived 40 CFR Part 158 requirements for reasons discussed in section III.

RESIDUE CHEMISTRY

EPA waived 40 CFR Part 158 requirements for reasons discussed in section III.

HUMAN EXPOSURE

EPA waived 40 CFR Part 158 requirements for reasons discussed in section III.

The citations listed in the bibliography (Appendix C) were used to support these decisions.

APPENDIX C

Citations Considered to be Part of the Data Base Supporting the Reregistration

GUIDE TO APPENDIX C

- 1. CONTENT OF BIBLIOGRAPHY. This bibliography contains citations of all studies considered relevant by EPA in arriving at the positions and conclusions stated elsewhere in the Reregistration Eligibility Document. Primary sources for studies in this bibliography have been the body of data submitted to EPA and its predecessor agencies in support of past regulatory decisions. Selections from other sources including the published literature, in those instances where they have been considered, will be included.
- 2. UNITS OF ENTRY. The unit of entry in this bibliography is called a "study". In the case of published materials, this corresponds closely to an article. In the case of unpublished materials submitted to the EPA the EPA has sought to identify documents at a level parallel to the published article from within the typically larger volumes in which they were submitted. The resulting "studies" generally have a distinct title (or at least a single subject), can stand alone for purposes of review, and can be described with a conventional bibliographic citation. The EPA has attempted also to unite basic documents and commentaries upon them, treating them as a single study.
- 3. IDENTIFICATION OF ENTRIES. The entries in this bibliography are sorted numerically by Master Record Identifier, or MRID number. This number is unique to the citation, and should be used at any time specific reference is required. It is not related to the six-digit "Accession Number" which has been used to identify volumes of submitted studies; see paragraph 4(d)(4) below for further explanation. In a few cases, entries added to the bibliography late in the review may be preceded by a nine-character temporary identifier. These entries are listed after all MRID entries. This temporary identifier number is also to be used whenever specific reference is needed.
- 4. FORM OF ENTRY. In addition to the Master Record Identifier (MRID), each entry consists of a citation containing standard elements followed, in the case of material submitted to EPA, by a description of the earliest known submission. Bibliographic conventions used reflect the standards of the American National Standards Institute (ANSI), expanded to provide for certain special needs.
 - a. Author. Whenever the EPA could confidently identify one, the EPA has chosen to show a personal author. When no individual was identified, the EPA has shown an identifiable laboratory or testing facility as author. As a last resort, the EPA has shown the first submitter as author.
 - b. Document date. When the date appears as four digits with no question marks, the EPA took it directly from the document. When a four-digit date is followed by a question mark the bibliographer deduced the date from evidence in the document. When the date appears as (19??), the EPA was unable to determine or estimate the date of the document.

- c. Title. In some cases, it has been necessary for EPA bibliographers to create or enhance a document title. Any such editorial insertions are contained between square brackets.
- d. Trailing parentheses. For studies submitted to the EPA in the past, the trailing parentheses include (in addition to any self-explanatory text) the following elements describing the earliest known submission:
 - (1) Submission date. The date of the earliest known submission appears immediately following the word "received."
 - (2) Administrative number. The next element, immediately following the word "under," is the registration number, experimental use permit number, petition number, or other administrative number associated with the earliest known submission.
 - (3) Submitter. The third element is the submitter, following the phrase "submitted by." When authorship is defaulted to the submitter, this element is omitted.
 - (4) Volume Identification (Accession Numbers). The final element in the trailing parentheses identifies the EPA accession number of the volume in which the original submission of the study appears. The six-digit accession number follows the symbol "CDL," standing for "Company Data Library." This accession number is in turn followed by an alphabetic suffix which shows the relative position of the study within the volume. For example, within accession number 123456, the first study would be 123456-A; the second, 123456-B; the 26th, 123456-Z; and the 27th, 123456-AA.

OFFICE OF PESTICIDE PROGRAMS REREGISTRATION ELIGIBILITY DOCUMENT BIBLIOGRAPHY

42243201	Vinje. E. (1992) Product Identity and Composition: Nosema locustae. Unpublished study prepared by Bozeman Bio-Tech. 4 p.
42243202	Vinje, E. (1992) Analysis and Certification of Product Ingredients: Nosema Locustae. Unpublished study prepared by Bozeman Bio-Tech, Inc. 3 p.
42245801	Merrill, L. (1992) Product Identity and Disclosure of Ingredients: Nosema locustae. Unpublished study prepared M & R Durango Inc. 8 p.
42245802	Merrill, L. (1992) Manufacturing Process: Nosema locustae. Unpublished study prepared by M & R Durango Inc. 10 p.
42245803	Rainnie, D. (1988) Bacterial and Fungal Contaminants of Nosema locustae Spore Suspension: Lab Project Number: R-86-0018. Unpublished study prepared by University of Saskatchewan, Tox. Research Center. 36 p.
42245804	Merrill, L. (1992) Analysis of Samples and Certification of Limits: Nosema locustae. Unpublished study prepared by M & R Durango Inc. 37 p.
42245805	Merrill, L. (1992) Physical and Chemical Properties: Nosema locustae. Unpublished study prepared by M & R Durango Inc. 16 p.
42245806	Rainnie, D. (1988) Acute Dermal Infectivity of Technical Grade Nosema locustae Canning Spore Suspensions to Sprag-ue-Dawley Rats: Lab Project Number: R-86-0018. Unpublished study prepared by Univ. of Saskatchewan, Tox. Research Center. 38 p.
42245807	Rainnie, D. (1988) Acute Respiratory Infectivity of Technical Grade Nosema locustae Canning Spore Suspensions to Sprague-Dawley Rats: Lab Project Number: R-86-0018. Unpublished study prepared by Univ. of Saskatchewan, Tox. Research Center. 45 p.
42245808	Rainnie, D. (1991) Study of Intraperitoneal Infectivity and Toxicity of Nosema locustae Spore Suspension in CD-1 Mice: Lab Project Number: R-86-0018. Unpublished study prepared by Univ. of Saskatchewan, Tox. Research Center. 82 p.

- 42245809 Shadduck, J. (1980) Maximum Challenge Safety Tests of Nosema locustae in Mice and Rabbits: Lab Project Number. Unpublished study prepared by Southwestern Medical School. 55 p.
- Fink, R. (1973) Eye Irritation--Rabbits Nosema locustae Spore in Saline Suspension: Final Report: Lab Project Number: 183-195. Unpublished study prepared by Hazleton Laborator
- Rainnie, D. (1988) Investigation of the Development of Delayed Hypersensitivity of Technical Grade Nosema locustae Canning Spor Suspensions in Albino Guinea Pigs:

 Lab Project Number: R-86-0018. Unpublished study prepared by Univ. of Saskatchewan, Tox. Research Center. 35 p.
- Rainnie, D. (1988) Acute Oral Infectivity of Technical Grade Nosema locustae Canning Spore Suspension to Ring-necked Pheasant Chicks: Lab Project Number: R-86-0018. Unpublished study prepared by Univ. of Saskatchewan, Tox. Research Center. 50 p.
- Rainnie, D. (1988) Maximum Hazard of Infectivity of Technical Grade Nosema locustae
 Canning Spore Suspension to Canning-necked Pheasant Chicks: Lab Project
 Number: R-86-0018. Unpublished study prepared by Univ. of Saskatchewan, Tox.
 Research Center. 79 p.
- Rainnie, D. (1988) Maximum Hazard of Infectivity of Technical Grade Nosema locustae Canning Spore Suspension to Rainbow Trout Fingerlings: Lab Project Number: R-86-0018. Unpublished study prepared by Univ. of Saskatchewan, Tox. Research Center. 59 p.
- Menapace, D.; Sackett, R.; Wilson, W. (1977) Adult honey bees are not susceptible to infection by Nosema locustae. Journal of Economic Entomology 71(2):304-306.
- Shadduck, J. (1992) Maximum Challenge Safety Tests of Nosema locustae in Mice and Rabbit. Unpublished study prepared by Southwestern Medical School. 51 p.
- 42314901 Bozeman Bio-Tech, Inc. (1992) The Acute Toxicity of Nosema locustae Canning Spores to Daphnia magna Straus Maximum Level Testing: Lab Project Number: 10058-DM. Unpublished study prepared by Biospherics, Inc. 31 p.
- 94269001 Vinje, R. (1992) Bozeman Bio Tech. Phase 3 Summary of MRID 00074175. Acute Oral Rats. Prepared by Hazleton Laboratories, Inc. 5 p.
- 94269002 Vinje, E. (1992) Bozeman Bio Tech. Phase 3 Summary of MRID 00072638. Acute Dermal Toxicity Guinea Pigs. Prepared by Hazleton Laboratories, Inc. 6 p.

- 94269003 Vinje, E. (1992) Bozeman Bio Tech. Phase 3 Summary of MRID 00074176. Acute Inhalation Toxicity- Rats. Prepared by Hazleton Laboratories, Inc. 6 p.
- 94269004 Vinje, E. (1992) Bozeman Bio Tech. Phase 3 Summary of MRID 00141791.

 Intraperitoneal Injections in Mice Using Nosema locustae Spores. Prepared by Beltsville Agric. Research Center. 5 p.
- 94269007 Vinje, E. (1992) Bozeman Bio Tech. Phase 3 Summary of MRID 40814304. Acute Orai Infectivity of Technical Grade Nosema locustae Canning Spore Suspension to Ring-necked Pheasant Chicks. Prepared by Univ. of Saskatchewan, Toxicology. Research Center. 5 p.
- 94269008 Vinje, E. (1992) Bozeman Bio Tech. Phase 3 Summary of MRID 00113252. Nosema locustae Toxicity Tests with Pheasants and Mallard Ducklings. Prepared by Denver Wildlife Research Center. 5 p.
- 94269009 Vinje, E. (1992) Bozeman Bio Tech. Phase 3 Summary of MRID 00085621. LC₅₀ Rainbow Trout and Bluegill Sunfish. Prepared by Hazleton Laboratories, Inc. 5 p.

APPENDIX D

PR Notice 91-2



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

...a. 2

PR NOTICE 91-2

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

NOTICE TO MANUFACTURERS, PRODUCERS, FORMULATORS,
AND REGISTRANTS OF PESTICIDES

ATTENTION: Persons Responsible for Federal Registration of

Pesticide Products.

SUBJECT: Accuracy of Stated Percentages for Ingredients

Statement

I. PURPOSE:

The purpose of this notice is to clarify the Office of Pesticide Program's policy with respect to the statement of percentages in a pesticide's label's ingredient statement. Specifically, the amount (percent by weight) of ingredient(s) specified in the ingredient statement on the label must be stated as the nominal concentration of such ingredient(s), as that term is defined in 40 CFR 158.153(i). Accordingly, the Agency has established the nominal concentration as the only acceptable label claim for the amount of active ingredient in the product.

II. BACKGROUND

For some time the Agency has accepted two different methods of identifying on the label what percentage is claimed for the ingredient(s) contained in a pesticide. Some applicants claimed a percentage which represented a level between the upper and the lower certified limits. This was referred to as the nominal concentration. Other applicants claimed the lower limit as the percentage of the ingredient(s) that would be expected to be present in their product at the end of the product's shelf-life. Unfortunately, this led to a great deal of confusion among the regulated industry, the regulators, and the consumers as to exactly how much of a given ingredient was in a given product. The Agency has established the nominal concentration as the only acceptable label claim for the amount of active ingredient in the product.

Current regulations require that the percentage listed in the active ingredient statement be as precise as possible reflecting good manufacturing practices 40 CFR 156.10(g)(5). The certified limits required for each active ingredient are intended to encompass any such "good manufacturing practice" variations 40 CFR 158.175(c)(3).



IV. PRODUCTS THAT REQUIRE EFFICACY DATA

All pesticides are required to be efficacious. Therefore, the certified lower limits may not be lower then the minimum level to achieve efficacy. This is extremely important for products which are intended to control pests which threaten the public health, e.g., certain antimicrobial and rodenticide products. Refer to 40 CFR 158.640.

In those cases where efficacy limits have been established, the Agency will not accept certified lower limits which are below that level for the shelf life of the product.

V. COMPLIANCE SCHEDULE

As described earlier, the purpose of this Notice is to make the registration process more uniform and more manageable for both the agency and the regulated community. It is the Agency's intention to implement the requirements of this notice as smoothly as possible so as not to disrupt or delay the Agency's high priority programs, i.e., reregistration, new chemical, or fast track (FIFRA section 3(c)(3)(B). Therefore, applicants/registrants are expected to comply with the requirements of this Notice as follows:

- (1) Beginning July 1, 1991, all new product registrations submitted to the Agency are to comply with the requirements of this Notice.
- (2) Registrants having products subject to reregistration under FIFRA section 4(a) are to comply with the requirements of this Notice when specific products are called in by the Agency under Phase V of the Reregistration Program.
- (3) All other products/applications that are not subject to (1) and (2) above will have until July 1, 1997, to comply with this Notice. Such applications should note "Conversion to Nominal Concentration" on the application form. These types of amendments will not be handled as "Fast Track" applications but will be handled as routine requests.

VI. FOR FURTHER INFORMATION

Contact Tyrone Aiken for information or questions concerning this notice on (703) 557-5024.

Anne E. Lindsay, Director Registration Division (H-7505

APPENDIX E

Pesticide Reregistration Handbook

APPENDIX F

Product Specific Data Call-In

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

DATA CALL-IN NOTICE

CERTIFIED MAIL

OFFICE OF PESTICIOES AND TOXIC SUBSTANCES

Dear Sir or Madam:

This Notice requires you and other registrants of pesticide products containing the active ingredient identified in Attachment A of this Notice, the <u>Data Call-In Chemical Status Sheet</u>, to submit certain product specific data as noted herein to the U.S. Environmental Protection Agency (EPA, the Agency). These data are necessary to maintain the continued registration of your product(s) containing this active ingredient. Within 90 days after you receive this Notice you must respond as set forth in Section III below. Your response must state:

- 1. How you will comply with the requirements set forth in this Notice and its Attachments A through G; or
- 2. Why you believe you are exempt from the requirements listed in this Notice and in Attachment C, Requirements Status and Registrant's Response Form, (see section III-B); or
- 3. Why you believe EPA should not require your submission of product specific data in the manner specified by this Notice (see section III-D).

If you do not respond to this Notice, or if you do not satisfy EPA that you will comply with its requirements or should be exempt or excused from doing so, then the registration of your product(s) subject to this Notice will be subject to suspension. We have provided a list of all of your products subject to this Notice in Attachment B, Data Call-In Response Form, as well as a list of all registrants who were sent this Notice (Attachment F).

The authority for this Notice is section 3(c)(2)(B) of the Federal Insecticide, Fungicide and Rodenticide Act as amended (FIFRA), 7 U.S.C. section 136a(c)(2)(B). Collection of this information is authorized under the Paperwork Reduction Act by OMB Approval No. 2070-0107 (expiration date 12-31-92).

Printed on Recycled Paper

This Notice is divided into six sections and seven Attachments. The Notice itself contains information and instructions applicable to all Data Call-In Notices. Attachments contain specific chemical information and instructions. The six sections of the Notice are:

Section I - Why You Are Receiving This Notice

Section II - Data Required By This Notice

Section III - Compliance With Requirements Of This

Section IV - Consequences Of Failure To Comply With This Notice

Section v - Registrants' Obligation To Report

Possible Unreasonable Adverse Effects Section VI - Inquiries And Responses To This Notice

The Attachments to this Notice are:

- Data Call-In Chemical Status Sheet

- Data Call-In Response Form

- Requirements Status and Registrant's Response Form - EPA Grouping of End-Use Products for Meeting Acute Toxicology Data Requirements for Reregistration
- E -EPA Acceptance Criteria

- List of Registrants Receiving This Notice

- Cost Share and Data Compensation Forms, and Product Specific Data Report Form

SECTION I. WHY YOU ARE RECEIVING THIS NOTICE

The Agency has reviewed existing data for this active ingredient and reevaluated the data needed to support continued registration of the subject active ingredient. The Agency has concluded that the only additional data necessary are product specific data. No additional generic data requirements are being You have been sent this Notice because you have product(s) containing the subject active ingredient.

SECTION II. DATA REQUIRED BY THIS NOTICE

II-A. DATA REQUIRED

The product specific data required by this Notice are specified in Attachment C, Requirements Status and Registrant's Response Form. Depending on the results of the studies required in this Notice, additional testing may be required.

II-B. SCHEDULE FOR SUBMISSION OF DATA

You are required to submit the data or otherwise satisfy the data requirements specified in Attachment C, Requirements Status and Registrant's Response Form, within the timeframes provided.

II-C. TESTING PROTOCOL

All studies required under this Notice must be conducted in accordance with test standards outlined in the Pesticide Assessment Guidelines for those studies for which guidelines have been established.

These EPA Guidelines are available from the National Technical Information Service (NTIS), Attn: Order Desk, 5285 Port Royal Road, Springfield, Va 22161 (tel: 703-487-4650).

Protocols approved by the Organization for Economic Cooperation and Development (OECD) are also acceptable if the OECD-recommended test standards conform to those specified in the Pesticide Data Requirements regulation (40 CFR § 158.70). When using the OECD protocols, they should be modified as appropriate so that the data generated by the study will satisfy the requirements of 40 CFR § 158. Normally, the Agency will not extend deadlines for complying with data requirements when the studies were not conducted in accordance with acceptable standards. The OECD protocols are available from OECD, 1750 Pennsylvania Avenue N.W., Washington, D.C. 20006.

All new studies and proposed protocols submitted in response to this Data Call-In Notice must be in accordance with Good Laboratory Practices [40 CFR Part 160.3(a)(6)].

II-D. REGISTRANTS RECEIVING PREVIOUS SECTION 3(c)(2)(B) NOTICES ISSUED BY THE AGENCY

Unless otherwise noted herein, this Data Call-In does not in any way supersede or change the requirements of any previous Data Call-In(s), or any other agreements entered into with the Agency pertaining to such prior Notice. Registrants must comply with the requirements of all Notices to avoid issuance of a Notice of Intent to Suspend their affected products.

SECTION III. COMPLIANCE WITH REQUIREMENTS OF THIS NOTICE

III-A. SCHEDULE FOR RESPONDING TO THE AGENCY

The appropriate responses initially required by this Notice for product specific data must be submitted to the Agency within 90 days after your receipt of this Notice. Failure to adequately respond to this Notice within 90 days of your receipt will be a basis for issuing a Notice of Intent to Suspend (NOIS) affecting

your products. This and other bases for issuance of NOIS due to failure to comply with this Notice are presented in Section IV-A and IV-B.

III-B. OPTIONS FOR RESPONDING TO THE AGENCY

The options for responding to this Notice for product specific data are: (a) voluntary cancellation, (b) agree to satisfy the product specific data requirements imposed by this Notice or (c) request a data waiver(s).

A discussion of how to respond if you choose the Voluntary Cancellation option is presented below. A discussion of the various options available for satisfying the product specific data requirements of this Notice is contained in Section III-C. A discussion of options relating to requests for data waivers is contained in Section III-D.

There are two forms that accompany this Notice of which, depending upon your response, one or both must be used in your response to the Agency. These forms are the Data-Call-In Response Form, and the Requirements Status and Registrant's Response Form, Attachment B and Attachment C. The Data Call-In Response Form must be submitted as part of every response to this Notice. addition, one copy of the Requirements Status and Registrant's Response Form must be submitted for each product listed on the Data Call-In Response Form unless the voluntary cancellation option is selected or unless the product is identical to another (refer to the instructions for completing the Data Call-In Response Form in Attachment B). Please note that the company's authorized representative is required to sign the first page of the Data Call-In Response Form and Requirements Status and Registrant's Response Form (if this form is required) and initial any subsequent pages. The forms contain separate detailed instructions on the response options. Do not alter the printed material. If you have questions or need assistance in preparing your response, call or write the contact person(s) identified in Attachment A.

1. Voluntary Cancellation - You may avoid the requirements of this Notice by requesting voluntary cancellation of your product(s) containing the active ingredient that is the subject of this Notice. If you wish to voluntarily cancel your product, you must submit a completed Data Call-In Response Form, indicating your election of this option. Voluntary cancellation is item number 5 on the Data Call-In Response Form. If you choose this option, this is the only form that you are required to complete.

If you choose to voluntarily cancel your product, further sale and distribution of your product after the effective date of cancellation must be in accordance with the Existing Stocks provisions of this Notice which are contained in Section IV-C.

- 2. Satisfying the Product Specific Data Requirements of this Notice. There are various options available to satisfy the product specific data requirements of this Notice. These options are discussed in Section III-C of this Notice and comprise options 1 through 6 on the Requirements Status and Registrant's Response Form and item numbers 7a and 7b on the Data Call-In Response Form. Deletion of a use(s) and the low volume/minor use option are not valid options for fulfilling product specific data requirements.
- 3. Request for Product Specific Data Waivers. Waivers for product specific data are discussed in Section III-D of this Notice and are covered by option 7 on the Requirements Status and Registrant's Response Form. If you choose this option, you must submit both forms as well as any other information/data pertaining to the option chosen to address the data requirement.

III-C SATISFYING THE DATA REQUIREMENTS OF THIS NOTICE

If you acknowledge on the Data Call-In Response Form that you agree to satisfy the product specific data requirements (i.e. you select option 7a or 7b), then you must select one of the six options on the Requirements Status and Registrant's Response Form related to data production for each data requirement. Your option selection should be entered under item number 9, "Registrant Response." The six options related to data production are the first six options discussed under item 9 in the instructions for completing the Requirements Status and Registrant's Response Form. These six options are listed immediately below with information in parentheses to guide registrants to additional instructions provided in this Section. The options are:

- I will generate and submit data within the specified timeframe (Developing Data) (2)
- I have entered into an agreement with one or more (3)
- registrants to develop data jointly (Cost Sharing)
- I have made offers to cost-share (Offers to Cost Share) I am submitting an existing study that has not been (4) submitted previously to the Agency by anyone (Submitting an Existing Study) (5)
- I am submitting or citing data to upgrade a study classified by EPA as partially acceptable and upgradeable
- I am citing an existing study that EPA has classified as acceptable or an existing study that has been submitted but not reviewed by the Agency (Citing an Existing Study)

Option 1. Developing Data -- If you choose to develop the required data it must be in conformance with Agency deadlines and with other Agency requirements as referenced herein and in the attachments. All data generated and submitted must comply with the Good Laboratory Practice (GLP) rule (40 CFR Part 160), be conducted according to the Pesticide Assessment Guidelines (PAG), and be in conformance with the requirements of PR Notice 86-5.

The time frames in the <u>Requirements Status and Registrant's Response Form</u> are the time frames that the Agency is allowing for the submission of completed study reports. The noted deadlines run from the date of the receipt of this Notice by the registrant. If the data are not submitted by the deadline, each registrant is subject to receipt of a Notice of Intent to Suspend the affected registration(s).

If you cannot submit the data/reports to the Agency in the time required by this Notice and intend to seek additional time to meet the requirements(s), you must submit a request to the Agency which includes: (1) a detailed description of the expected difficulty and (2) a proposed schedule including alternative dates for meeting such requirements on a step-by-step basis. You must explain any technical or laboratory difficulties and provide documentation from the laboratory performing the testing. While EPA is considering your request, the original deadline remains. The Agency will respond to your request in writing. If EPA does not grant your request, the original deadline remains. Normally, extensions can be requested only in cases of extraordinary testing problems beyond the expectation or control of the registrant. Extensions will not be given in submitting the 90-day responses. Extensions will not be considered if the request for extension is not made in a timely fashion; in no event shall an extension request be considered if it is submitted at or after the lapse of the subject deadline.

Option 2. Agree to Share in Cost to Develop Data -- Registrants may only choose this option for acute toxicity data and certain efficacy data and only if EPA has indicated in the attached data tables that your product and at least one other product are similar for purposes of depending on the same data. If this is the case, data may be generated for just one of the products in the group. The registration number of the product for which data will be submitted must be noted in the agreement to cost share by the registrant selecting this option. If you choose to enter into an agreement to share in the cost of producing the required data but will not be submitting the data yourself, you must provide the name of the registrant who will be submitting the data. You must also provide EPA with documentary evidence that an agreement has been formed. Such evidence may be your letter offering to join in an agreement and the other registrant's acceptance of your offer, or a written statement by the parties that an agreement exists. The agreement to produce the data need not specify all of the terms of the final arrangement between the parties or the mechanism to resolve the terms. Section 3(c)(2)(B) provides that if the parties cannot resolve the terms of the agreement they may resolve their differences through binding arbitration.

Option 3. Offer to Share in the Cost of Data Development -This option only applies to acute toxicity and certain efficacy
data as described in option 2 above. If you have made an offer to
pay in an attempt to enter into an agreement or amend an existing
agreement to meet the requirements of this Notice and have been

unsuccessful, you may request EPA (by selecting this option) to exercise its discretion not to suspend your registration(s), although you do not comply with the data submission requirements of this Notice. EPA has determined that as a general policy, absent other relevant considerations, it will not suspend the registration of a product of a registrant who has in good faith sought and continues to seek to enter into a joint data development/cost sharing program, but the other registrant(s) developing the data has refused to accept your offer. To qualify for this option, you must submit documentation to the Agency proving that you have made an offer to another registrant (who has an obligation to submit data) to share in the burden of developing that data. also submit to the Agency a completed EPA Form 8570-32, Certification of Offer to Cost Share in the Development of Data, Attachment G. In addition, you must demonstrate that the other registrant to whom the offer was made has not accepted your offer to enter into a costsharing agreement by including a copy of your offer and proof of the other registrant's receipt of that offer (such as a certified mail receipt). Your offer must, in addition to anything else, offer to share in the burden of producing the data upon terms to be agreed or failing agreement to be bound by binding arbitration as provided by FIFRA section 3(c)(2)(B)(iii) and must not qualify this offer. The other registrant must also inform EPA of its election of an option to develop and submit the data required by this Notice by submitting a Data Call-In Response Form and a Requirements Status and Registrant's Response Form committing to develop and submit the data required by this Notice.

In order for you to avoid suspension under this option, you may not withdraw your offer to share in the burdens of developing the data. In addition, the other registrant must fulfill its commitment to develop and submit the data as required by this Notice. If the other registrant fails to develop the data or for some other reason is subject to suspension, your registration as well as that of the other registrant will normally be subject to initiation of suspension proceedings, unless you commit to submit, and do submit the required data in the specified time frame. In such cases, the Agency generally will not grant a time extension for submitting the data.

Option 4. Submitting an Existing Study -- If you choose to submit an existing study in response to this Notice, you must determine that the study satisfies the requirements imposed by this Notice. You may only submit a study that has not been previously submitted to the Agency or previously cited by anyone. Existing studies are studies which predate issuance of this Notice. Do not use this option if you are submitting data to upgrade a study. (See Option 5).

You should be aware that if the Agency determines that the study is not acceptable, the Agency will require you to comply with this Notice, normally without an extension of the required date of submission. The Agency may determine at any time that a study is not valid and needs to be repeated.

To meet the requirements of the DCI Notice for submitting an existing study, all of the following three criteria must be clearly met:

- a. You must certify at the time that the existing study is submitted that the raw data and specimens from the study are available for audit and review and you must identify where they are available. This must be done in accordance with the requirements of the Good Laboratory Practice (GLP) regulation, 40 CFR Part 160. As stated in 40 CFR 160.3(j) [r]aw data' means any laboratory worksheets, records, memoranda, notes, or exact copies thereof, that are the result of original observations and activities of a study and are necessary for the reconstruction and evaluation of the report of that study. In the event that exact transcripts of raw data have been prepared (e.g., tapes which have been transcribed verbatim, dated, and verified accurate by signature), the exact copy or exact transcript may be substituted for the original 'Raw data' may include photographs, source as raw data. microfilm or microfiche copies, computer printouts, magnetic media, including dictated observations, and recorded data from automated instruments." The term "specimens", according to 40 CFR 160.3(k), means "any material derived from a test system for examination or analysis."
 - b. Health and safety studies completed after May 1984 must also contain all GLP-required quality assurance and quality control information, pursuant to the requirements of 40 CFR Part 160. Registrants must also certify at the time of submitting the existing study that such GLP information is available for post-May 1984 studies by including an appropriate statement on or attached to the study signed by an authorized official or representative of the registrant.
- c. You must certify that each study fulfills the acceptance criteria for the Guideline relevant to the study provided in (Attachmenta) the FIFRA Accelerated Reregistration Phase 3 Technical Guidance A and that the study has been conducted according to the Pesticide Assessment Guidelines (PAG) or meets the purpose of the PAG (both available from NTIS). A study not conducted according to the PAG may be submitted to the Agency for consideration if the registrant believes that the study clearly meets the purpose of the PAG. The registrant is referred to 40 CFR 158.70 which states the Agency's policy regarding acceptable protocols. If you wish to submit the study, you must, in addition to certifying that the purposes of the PAG are met by the study, clearly articulate the rationale why you believe the study meets the purpose of the PAG, including copies of any supporting information or data. It has been the Agency's experience that studies completed prior to January 1970 rarely satisfied the purpose of the PAG and that necessary raw data are usually not available for such studies.

If you submit an existing study, you must certify that the study meets all requirements of the criteria outlined above.

If you know of a study pertaining to any requirement in this Notice which does not meet the criteria outlined above but does contain factual information regarding unreasonable adverse effects, you must notify the Agency of such a study. If such study is in the Agency's files, you need only cite it along with the notification. If not in the Agency's files, you must submit a summary and copies as required by PR Notice 86-5.

Option 5. Upgrading a Study -- If a study has been classified as partially acceptable and upgradeable, you may submit data to upgrade that study. The Agency will review the data submitted and determine if the requirement is satisfied. If the Agency decides the requirement is not satisfied, you may still be required to submit new data normally without any time extension. In but upgradeable studies will normally be classified as supplemental. However, it is important to note that not all studies classified as supplemental are upgradeable. questions regarding the classification of a study or whether a If you have study may be upgraded, call or write the contact person listed in Attachment A. If you submit data to upgrade an existing study you must satisfy or supply information to correct all deficiencies in the study identified by EPA. You must provide a clearly articulated rationale of how the deficiencies have been remedied or corrected and why the study should be rated as acceptable to EPA. Your submission must also specify the MRID number(s) of the study which you are attempting to upgrade and must be in conformance with

Do not submit additional data for the purpose of upgrading a study classified as unacceptable and determined by the Agency as not capable of being upgraded.

This option should also be used to cite data that has been previously submitted to upgrade a study, but has not yet been reviewed by the Agency. You must provide the MRID number of the data submission as well as the MRID number of the study being upgraded.

The criteria for submitting an existing study, as specified in Option 4 above, apply to all data submissions intended to upgrade studies. Additionally your submission of data intended to upgrade studies must be accompanied by a certification that you comply with each of those criteria as well as a certification regarding protocol compliance with Agency requirements.

Option 6. Citing Existing Studies -- If you choose to cite a study that has been previously submitted to EPA, that study must have been previously classified by EPA as acceptable or it must be a study which has not yet been reviewed by the Agency. Acceptable

toxicology studies generally will have been classified as "core-guideline" or "core minimum." For all other disciplines the classification would be "acceptable." With respect to any studies for which you wish to select this option you must provide the MRID number of the study you are citing and, if the study has been reviewed by the Agency, you must provide the Agency's classification of the study.

If you are citing a study of which you are not the original data submitter, you must submit a completed copy of EPA Form 8570-31, Certification with Respect to Data Compensation Requirements.

Registrants who select one of the above 6 options must meet all of the requirements described in the instructions for completing the <u>Data Call-In Response</u> Form and the <u>Requirements Status and Registrant's Response</u> Form, as appropriate.

III-D REQUESTS FOR DATA WAIVERS

If you request a waiver for product specific data because you believe it is inappropriate, you must attach a complete justification for the request, including technical reasons, data and references to relevant EPA regulations, guidelines or policies. (Note: any supplemental data must be submitted in the format required by PR Notice 86-5). This will be the only opportunity to state the reasons or provide information in support of your request. If the Agency approves your waiver request, you will not be required to supply the data pursuant to section 3(c)(2)(B) of FIFRA. If the Agency denies your waiver request, you must choose an option for meeting the data requirements of this Notice within 30 days of the receipt of the Agency's decision. You must indicate and submit the option chosen on the Requirements Status and Registrant's Response Form. Product specific data requirements for product chemistry, acute toxicity and efficacy (where appropriate) are required for all products and the Agency will grant a waiver only under extraordinary circumstances. You should also be aware that submitting a waiver request will not automatically extend the due date for the study in question. Waiver requests submitted without adequate supporting rationals will be denied and the original due date will remain in force.

IV. CONSEQUENCES OF FAILURE TO COMPLY WITH THIS NOTICE

IV-A NOTICE OF INTENT TO SUSPEND

The Agency may issue a Notice of Intent to Suspend products subject to this Notice due to failure by a registrant to comply with the requirements of this Data Call-In Notice, pursuant to FIFRA section 3(c)(2)(B). Events which may be the basis for issuance of a Notice of Intent to Suspend include, but are not limited to, the following:

- 1. Failure to respond as required by this Notice within 90 days of your receipt of this Notice.
- 2. Failure to submit on the required schedule an acceptable proposed or final protocol if such is required to be submitted to the Agency for review.
- 3. Failure to submit on the required schedule an adequate progress report on a study if required by this Notice.
- 4. Failure to submit on the required schedule acceptable data as required by this Notice.
- 5. Failure to take a required action or submit adequate information pertaining to any option chosen to address the data requirements (e.g., any required action or information pertaining to submission or citation of existing studies or offers, arrangements, or arbitration on the sharing of costs or the formation of Task Forces, failure to comply with the terms of an agreement or arbitration concerning joint data development or failure to comply with any terms of a data waiver).
- 6. Failure to submit supportable certifications as to the conditions of submitted studies, as required by Section III-C of this Notice.
- 7. Withdrawal of an offer to share in the cost of developing required data.
- 8. Failure of the registrant to whom you have tendered an offer to share in the cost of developing data and provided proof of the registrant's receipt of such offer either to:
- a. Inform EPA of intent to develop and submit the data required by this Notice on a <u>Data Call-In Response</u> Form and a <u>Requirements Status and Registrant's Response</u> Form;
 - b. Fulfill the commitment to develop and submit the data as required by this Notice; or
- c. Otherwise take appropriate steps to meet the requirements stated in this Notice, unless you commit to submit and do submit the required data in the specified time frame.
- 9. Failure to take any required or appropriate steps, not mentioned above, at any time following the issuance of this Notice.

IV-B. BASIS FOR DETERMINATION THAT SUBMITTED STUDY IS UNACCEPTABLE

The Agency may determine that a study (even if submitted within the required time) is unacceptable and constitutes a basis for

issuance of a Notice of Intent to Suspend. The grounds for suspension include, but are not limited to, failure to meet any of the following:

- cher documents incorporated by reference (including, as applicable, EPA Pesticide Assessment Guidelines, Data Reporting Guidelines, and GeneTox Health Effects Test Guidelines) regarding the design, conduct, and reporting of required studies. Such requirements include, but are not limited to, those relating to test material, test procedures, selection of species, number of animals, sex and distribution of animals, dose and effect levels to be tested or attained, duration of test, and, as applicable, Good Laboratory Practices.
- 2. EPA requirements regarding the submission of protocols (if applicable), including the incorporation of any changes required by the Agency following review.
- 3. EPA requirements regarding the reporting of data, including the manner of reporting, the completeness of results, and the adequacy of any required supporting (or raw) data, including, but not limited to, requirements referenced or included in this Notice or contained in PR 86-5. All studies must be submitted in the form of a final report; a preliminary report will not be considered to fulfill the submission requirement.

IV-C EXISTING STOCKS OF SUSPENDED OR CANCELLED PRODUCTS

EPA has statutory authority to permit continued sale, distribution and use of existing stocks of a pesticide product which has been suspended or cancelled if doing so would be consistent with the purposes of the Act.

The Agency has determined that such disposition by registrants of existing stocks for a suspended registration when a section 3(c)(2)(B) data request is outstanding would generally not be consistent with the Act's purposes. Accordingly, the Agency anticipates granting registrants permission to sell, distribute, or use existing stocks of suspended product(s) only in exceptional circumstances. If you believe such disposition of existing stocks of your product(s) which may be suspended for failure to comply with this Notice should be permitted, you have the burden of clearly demonstrating to EPA that granting such permission would be consistent with the Act. You must also explain why an "existing stocks" provision is necessary, including a statement of the quantity of existing stocks and your estimate of the time required for their sale, distribution, and use. Unless you meet this burden the Agency will not consider any request pertaining to the continued sale, distribution, or use of your existing stocks after suspension.

If you request a voluntary cancellation of your product(s) as a response to this Notice and your product is in full compliance with

all Agency requirements, you will have, under most circumstances, one year from the date your 90 day response to this Notice is due, to sell, distribute, or use existing stocks. Normally, the Agency will allow persons other than the registrant such as independent distributors, retailers and end users to sell, distribute or use such existing stocks until the stocks are exhausted. Any sale, distribution or use of stocks of voluntarily cancelled products containing an active ingredient for which the Agency has particular risk concerns will be determined on a case-by-case basis.

Requests for voluntary cancellation received after the 90 day response period required by this Notice will not result in the Agency granting any additional time to sell, distribute, or use existing stocks beyond a year from the date the 90 day response was due unless you demonstrate to the Agency that you are in full compliance with all Agency requirements, including the requirements of this Notice. For example, if you decide to voluntarily cancel your registration six months before a 3 year study is scheduled to be submitted, all progress reports and other information necessary to establish that you have been conducting the study in an Agency, before EPA will consider granting an existing stocks

SECTION V. REGISTRANTS' OBLIGATION TO REPORT POSSIBLE UNREASONABLE ADVERSE EFFECTS

Registrants are reminded that FIFRA section 6(a)(2) states that if at any time after a pesticide is registered a registrant has additional factual information regarding unreasonable adverse effects on the environment by the pesticide, the registrant shall submit the information to the Agency. Registrants must notify the Agency of any factual information they have, from whatever source, including but not limited to interim or preliminary results of studies, regarding unreasonable adverse effects on man or the environment. This requirement continues as long as the products are registered by the Agency.

SECTION VI. INOUIRIES AND RESPONSES TO THIS NOTICE

If you have any questions regarding the requirements and procedures established by this Notice, call the contact person(s) listed in Attachment A, the <u>Data Call-In Chemical Status Sheet</u>.

All responses to this Notice (other than voluntary cancellation requests) must include a completed <u>Data Call-In Response Form</u> and a completed <u>Requirements Status and Registrant's Response Form</u> (Attachment B and Attachment C) and any other documents required by this Notice, and should be submitted to the contact person(s) identified in Attachment A. If the voluntary cancellation option is chosen, only the <u>Data Call-In Response Form</u> need be submitted.

The Office of Compliance Monitoring (OCM) of the Office of Pesticides and Toxic Substances (OPTS), EPA, will be monitoring the data being generated in response to this Notice.

Sincerely yours,

Daniel M. Barolo, Director Special Review and Reregistration Division

Attachments

- Data Call-In Chemical Status Sheet
- Data Call-In Response Form
- Requirements Status and Registrant's Response Form
- EPA Grouping of End-Use Products for Meeting Acute
 Toxicology Data Requirements for Reregistration
- EPA Acceptance Criteria
- List of Registrants Receiving This Notice
- Cost Share and Data Compensation Forms, and Product Specific Data Report Form

ATTACHMENT A CHEMICAL STATUS SHEET

ATTACHMENT A

N. locustae: DATA CALL-IN CHEMICAL STATUS SHEET

INTRODUCTION

You have been sent this Data Call-In Notice because you have products containing N. locustae.

This attachment, the <u>Data Call-in Chemical Status Sheet</u>, contains a point of contact for inquiries. This attachment is to be used in conjunction with (1) the <u>Data Call-In Notice</u>, (2) Attachment B, the <u>Data Call-In Response Form</u>, (3) Attachment C, the <u>Requirement Status and Registrant's Response Form</u> for product specific data, (4) Attachment D, <u>EPA Grouping of End-Use Products for Meeting Acute Toxicology Data Requirements for Reregistration</u>, (5) Attachment E, <u>EPA Acceptance Criteria</u>, (6) Attachment F, <u>List of All Registrant(s) sent this Data Call-In Notice</u>, and (7) Attachment G, the <u>Cost Share and Data Compensation Forms</u> for product specific data, and <u>Product Specific Data Report Form</u> for use in replying to this name of chemical Data Call-In. Instructions and guidance accompany each form.

DATA REQUIRED BY THIS NOTICE

The additional data requirements needed to complete the database for name of chemical are listed in the <u>Requirements Status and Registrant's Response Form</u>, Attachment C.

The Agency has concluded that product specific data are needed for name of chemical. The required additional data are listed in Attachment C.

Depending on the results of the studies required in this Notice, additional testing may be required.

INQUIRIES AND RESPONSES TO THIS NOTICE

If you have any questions regarding the product specific data requirements and procedures established by this Notice, please contact Phil Hutton at (703) 305-7690. All responses to this Notice should be submitted to:

Document Processing Desk (RED/RD/PM-18)
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M Street S.W.
Washington, D.C. 20460

RE: N. locustae

If you have any questions regarding the generic data requirements and procedures established by this Notice, please contact Sue Rathman at (703) 308-8069. All responses to this Notice should be submitted to:

Chemical Review Manager Sue Rathman Accelerated Reregistration Branch (H7508W) Special Review and Reregistration Division Office of Pesticide Programs U.S. Environmental Protection Agency 401 M Street S.W. Washington, D.C. 20460

RE: N. locustae

ATTACHMENT B

PRODUCT SPECIFIC DATA CALL-IN RESPONSE FORMS (Form A) PLUS INSTRUCTIONS

SPECIFIC INSTRUCTIONS FOR THE DATA CALL-IN RESPONSE FORM

This form is designed to be used to respond to call-ins for generic and product specific data for the purpose of reregistering pesticides under the Federal Insecticide Fungicide and Rodenticide Act. Fill out this form each time you are responding to a data call-in for which EPA has sent you the form entitled "Requirements Status and Registrant's Response."

Items 1 -4 will have been preprinted on the form. Items 5 through 7 must be completed by the registrant as appropriate. Items 8 through 11 must be completed by the registrant before submitting a response to the Agency.

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggesting for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460; and to the Office of Management and Budget, Paperwork Reduction Project 2070-0107, Washington, D.C. 20503.

INSTRUCTIONS

- Item 1. This item identifies your company name, number and address.
- Item 2. This item identifies the case number, case name, EPA chemical number and chemical name.
- Item 3. This item identifies the date and type of data call-in.
- Item 4. This item identifies the EPA product registrations relevant to the data call-in. Please note that you are also responsible for informing the Agency of your response regarding any product that you believe may be covered by this data call-in but that is not listed by the Agency in Item 4. You must bring any such apparent omission to the Agency's attention within the period required for submission of this response form.
- Item 5. Check this item for each product registration you wish to cancel voluntarily. If a registration number is listed for a product for which you previously requested voluntary cancellation, indicate in Item 5 the date of that request. You do not need to complete any item on

the <u>Requirements Status and Registrant's Response Form</u> for any product that is voluntarily cancelled.

Item 6a. Check this item if this data call-in is for generic data as indicated in Item 3 and if you are eligible for a Generic Data Exemption for the chemical listed in Item 2 and used in the subject product. By electing this exemption, you agree to the terms and conditions of a Generic Data Exemption as explained in the Data Call-In Notice.

If you are eligible for or claim a Generic Data Exemption, enter the EPA registration Number of each registered source of that active ingredient that you use in your product.

Typically, if you purchase an EPA-registered product from one or more other producers (who, with respect to the incorporated product, are in compliance with this and any other outstanding Data Call-In Notice), and incorporate that product into all your products, you may complete this item for all products listed on this form. If, however, you produce the active ingredient yourself, or use any unregistered product (regardless of the fact that some of your sources are registered), you may not claim a Generic Data Exemption and you may not select this item.

- Item 6b. Check this Item if the data call-in is a generic data call-in as indicated in Item 3 and if you are agreeing to satisfy the generic data requirements of this data call-in. Attach the Requirements Status and Registrant's Response Form that indicates how you will satisfy those requirements.
- Item 7a. Check this item if this call-in is a data call-in as indicated in Item 3 for a manufacturing use product (MUP), and if your product is a manufacturing use product for which you agree to supply product-specific data. Attach the <u>Requirements Status and Registrants' Response Form</u> that indicates how you will satisfy those requirements.
- Item 7b. Check this item if this call-in is a data call-in for an end use product (EUP) as indicated in Item 3 and if your product is a end use product for which you agree to supply product-specific data. Attach the Requirements Status and Registrant's Response Form that indicates how you will satisfy those requirements.
- Item 8. This certification statement must be signed by an authorized representative of your company and the

person signing must include his/her title. Additional pages used in your response must be initialled and dated in the space provided for the certification.

- Item 9. Enter the date of signature.
- Item 10. Enter the name of the person EPA should contact with questions regarding your response.
- Item 11. Enter the phone number of your company contact.

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	United	States Envir Washing	onmental Protection Agency ton, D. C. 20460		Form Approved OMS No. 2070-0107
		DATA CALL-IN RESPONSE	RESPONSE		Approval Expires 12-31-92
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54735-3		N.A.	N.A.		
8. Certification				9. Date	
I certify that the statements made on this form and all at I ecknowledge that any knowingly false or misleading state or both under applicable law. Signature and Title of Company's Authorized Representative	itements made on the knowingly false of the law.	tacha ment	ments are true, accurate, and complete. may be punishable by fine, imprisonment		
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Signature and Title of Company's Authorized Representative	f Company's Authori	zed Representative		4	
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ATTACHMENT C

PRODUCT SPECIFIC REQUIREMENT STATUS AND REGISTRANT'S RESPONSE (FORMS B) PLUS INSTRUCTIONS

AND

PR NOTICE 86-5

SPECIFIC INSTRUCTIONS FOR COMPLETING THE REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE FORM

Product Specific Data

This form is designed to be used for registrants to respond to call-ins for generic and product-specific data as part of EPA's reregistration program under the Federal Insecticide Fungicide and Rodenticide Act. Although the <u>form</u> is the same for both product and generic data, <u>instructions</u> for completing the forms differ slightly. Specifically, options for satisfying product specific data requirements do not include (1) deletion of uses or (2) request for a low volume/minor use waiver. These instructions are for completion of <u>product specific data</u> requirements.

EPA has developed this form individually for each data callin addressed to each registrant, and has preprinted this form with a number of items. <u>DO NOT</u> use this form for any other active ingredient.

Items 1 through 8 (inclusive) will have been preprinted on the form. You must complete all other items on this form by typing or printing legibly.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460; and to the Office of Management and Budget, Paperwork Reduction Project 2070-0107, Washington, D.C. 20503.

- 2. I have entered into an agreement with one or more registrants to develop data jointly (Cost Sharing). I am submitting a copy of this agreement and a completed "Certification With Respect To Data Compensation Requirements" form. I understand that this option is available only for acute toxicity or certain efficacy data only if EPA indicates in an attachment to this Notice that my product is similar enough to another product to qualify for this option. I certify that another party in the agreement is committing to submit or provide the requirement data; if the required study is not submitted on time, my product may be subject to suspension.
- I have made offers to share in the cost to develop data 3. (Offers to Cost Share). I understand that this option is available only for acute toxicity or certain efficacy data and only if EPA indicates in an attachment to this Data Call-In Notice that my product is similar enough to another product to qualify for this option. I am submitting evidence that I have make an offer to another registrant (who has an obligation to submit data) to share in the cost of that data. am also submitting a completed "Certification of Offer to Cost Share in the Development Data" form. including a copy of my offer and proof of the other registrant's receipt of that offer. I am identifying the party which is committing to submit or provide the required data; if the required study is not submitted on time, my product may be subject to suspension. understand that other terms under Option 3 in the Data Call-In Notice (Section III-C.1.) apply as well.
- 4. By the specified due date, I will submit an existing study that has not been submitted previously to the Agency by anyone (Submitting an Existing Study). I certify that this study will meet all the requirements for submittal of existing data outlined in Option 4 in the Data Call-In Notice (Section III-C.1.) and will meet the attached acceptance criteria (for acute toxicity and product chemistry data). I will attach the needed supporting information along with this response. I also certify that I have determined that this study will fill the data requirement for which I have indicated this choice.

Items 10-13 Self-explanatory.

NOTE:

You may provide additional information that does not fit on this form in a signed letter that accompanies this form. For example, you may wish to report that your product has already been transferred to antoher company or that you have already voluntarily cancelled this product. For these cases, please supply all relevant details so that EPA can ensure that its records are correct.



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

JUL 29 1986

PR NOTICE 86-5

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

NOTICE TO PRODUCERS, FORMULATORS, DISTRIBUTORS
AND REGISTRANTS

Attention: Persons responsible for Federal registration of

pesticides.

Subject: Standard format for data submitted under the Federal

Insecticide, Fungicide, and Rodenticide Act (FIFRA) and certain provisions of the Federal Food, Drug,

and Cosmetic Act (FFDCA).

I. Purpose

To require data to be submitted to the Environmental Protection Agency (EPA) in a standard format. This Notice also provides additional guidance about, and illustrations of, the required formats.

II. Applicability

This PR Notice applies to all data that are submitted to EPA to satisfy data requirements for granting or maintaining pesticide registrations, experimental use permits, tolerances, and related approvals under certain provisions of FIFRA and FFDCA. These data are defined in FIFRA \$10(d)(1). This Notice does not apply to commercial, financial, or production information, which are, and must continue to be, submitted differently under separate cover.

III. Effective Date

This notice is effective on November 1, 1986. Data formatted according to this notice may be submitted prior to the effective date. As of the effective date, submitted data packages that do not conform to these requirements may be returned to the submitter for necessary revision.

IV. Background

On September 26, 1984, EPA published proposed regulations in the Federal Register (49 FR 37956) which include Requirements for Data Submission (40 CFR \$158.32), and Procedures for Claims of Confidentiality of Data (40 CFR \$158.33). These regulations

specify the format for data submitted to EPA under Section 3 of FIFRA and Sections 408 and 409 of FFDCA, and procedures which must be followed to make and substantiate claims of confidentiality. No entitlements to data confidentiality are changed, either by the proposed regulation or by this notice.

OPP is making these requirements mandatory through this Notice to gain resource-saving benefits from their use before the entire proposed regulation becomes final. Adequate lead time is being provided for submitters to comply with the new requirements.

V. Relationship of this Notice to Other OPP Policy and Guidance

While this Notice contains requirements for organizing and formatting submittals of supporting data, it does not address the substance of test reports themselves. "Data reporting" guidance is now under development in OPP, and will specify how the study objectives, protocol, observations, findings, and conclusions are organized and presented within the study report. The data reporting guidance will be compatible with submittal format requirements described in this Notice.

OPP has also promulgated a policy (PR Notice 86-4 dated April 15, 1986) that provides for early screening of certain applications for registration under FIFRA §3. The objective of the screen is to avoid the additional costs and prolonged delays associated with handling significantly incomplete application packages. As of the effective date of this Notice, the screen will include in its criteria for acceptance of application packages the data formatting requirements described herein.

OPP has also established a public docket which imposes deadlines for inserting into the docket documents submitted in connection with Special Reviews and Registration Standards (see 40 CFR \$154.15 and \$155.32). To meet these deadlines, OPP is requiring an additional copy of any data submitted to the docket. Please refer to Page 10 for more information about this requirement.

For several years, OPP has required that each application for registration or other action include a list of all applicable data requirements and an indication of how each is satisfied—the statement of the method of support for the application. Typically, many requirements are satisfied by reference to data previously submitted—either by the applicant or by another party. That requirement is not altered by this notice, which applies only to data submitted with an application.

VI. Format Requirements

A more detailed discussion of these format requirements follows the index on the next page, and samples of some of the requirements are attached. Except for the language of the two alternative forms of the Statement of Data Confidentiality Claims (shown in Attachment 3) which cannot be altered, these samples are illustrative. As long as the required information is included and clearly identifiable, the form of the samples may be altered to reflect the submitter's preference.

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A. Organization of Submittal Package

A 'submittal package' consists of all studies submitted at the same time for review in support of a single regulatory action, along with a transmittal document and other related administrative material (e.g. the method of support statement, EPA Forms 8570-1, 8570-4, 8570-20, etc.) as appropriate.

Data submitters must organize each submittal package as described in this notice. The transmittal and any other administrative material must be grouped together in the first physical volume. Each study included in the submittal package must then be bound separately.

Submitters sometimes provide additional materials that are intended to clarify, emphasize, or otherwise comment to help Product Managers and reviewers better understand the submittal.

- If such materials relate to one study, they should be included as an appendix to that study.
- If such materials relate to more than one study (as for example a summary of all studies in a discipline) or to the submittal in general, they must be included in the submittal package as a separate study (with title page and statement of confidentiality claims).

B. Transmittal Document

The first item in each submittal package must be a transmittal document. This document identifies the submitter or all joint submitters; the regulatory action in support of which the package is being submitted—i.e., a registration application, petition, experimental use permit (EUP), \$3(c)(2)(B) data call—in, \$6(a)(2) submittal, or a special review; the transmittal date; and a list of all individual studies included in the package in the order of their appearance, showing (usually by Guideline reference number) the data requirement(s) addressed by each one. The EPA—assigned number for the regulatory action (e.g. the registration, EUP, or tolerance petition number) should be included in the transmittal document as well, if it is known to the submitter. See Attachment 1 for an example of an acceptable transmittal document.

The list of included studies in the transmittal of a data submittal package supporting a registration application should be subdivided by discipline, reflecting the order in which data requirements appear in 40 CFR 158.

The list of included studies in the transmittal of a data submittal package supporting a petition for tolerance or an application for an EUP should be subdivided into sections A, B, C,... of the petition or application, as defined in 40 CFR 180.7 and 158.125, (petitions) or Pesticide Assessment Guidelines, Subdivision I (EUPs) as appropriate.

When a submittal package supports a tolerance petition and an application for a registration or an EUP, list the petition studies first, then the balance of the studies. Within these two groups of studies follow the instructions above.

C. Individual Studies

A study is the report of a single scientific investigation, including all supporting analyses required for logical completeness. A study should be identifiable and distinguishable by a conventional bibliographic citation including author, date, and title. Studies generally correspond in scope to a single Guideline requirement for supporting data, with some exceptions discussed in section C.l. Each study included in a submittal package must be bound as a separate entity. (See comments on binding studies on page 9.)

Each study must be consecutively paginated, beginning from the title page as page 1. The total number of pages in the complete study must be shown on the study title page. In addition (to ensure that inadvertently separated pages can be reassociated with the proper study during handling or review) use either of the following:

- Include the total number of pages in the complete study on each page (ie., 1 of 250, 2 of 250, ... 250 of 250).
- Include a company name or mark and study number on each page of the study, e.g., Company Name-1986-23. Never reuse a study number for marking the pages of subsequent studies.

When a single study is extremely long, binding it in multiple volumes is permissible so long as the entire study is paginated in a single series, and each volume is plainly identified by the study title and its position in the multi-volume sequence.

C.1 Special Considerations for Identifying Studies

Some studies raise special problems in study identification, because they address Guidelines of broader than normal scope or for other reasons.

a. <u>Safety Studies</u>. Several Guidelines require testing for safety in more than one species. In these cases each species tested should be reported as a separate study, and bound separately.

Extensive supplemental reports of pathology reviews, feed analyses, historical control data, and the like are often associated with safety studies. Whenever possible these should be submitted with primary reports of the study, and bound with the primary study as appendices. When such supplemental reports are submitted independently of the primary report, take care to fully identify the primary report to which they pertain.

Batteries of acute toxicity tests, performed on the same end use product and covered by a single title page, may be bound together and reported as a single study,

b. Product Chemistry Studies. All product chemistry data within a submittal package submitted in support of an end-use product produced from registered manufacturing-use products should be bound as a single study under a single title page.

Product chemistry data submitted in support of a technical product, other manufacturing-use product, an experimental use permit, an import tolerance petition, or an end-use product produced from unregistered source ingredients, should be bound as a single study for each Guideline series (61, 62, and 63) for conventional pesticides, or for the equivalent subject range for biorational pesticides. The first of the three studies in a complete product chemistry submittal for a biochemical pesticide would cover Guidelines 151-10, 151-11, and 151-12; the second would cover Guidelines 151-13, 151-15, and 151-16; the third would cover Guideline 151-17. The first study for a microbial pesticide would cover Guidelines 151-20, 151-21, and 151-22; the second would cover Guidelines 151-23 and 151-25; the third would cover Guideline 151-26.

Note particularly that product chemistry studies are likely to contain Confidential Business Information as defined in FIFRA \$10(d)(1)(A), (B), or (C), and if so must be handled as described in section D.3. of this notice.

Residue Chemistry Studies. Guidelines 171-4, 153-3, and 153-4 are extremely broad in scope; studies addressing residue chemistry requirements must thus be defined at a level below that of the Guideline code. The general principle, however, of limiting a study to the report of a single investigation still applies fully. Data should be treated as a single study and bound separately for each analytical method, each report of the nature of the residue in a single crop or animal species, and for each report of the magnitude of residues resulting from treatment of a single crop or from processing a single crop. When more than one commodity is derived from a single crop (such as beet tops and beet roots) residue data on all such commodities should be reported as a single study. When multiple field trials are associated with a single crop, all such trials should be reported as a single study.

D. Organization of Each Study Volume

Each complete study must include all applicable elements in the list below, in the order indicated. (Also see Page 17.) Several of these elements are further explained in the following paragraphs. Entries in the column headed 'example' cite the page number of this notice where the element is illustrated.

Element	When Required	Example
Study Title Page	Always	Page 12
Statement of Data Confidentiality Claims	One of the two alternative forms of this statement is always required.	Page 13
Certification of Good Laboratory Practice	If study reports laboratory work subject to GLP require-ments	Page 16
Flagging statements	For certain toxicology studies. flagging requirements are finalis	(When zed.)
Body of Study	Always - with an English language translation if required.	e
Study Appendices	At submitter's option	
Cover Sheet to Confi- dential Attachment	<pre>If CBI is claimed under FIFRA \$10(d)(1)(A), (B), or (C)</pre>	
CBI Attachment	If CBI is claimed under FIFRA \$10(d)(1)(A), (B), or (C)	Page 15
Supplemental Statement of Data Confidentiality Claims	Only if confidentiality is claimed on a basis other than FIFRA \$10(d)(1)(A), (B), or (C)	Page 14

D.1 Title Page

A title page is always required for each submitted study, published or unpublished. The title page must always be freely releasable to requestors; DO NOT INCLUDE CBI ON THE TITLE PAGE. An example of an acceptable title page is on page 12 of this notice. The following information must appear on the title page:

- a. Study title. The study title should be as descriptive as possible. It must clearly identify the substance(s) tested and correspond to the name of the data requirement as it appears in the Guidelines.
- b. Data requirement addressed. Include on the title page the Guideline number(s) of the specific requirement(s) addressed by the study.
- c. <u>Author(s)</u>. Cite only individuals with primary intellectual responsibility for the content of the study. Identify them plainly as authors, to distinguish them from the performing laboratory, study sponsor, or other names that may also appear on the title page.
- d. Study Date. The title page must include a single date for the study. If parts of the study were performed at different times, use only the date of the latest element in the study.
- e. <u>Performing Laboratory Identification</u>. If the study reports work done by one or more laboratories, include on the title page the name and address of the performing laboratory or laboratories, and the laboratory's internal project number(s) for the work. Clearly distinguish the laboratory's project identifier from any other reference numbers provided by the study sponsor or submitter.
- f. <u>Supplemental Submissions</u>. If the study is a commentary on or supplement to another previously submitted study, or if it responds to EPA questions raised with respect to an earlier study, include on the title page elements a. through d. for the previously submitted study, along with the EPA Master Record Identifier (MRID) or Accession number of the earlier study if you know these numbers. (Supplements submitted in the same submittal package as the primary study should be appended to and bound with the primary study. Do not include supplements to more than one study under a single title page).
- g. <u>Facts of Publication</u>. If the study is a reprint of a published document, identify on the title page all relevant facts of publication, such as the journal title, volume, issue, inclusive page numbers, and publication date.

D.2. Statements of Data Confidentiality Claims Under FIFRA \$10(d)(1).

Each submitted study must be accompanied by one of the two alternative forms of the Statement of Data Confidentiality Claims specified in the proposed regulation in \$158.33 (b) and (c). (See Attachment 3) These statements apply only to claims of data confidentiality based on FIFRA \$10(d)(1)(A), (B), or (C). Use the appropriate alternative form of the statement either to assert a claim of \$10(d)(1) data confidentiality (\$158.33(b)) or to waive such a claim (\$158.33(c)). In either case, the statement must be signed and dated, and must include the typed name and title of the official who signs it. Do not make CBI claims with respect to analytical methods associated with petitions for tolerances or emergency exemptions (see NOTE Pg 13).

D.3. Confidential Attachment

If the claim is made that a study includes confidential business information as defined by the criteria of FIFRA \$10(d)(1)(A), (B), or (C) (as described in D.2. above) all such information must be excised from the body of the study and confined to a separate study-specific Confidential Attachment. Each passage of CBI so isolated must be identified by a reference number cited within the body of the study at the point from which the passage was excised (See Attachment 5).

The Confidential Attachment to a study must be identified by a cover sheet fully identifying the parent study, and must be clearly marked 'Confidential Attachment.' An appropriately annotated photocopy of the parent study title page may be used as this cover sheet. Paginate the Confidential Attachment separately from the body of the study, beginning with page 1 of X on the title page. Each passage confined to the Confidential Attachment must be associated with a specific cross reference to the page(s) in the main body of the study on which it is cited, and with a reference to the applicable passage(s) of FIFRA \$10(d)(1) on which the confidentiality claim is based.

D.4. Supplemental Statement of Data Confidentiality Claims (See Attachment 4)

If you wish to make a claim of confidentiality for any portion of a submitted study other than described by FIFRA \$10(d)(1)(A), (B), or (C), the following provisions apply:

- The specific information to which the claim applies must be clearly marked in the body of the study as subject to a claim of confidentiality.
- A Supplemental Statement of Data Confidentiality Claims must be submitted, identifying each passage claimed confidential and describing in detail the basis for the claim. A list of the points to address in such a statement is included in Attachment 4 on Pg 14.
- The Supplemental Statement of Data Confidentiality Claims must be signed and dated and must include the typed name and title of the official who signed it.

D.5 Good Laboratory Practice Compliance Statement

This statement is required if the study contains laboratory work subject to GLP requirements specified in 40 CFR 160. Samples of these statements are shown in Attachment 6.

E. Reference to Previously Submitted Data

DO NOT RESUBMIT A STUDY THAT HAS PREVIOUSLY BEEN SUBMITTED FOR ANOTHER PURPOSE unless EPA specifically requests it. A copy of the title page plus the MRID number (if known) is sufficient to allow us to retrieve the study immediately for review. This prevents duplicate entries in the Agency files, and saves you the cost of sending more copies of the study. References to previously submitted studies should not be included in the transmittal document, but should be incorporated into the statement of the method of support for the application.

F. Physical Format Requirements

All elements in the data submittal package must be on uniform 8 1/2 by 11 inch white paper, printed on one side only in black ink, with high contrast and good resolution. Bindings for individual studies must be secure, but easily removable to permit disassembly for microfilming. Check with EPA for special instructions before submitting data in any medium other than paper, such as film or magnetic media.

Please be particularly attentive to the following points:

- o Do not include frayed or torn pages.
- o Do not include carbon copies, or copies in other than black ink.
- o Make sure that photocopies are clear, complete, and fully readable.
- o Do not include oversize computer printouts or fold-out pages.
- o Do not bind any documents with glue or binding tapes.
- o Make sure that all pages of each study, including any attachments or appendices, are present and in correct sequence.

Number of Copies Required - All submittal packages except those associated with a Registration Standard or Special Review (see Part G below) must be provided in three complete, identical copies. (The proposed regulations specified two copies; three are now being required to expedite and reduce the cost of processing data into the OPP Pesticide Document Management System and getting it into review.)

G. Special Requirements for Submitting Data to the Docket

Data submittal packages associated with a Registration Standard or Special Review must be provided in <u>four</u> copies, from one of which all material claimed as CBI has been excised. This fourth copy will become part of the public docket for the RS or SR case. If no claims of confidentiality are made for the study, the fourth copy should be identical to the other three. When portions of a study submitted in support of an RS or SR are claimed as CBI, the first three copies will include the CBI material as provided in section D of this notice. The following special preparation is required for the fourth copy.

- Remove the 'Supplemental Statement of Data Confidentiality Claims'.
- o Remove the 'Confidential Attachment'.
- o Excise from the body of the study any information you claim as confidential, even if it does not fall within the scope of FIFRA \$10(d)(1)(A), (B), or (C). Do not close up or paraphrase text remaining after this excision.
- o Mark the fourth copy plainly on both its cover and its title page with the phrase "Public Docket Material contains no information claimed as confidential".

V. For Further Information

For further information contact William C. Grosse, Chief, Information Services Branch, Program Management and Support Division, (703-557-2613).

Attachment 1. Sample Transmittal Document

Attachment 2. Sample Title Page for a Newly Submitted Study

Attachment 3. Statements of Data Confidentiality Claims

Attachment 4. Supplemental Statement of Data Confidentiality Claims

Dames W. Akerman Acting Director,

Registration Division

Attachment 5. Samples of Confidential Attachments

Attachment 6. Sample Good Laboratory Practice Statements

Attachment 7. Format Diagrams for Submittal Packages and Studies

ATTACHMENT 1.

ELEMENTS TO BE INCLUDED IN THE TRANSMITTAL DOCUMENT*

1. Name and address of submitter (or all joint submitters**)

†Smith Chemical Corporation Jones Chemical Company 1234 West Smith Street -and- 5678 Wilson Blvd Cincinnati, OH 98765 Covington, KY 56789

†Smith Chemical Corp. will act as sole agent for all submitters.

2. Regulatory action in support of which this package is submitted

Use the EPA identification number (e.g. 359-EUP-67) if you know it Otherwise describe the type of request (e.g. experimental use permit, data call-in - of xx-xx-xx date).

- 3. Transmittal date
- 4. List of submitted studies
 - Vol 1. Administrative materials forms, previous correspondence with Project Managers, and so forth.
 - Vol 2. Title of first study in the submittal (Guideline No.)
 - Vol n. Title of nth study in the submittal (Guideline No.)
 - * Applicants commonly provide this information in a transmittal letter. This remains an acceptable practice so long as all four elements are included.
 - ** Indicate which of the joint submitters is empowered to act on behalf of all joint submitters in any matter concerning data compensation or subsequent use or release of the data.

Company	Official:	Name	Signature
Company	Name:		
Company	Contact:	Name	Phone

ATTACHMENT 2.

SAMPLE STUDY TITLE PAGE FOR A NEWLY SUBMITTED STUDY

Study Title

(Chemical name) - Magnitude of Residue on Corn

Data Requirement

Guideline 171-4

Author

John C. Davis

Study Completed On

January 5, 1979

Performing Laboratory

ABC Agricultural Laboratories 940 West Bay Drive Wilmington, CA 39897

Laboratory Project ID

ABC 47-79

Page 1 of X (X is the total number of pages in the study)

ATTACHMENT 3.

STATEMENTS OF DATA CONFIDENTIALITY CLAIMS

1. No claim of confidentiality under FIFRA \$10(d)(1)(A),(B), or (C)

STATEMENT OF NO DATA CONFIDENTIALITY CLAIMS

No claim of confident on the basis of its f	iality is made for any infor alling within the scope of F	mation contained in this study IFRA \$10(d)(1)(A), (B), or (C).
Company		· · · · · · · · · · · · · · · · · · ·
Company Agent:	Typed Name	Date:
Titl	e	Signature
		<u> </u>

2. Claim of confidentiality under FIFRA \$10(d)(1)(A), (B), or (C).

STATEMENT OF DATA CONFIDENTIALITY CLAIMS

of FIFRA §10(d)(1)(A),		its falling within the scope wed to a confidential appendix, my of the study.
Company:		
Company Agent:	Typed Name	Date:
Title	· · · · · · · · · · · · · · · · · · ·	Signature

NOTE: Applicants for permanent or temporary tolerances should note that it is OPP policy that no permanent tolerance, temporary tolerance, or request for an emergency exemption incorporating an analytical method, can be approved unless the applicant waives all claims of confidentiality for the analytical method. These analytical methods are published in the FDA Pesticide Analytical Methods Manual, and therefore cannot be claimed as confidential. OPP implements this policy by returning submitted analytical methods, for which which confidentiality claims have been made, to the submitter, to obtain the confidentiality waiver before they can be processed.

ATTACHMENT 4.

SUPPLEMENTAL STATEMENT OF DATA CONFIDENTIALITY CLAIMS

For any portion of a submitted study that is not described by FIFRA \$10(d)(1)(A), (B), or (C), but for which you claim confidential treatment on another basis, the following information must be included within a Supplemental Statement of Data Confidentiality Claims:

- Identify specifically by page and line number(s) each portion of the study for which you claim confidentiality.
- O Cite the reasons why the cited passage qualifies for confidential treatment.
- o Indicate the length of time--until a specific date or event, or permanently--for which the information should be treated as confidential.
- o Identify the measures taken to guard against undesired disclosure of this information.
- O Describe the extent to which the information has been disclosed, and what precautions have been taken in connection with those disclosures.
- o Enclose copies of any pertinent determinations of confidentiality made by EPA, other Federal agencies, or courts concerning this information.
- O If you assert that disclosure of this information would be likely to result in substantial harmful effects to you, describe those harmful effects and explain why they should be viewed as substantial.
- o If you assert that the information is voluntarily submitted, indicate whether you believe disclosure of this information might tend to lessen the availability to EPA of similar information in the future, and if so, how.

ATTACHMENT 5.

EXAMPLES OF SEVERAL CONFIDENTIAL ATTACHMENTS

Example 1 (Confidential word or phrase that has been deleted from the study)

		in pl	cross reference number ace of the following w ated volume and page re	ords or phrase at the
DELETED W	ORDS C	R PHRASE: Ethy	lene Glycol	
PAGE L	INE	REASON FOR THE DELETI	<u>on</u>	FIFRA REFERENCE
6	14	Identity of Inert Inc	redient	§10(d)(1)(C)
28	25	н	,	n
100	19	и		••

Example 2 (Confidential paragraph(s) that have been deleted from the study)

CROSS RE	EFERENC	E NUMBER 5 This cross reference number is in place of the following paragindicated volume and page refer	graph(s) at the
DELETED (PARAGR	APH(S): Reproduce the deleted paragraph(s) here)))
PAGE	LINES	REASON FOR THE DELETION	FIFRA REFERENCE
20	4-17	Description of the quality control process	§10(d)(1)(C)

Example 3 (Confidential pages that have been deleted from the study)

CROSS REFEREN	CE NUMBER7_	This cross reference number not page is used in place of the foat the indicated volume and page	ollowing whole pages
DELETED PAGE(S): are attache	ed immediately behind this page.	
PAGE(S)	REASON FOR THE	DELETION	FIFRA REFERENCE
33-41	Description of	product manufacturing process	\$10(d)(1)(A)

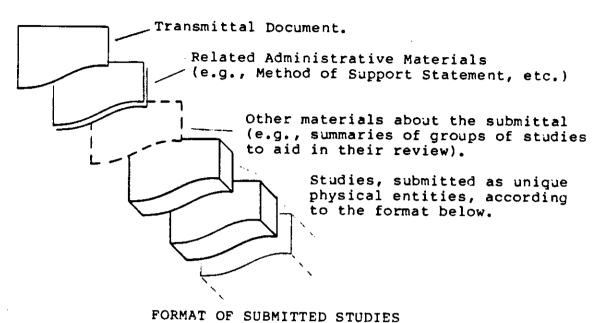
ATTACHMENT 6.

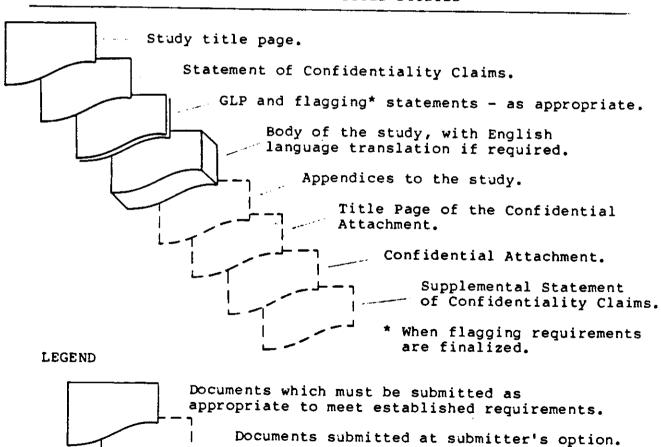
SAMPLE GOOD LABORATORY PRACTICE STATEMENTS

Example 1.

This study meets the requirements for 40 CFR Part Submitter Sponsor Study Director	160
Example 2.	
This study does not meet the requirements of 40 CFR Part 160, and differs in the following ways: 1. 2. Submitter Sponsor Study Director	
The submitter of this study was neither the sponsor study nor conducted it, and does not know whether i been conducted in accordance with 40 CFR Part 160. Submitter	of this

FORMAT OF THE SUBMITTAL PACKAGE





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	United States Enviro	ronmental Prote	Protection Agency		Form Approved	Approved
	Mashin	gton, D. C. 20460			OMB No.	OKB No. 2070-0107
	ements status	AND REGISTRANT'S	T'S RESPONSE		Approva	Approval Expires 12-31-92
INSTRUCTIONS: Please type or print in ink. Use additional sheet(s) if necessary.	ink.	the attached instruct	Please read carefully the attached instructions and supply the information requested on this form.	imation requested	on this form.	
1. Company name and Address DELTA ANALYTICAL AGENT FOR: ATTACE	SS CAL CORP	2. Case # and Name 4104 Nosema	ma locustae		3. Date and Type of DCI PRODUCT SPECIFIC	CIFIC
1414 FENWICK SILVER SPRING	1414 FENWICK LN SILVER SPRINGS MD 20910	EPA Reg. N	No. 36488-3		1D# 35488-KD-2343	D-2343
4. Guideline Requirement Number	5. Study Title	Progress Reports 0 1 2 3	6. Use Pattern	7. Test Substance	8. Time Frame	9. Registrant Response
	Prod Chem - Microbial					
151A-10	Product identity		ABCDEFGHIJK	MP/EP	8	
151A-11	Narufacturing process		ABCDEFGHIJK	MP/EP		
151A-12	Discussion of formation of		ABCDEFGHIJK	MP/EP	8 mos.	
151A-13	unintentional ingredients Analysis of samples		ABCDFFCHTIK	MD/ED	C E	
7	ni ts		ARCDEFGHIIK	MD/ED		
151A-16	Physical and chemical		ABCDEFGHIJK	MP/EP	8 mos.	
וביאנדמואו	properties					
	Color		ABCDEFGHIJK	MP/EP		
151A-16(b)	Physical state		ABCDEFGHIJK	MP/EP		
151A-16(C)	Odor		ABCDEFGHIJK	MP/EP	8 mos.	
151A-16(d)	Density or specific gravity		ABCDEFGHIJK	MP/EP		
1518-16(€)	E		ABCDEFGHIJK	MF/EF		
151A-16(g)	Storage stability		ABCDEFGHIJK	MP/EP	8 mos.	
10. Certification				11. Date	Date	
I certify that the statements I acknowledge that any knowin or both under applicable law.	made on this form and all attach gly false or misleading statement	ments are true, accurate, and complete. may be punishable by fine, imprisonment	and complete. e, imprisonment			
Signature and Title of Co	Signature and Title of Company's Authorized Representative					
12 Mane of Company Contact				!		

	United States Environmental	_ '	Protection Agency		Form Approved	roved
	MASHINGUM, D. BEOHIDEMENTE STRATHE AND DEC	STATIS AND DECISIONAL	eu T'e Dredoner		CMB No.	CMB No. 2070-0107
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1. Company name and Addi DELTA ANALYT AGENT FOR: A	Company name and Address DELTA ANALYTICAL CORP AGENT FOR: ATTACK PESTICIDES	2. Case # and Name 4104 Nosema	ma locustae		3. Date and Type of DCI PRODUCT SPECIFIC	CIFIC
1414 FENWICK SILVER SPRIN	GS MD 20910	EPA Reg. No	No. 36488-3		117# 35486-KL	U-2343
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81-1 81-2			ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos.	
81-3 81-5	toxicity-rabbit/rat Acute inhelation toxicity-rat (3,40) Primary dermal irritation (1,2,40)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos.	<u> </u>
	Acute Toxic - Microbial					
152A-14 152A-15	Primary eye frritation (40) Hypersensitivity incidents (2)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos. 8 mos.	
	·.					
	Initial to indicate certification as to information on this Dede		Date	-		

United States Environmental Protection Agency Washington, D. C. 20460

POOTNOTES AND KEY DEFINATIONS FOR GUIDELINE REQUIREMENTS

Case # and Name: 4104 Nosema locustae

Key: MP = manufacturing-use product; EP = end-use product; provided formulators purchase their active ingredient(s) from a registered source, they need not submit or cite data pertaining to the purchased product. INOIE: If a product is a 100 percent repackage of another registered product that is purchased, and any use for the product does not differ from those of the purchased and registered source, users are not subject to any data requirements identified in the tables.]; TEP = typical end-use product; IGAI = technical grade of the active ingredient; PAI = "pure" active ingredient; PAIRA = "pure" active ingredient, radiolabeled.

Use Categories Key:

1 - Greenhouse nonfood crop D - Aquatic food crop C - Terrestrial nonfood crop G - Aquatic nonfood residential B - Terrestrial food feed crop Aquatic nonfood Industrial A - Terrestrial food crop

L - Indoor food

K - Residential outdoor

N - Indoor Medical H - Greenhouse food crop M - Indoor nonfood

E - Aquatic nonfood outdoor

J - Forestry

0 - Indoor residential

FOOTHOTES: [The following notes are referenced in column two (5. Study Title) of the REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE form.)

Prod Ches - Microbial

Data on other end-use products Required to support registration of each manufacturing-use product and end-use products produced by an integrated formulation system. Data on other end-use will be required on a case-by-case basis for pesticides in the production stage. A rudimentary product analytical method and data will suffice to support an experimental use permit. M

Acute Toxic - Regular Chemical

- Not required if test material is a gas or highly volatile.
- Not required if test material is corrosive to skin or has pH less than 2 or greater than 11.5; such a product will be classified as Toxicity Category 1 on the basis of potential eye and dermal irritation effects.
 - Required if the product consists of, or under conditions of use will result in, an inhalable material (e. g., gas, volatile substances, or aerosol/particulate).

Acute Toxic - Microbial

2 Hypersensitivity incidents must be reported, if they occur.

Acute Toxic - General Footnote

The acute toxicity studies for the MP and EP are intended to provide data on the acute toxicity of the formulated product. Waivers for any or all of these studies may be granted when it is common knowledge that, or information submitted by the respondent indicates that the inert ingradients in the formulation are not likely to pose human health risks. 3

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	United States Environme Washington,	ntal D. C	Protection Agency . 20460		Ē	Form Approved
	REQUIREMENTS STATUS	STATUS AND REGISTRANT'S	NT'S RESPONSE		<u> </u>	Umb No. 2070-UIU/ Approval Expires 12-31-92
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1. Company name and Address DELTA ANALYTICAL CAGENT FOR: ATTACK	ress ICAL CORP TFACK PESTICIDES	2. Case # and Name 4104 Nosema	ema locustae		3. Date and Type of DCI PRODUCT SPECT	Date and Type of DCI PRODUCT SPECIFIC
1414 FENWICK SILVER SPRIN	GS MD 20910	EPA Reg. N	No. 36488-7			**C7-04-0
4. Guideline Requirement Number	5. Study Title	R Progress	s 6. Use Pattern	7. Test Substance	8. Time Frame	9. Registrant Response
	Prod Chem - Microbial					
151A-10	Product identity		ABCDEFGHIJK	MP/EP		mos.
151A-11	Manufacturing process		ABCDEFGHIJK	MP/EP	E 8	mos.
151A-12	Discussion of formation of		ABCDEFGHIJK	MP/EP		mos.
151A-13	Analysis of samples (3)		ABCDEFGHIJK	MP/EP		MOS.
151A-15	mi te		ABCDEFGHIJK	MP/EP	E 8	mos.
151A-16	Physical and chemical		ABCDEFGHIJK	MP/EP		mos.
1518-16(a)	properties		ARCHERCHITK	MD/ED	α	i C
151A-16(b)	Physical state		ABCDEFCHIJK	MP/EP		mos.
151A-16(c)	Odor		ABCDEFGHIJK	MP/EP		mos.
151A-16(d)	Density or specific gravity		ABCDEFGHIJK	MP/EP		HOS.
(e)	3 .		ABCDEFCHIJK	MP/EP		mos.
151A-16(F) 151A-16(G)	Stability Storage stability		ABCDEFGHIJK	TGAL MP/EP	E E	HOS.
10. Certification				11. Date	Jate	
I certify that the statements asknowledge that any knowing or both under annicable law.	I certify that the statements made on this form and all attachments are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine, imprisonment or both under annicable law.	ents are true, accurate may be punishable by fi	e, and complete. ine, imprisorment			
Signature and Title of C	Signature and Title of Company's Authorized Representative					
12. Name of Company Contact	400			1	13 Dhone Marker	

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		Primary eye irritation Hypersensitivity incidents		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP		mos.	

United States Environmental Protection Agency Washington, D. C. 20460

POOTNOTES AND KEY DEFINATIONS FOR GUIDELINE REQUIREMENTS

Case # and Name: 4104 Nosema locustae

Key: MP = manufacturing-use product; EP = end-use product; provided formulators purchase their active ingredient(s) from a registered source, they need not submit or cite data pertaining to the purchased product. [NOTE: If a product is a 100 percent repackage of another registered product that is purchased, and any use for the product does not differ from those of the purchased and registered source, users are not subject to any data requirements identified in the tables.]; IEP a typical end-use product; IGAI = technical grade of the active ingredient; PAI = "pure" active ingredient; PAIRA = "pure" active ingredient, radiolabeled.

E - Aquatic nonfood outdoor J - Forestry crop D - Aquatic food crop I - Greenhouse nonfood C - Terrestrial nonfood crop H - Greenhouse food crop B - Terrestrial food feed crop G - Aquatic nonfood residential - Aquatic nonfood Industrial - Terrestrial food crop Use Categories Key:

FOOCHOCES: [The following notes are referenced in column two (5. Study Title) of the REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE form.]

M - Indoor nonfood

L - Indoor food

K - Residential outdoor

0 - Indoor residential

N - Indoor Medical

Prod Chem - Microbial

I Required to support registration of each manufacturing-use product and end-use products produced by an integrated formulation system. Data on other end-use products will be required on a case-by-case basis for pesticides in the production stage. A rudimentary product analytical method and data will suffice to support an experimental use permit.

Acute Toxic - Regular Chemical

- Not required if test material is a gas or highly volatile.
- Not required if test material is corrosive to skin or has pH less than 2 or greater than 11.5; such a product will be classified as Toxicity Category I on the basis of potential eye and dermal irritation effects.
 - Required if the product consists of, or under conditions of use Will result in, an inhelable material (e. g., gas, volatile substances, or aerosol/particulate).

Acute Toxic - Microbial

2 Hypersensitivity incidents must be reported, if they occur.

Acute Taxic - General Footnote

The acute toxicity studies for the MP and EP are intended to provide data on the acute toxicity of the formulated product. Waivers for any or all of these studies may be granted when it is common knowledge that, or information submitted by the respondent indicates that the inert ingredients in the formulation are not likely to pose human health risks. 9

						Page 1 of
	United States Environme Washington,	Environmental Protection Ishington, D. C. 20460	ction Agency 60		Form	Form Approved
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1. Company name and Address M&R DURANGO, INC		2. Case # and Name 4104 Nosema	na locustae		3. Date and Type of DCI PRODUCT SPECIFIC	PECIFIC
BAYFIELD CO 81122	22	EPA Reg. No.	0. 46149-1		1D# 46149	46149-KD-2345
4. Guideline 5. Stu Requirement Number	5. Study Title	Progress Reports	6. Use Pattern	7. Test Substance	8. Time Frame	9. Registrant Response
Prod C	Prod Chem - Microbial					
	Product identity		ABCDEFGHIJK	MP/EP		•
·:	Manufacturing process		ABCDEFGHIJK	MP/EP	SOM 8	70
151A-12 Disc	Discussion of formation of		ABCDEFGHIJK	MP/EP	SOM 8	•••
151A-13 Anel	Analysis of samples (3)		ABCDEFGHIJK	MP/EP	SOM 8	• • • • • • • • • • • • • • • • • • • •
	nite		ABCDEFGHIJK	MP/EP	8 mos	**
1.1	Physical and chemical		ABCDEFGHIJK	MP/EP	SOM 8	**
151A-16(a) color			ABCDEFGHIJK	MP/EP	8 mos.	•
51A-16(b)	Physical state		ABCDEFGHIJK	MP/EP		70
<u>. </u>		-	ABCDEFGHIJK	MP/EP	8 mos.	
	Density or specific gravity		ABCDEFGHIJK	MP/EP	8 mos.	•
(e)			ABCDEFGHIJK	MP/EP	8 mos.	10
	Stability		ABCDEFGHIJK	TGAI	8 mos.	70
:	Storage stability	·	ABCDEFGHIJK	MP/EP	8 mos.	70
10. Certification 1 certify that the statements m 1 actions that the vibration	10. Certification I certify that the statements made on this form and all attachments are true, accurate, and complete. I acknowledge that any knowledge of false or misleading statement may be punishable by fire, imprisonment	ts are true, accurate,	accurate, and complete.	11. Date	ate	
or both under applicable law.						
Signature and Title of Company's Authorized Representative	's Authorized Representative					

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	REQUIREMENTS STATUS A	STATUS AND REGISTRANT'S	T'S RESPONSE			Approval Expires 12-31-92	oires 12-31-9
INSTRUCTIONS: Please type or print in ink. Use additional sheet(s) if necessary.	pe or print in ink. Please read carefully the attached instructions and supply the information requested on this form if necessary.	he attached instruct	ions and supply the info	rmation requested	on this form.		
1. Company name and Address M&R DURANGO, II	NC	2. Case # and Name 4104 Nosema	ma locustae			Date and Type of DCI PRODUCT SPECIFIC	TIC
	81122	EPA Reg. N	No. 46149-1		1D# 46.	40149-KD-2345	2343 243
4. Guideline Requirement Number	5.4Study Title	Progress Reports 0 1 2 3	6. Use Pattern	7. Test Substance	8. Time Frame		9. Registrant Response
151A-16(h) 151A-16(i) 151A-16(j)	Viscosity Miscibility Corrosion characteristics		ABCDEFGHIJK ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP EP	& & &	HOS. HOS.	
	Acute Toxic - Regular Chemical						
81-1			ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	& &	mos.	
81-3 81-5	Acute inhalation toxicity-rat (3,40) Primary dermal irritation (1,2,40)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	& &	MOS.	
	Acute Texic - Microbial				·		
152A-14 152A-15	Primary eye frritation (40) Hypersensitivity incidents (2)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	& &	HOS.	
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United States Environmental Protection Agency Washington, D. C. 20460

FOOTNOTES AND KEY DEFINATIONS FOR GUIDELINE REQUIREMENTS

Case # and Name: 4104 Nosema locustae

* manufacturing-use product; EP * end-use product; provided formulators purchase their active ingredient(s) from a registered source, they need not submit or cite Key: MP = manufacturing-use product; EP = end-use product; provided formulators purchase their active ingrevients, and have use for the product does data pertaining to the purchased product.[NOTE: If a product is a 100 percent repackage of another registered product that is purchased, and any use for the product does not differ from those of the purchased and registered source, users are not subject to any data requirements identified in the tables.]; IEP = typical end-use product; IGAI = technical grade of the active ingredient; PAI = "pure" active ingredient, radiolabeled.

Use Categories Key:

1 - Greenhouse nonfood crop D - Aquatic food crop C - Terrestrial nonfood crop H - Greenhouse food crop B - Terrestrial food feed crop G - Aquatic nonfood residential L - Indoor food F - Aquatic nonfood Industrial - Terrestrial food crop

K - Residential outdoor

N - Indoor Medical M - Indoor nonfood

E - Aquatic nonfood outdoor J - Forestry O - Indoor residential

FOOTHOES: [The following notes are referenced in column two (5. Study Title) of the REDUIREMENTS STATUS AND REGISTRANT'S RESPONSE form.)

Prod Chem - Microbial

3 Required to support registration of each manufacturing-use product and end-use produced by an integrated formulation system. Data on other end-use products will be required on a case-by-case basis for pesticides in the production stage. A rudimentary product analytical method and data will suffice to support an experimental use permit.

Acute Toxic - Regular Chemical

- Not required if test material is a gas or highly volatile.
- Not required if test material is corrosive to skin or has pH less than 2 or greater than 11.5; such a product will be classified as Toxicity Category I on the basis of potential eye and dermal irritation effects.
 - Required if the product consists of, or under conditions of use will result in, an inhalable material (e. g., gas, volatile substances, or aerosol/particulate).

Acute Toxic - Microbial

2 Hypersensitivity incidents must be reported, if they occur.

Acute Toxic - General Footnote

The acute toxicity studies for the MP and EP are intended to provide data on the acute toxicity of the formulated product. Maivers for any or ail of these studies may be granted when it is common knowledge that, or information submitted by the respondent indicates that the inert ingredients in the formulation are not likely to pose human health risks.

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1. Company name and Address M&R DURANGO, II	AC.	2. Case # and Name 4104 Nos	Nosema locustae			of DCI
TELD CO	81122	EPA Reg.	No. 46149-2		TD# 4014	46149-KD-2346
4. Guideline Requirement Number	5. Study Title	Progress 6 1 2 3	ss 6. Use s Pattern 3	7. Test Substance	8. Time Frame	9. Registrant Response
11	Prod Chem - Microbial			1		
	Product identity		ABCDEFGHIJK	MP/EP	8	mos.
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151A-12	Discussion of formation of		ABCDEFGHIJK	MP/EP		mos.
151A-13	unintentional ingredients Analysis of samples (3)		ABCDEFGHIJK	MP/EP	Ε 8	Bos.
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			A PODE COLL AND	Mr/ Er		
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	Density of specific gravity		ABCDEFGHLJK	MP/EP		ios.
			ABCDEFGHIJK	MP/EP		mos.
151A-16(f)	Stability		ABCDEFGHIJK	TGAI	8	mos.
151A-16(g)	Storage stability		ABCDEFGHLJK	MP/EP		mos.
10. Certification I certify that the statem I acknowledge that any kn	made on this form and all attach gly false or misleading statemen	heents are true, accurate, and complete. t may be punishable by fine, imprisormen	e, and complete. ine, imprisonment	11.	11. Date	
or both under applicable law. Signature and Title of Compan	or both under applicable law. Signature and Title of Company's Authorized Representative					
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United States Environmental Protection Agency Rashington, D. C. 20460 REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE 1. Case of state in this interest carefully the stracked instructions and supply the information requested on this form. 1. Case of state interest inte					•	Pè	Page 2 of
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Primary eye irritation (40) MP/EP 8 Mp/EP 8 MP/EP 8		Acute Toxic - Microbial					
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United Státes Environmental Protection Agency Washington, D. C. 20460

FOOTNOTES AND KEY DEFINATIONS FOR GUIDELINE REQUIREMENTS

Nosema locustae Case # and Name: 4104

Key: MP = manufacturing-use product; EP = end-use product; provided formulators purchase their active ingredient(s) from a registered source, they need not submit or cite data pertaining to the purchased product.[NOTE: If a product is a 100 percent repackage of another registered product that is purchased, and any use for the product does not differ from those of the purchased and registered source, users are not subject to any data requirements identified in the tables.]; IEP * typical end-use product; IGAI * technical grade of the active ingredient; PAI * "pure" active ingredient, PAIRA = "pure" active ingredient, radiolabeled.

Use Categories Key:

K - Residential outdoor

- · Greenhouse nonfood crop D . Aquatic food crop C - Terrestrial nonfood crop H - Greenhouse food crop 8 - Terrestrial food feed crop6 - Aquatic nonfood residentialL - Indoor food - Aquatic nonfood Industrial A - Terrestrial food crop
- M Indoor nonfood
- 0 Indoor residential N - Indoor Medical

E - Aquatic nonfood outdoor

J - Forestry

FOOTHOTES: [the following notes are referenced in column two (5. Study Title) of the REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE form.]

Prod Chem - Microbial

Data on other end-use products will be required on a case-by-case basis for pesticides in the production stage. A rudimentary product analytical method and data will suffice to support an 3 Required to support registration of each manufacturing-use product and end-use products produced by an integrated formulation system. experimental use permit.

Acute Toxic - Regular Chemical

- Not required if test material is a gas or highly volatile. Not required if test material is corrosive to skin or has pH less than 2 or greater than 11.5; such a product will be classified as Toxicity Category 1 on the basis of potential eye and dermal irritation effects.
 - Required if the product consists of, or under conditions of use will result in, an inhalable material (e.g., gas, volatile substances, or aerosol/particulate).

2 Hypersensitivity incidents must be reported, if they occur.

Acute Toxic - General Footnote

The acute toxicity studies for the MP and EP are intended to provide data on the acute toxicity of the formulated product. Waivers for any or all of these studies may be granted when it is common knowledge that, or information submitted by the respondent indicates that the inert ingredients in the formulation are not likely to pose human health risks. 9

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		STATUS AND REGISTRANT'S	IT'S RESPONSE			Approval Ex	Approval Expires 12-31-92
INSTRUCTIONS: Please type or print in ink. Use additional sheet(s) if necessary.	ink.	/ the attached instruc	Please read carefully the attached instructions and supply the information requested on this form	mation requested	on this form.		
1. Company name and Address BOZEMAN BIO-TECH INC	ress TECH INC F ROX 3146	2. Case # and Name 4104 Nosema	ma locustae			Date and Type of DCI PRODUCT SPECIFIC	FIC
BOZEMAN MT		EPA Reg. N	No. 54735-3		# C # C # C # C # C # C # C # C # C # C	-/35-KU-	.234/
4. Guideline Requirement Number	5. Study Title	Progress 6 1 2 3	6. Use Pattern	7. Test Substance	8. Time Frame		9. Registrant Response
	Prod Chem - Microbial						
151A-10	Product identity		ABCDEFGHIJK	MP/EP		mos.	
151A-11	Manufacturing process		ABCDEFGHIJK	MP/EP	&	mos.	
151A-12	Discussion of formation of		ABCDEFGHIJK	MP/EP	~	mos.	
151A-13	Analysis of samples (3)		ABCDEFGHLIK	MP/ED		T C	
151A-15	nits		ABCDEFGHIJK	MP/EP			
151A-16	Physical and chemical		ABCDEFGHIJK	MP/EP	~	mos.	
•	properties						
151A-16(a)	Color Physical state		ABCDEFGHIJK	MP/EP MP/EP	∞ α	HOS.	
			ALTHUMBOUR	MD/ED			
	Density or specific gravity		ABCDEFGHIJK	MP/EP			
	&	-	ABCDEFGHIJK	MP/EP			
151A-16(f)	Stability		ABCDEFGHIJK	TGAI	8	mos.	
151A-16(g)	Storage stability		ABCDEFGHIJK	MP/EP	<u>~</u>	mos.	
10. Certification				11. Date)ate		
I certify that the statements I acknowledge that any knowing or both under applicable law.	I certify that the statements made on this form and all attachments are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine, imprisonment or both under applicable law.	its are true, accurate, ly be punishable by fir	accurate, and complete. ble by fine, imprisorment				
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12. Name of Company Contact	ect			1 21	12 Obered Williams		

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1. Company name and Address BOZEMAN BIO-TECH INC 1612 GOLD AVE BOX 31 BOZEMAN WT 50772	CH INC 30X 3146	2. Case # and Name 4104 Nosema	sema locustae		3. Date and Type of DCI PRODUCT SPECIFIC ID# 54735-RD-2347	e of DCI SPECIFIC 15-RD-2347
4. Guideline Requirement Number	5. Study Title	Progres Reports	1 . 2	7. Test Substance	8. Time Frame	9. Registrant Response
151A-16(h) 151A-16(i) 151A-16(j)	Viscosity Niscibility Corrosion characteristics		ABCDEFGHIJK ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP EP	8 mos. 8 mos.	
81-1 81-2	₹		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos.	
81-3 81-5	Acute inhalation toxicity-rat (3,40) Primary dermal irritation (1,2,40)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos. 8 mos.	
152A-14 152A-15	Acute Touic - Microbial Primary aya fritation (40) Mypersensitivity incidents (2)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos.	
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United States Environmental Protection Agency Washington, D. C. 20460

FOOTNOTES AND KEY DEFINATIONS FOR GUIDELINE REQUIREMENTS

Case # and Name: 4104 Nosema locustae

Key: MP = manufacturing-use product; EP = end-use product; provided formulators purchase their active ingredient(s) from a registered source, they need not submit or cite data pertaining to the purchased product.[NOTE: If a product is a 100 percent repackage of another registered product that is purchased, and any use for the product does not differ from those of the purchased and registered source, users are not subject to any data requirements identified in the tables.]; IEP = typical end-use product; IGAI = "pure" active ingredient, radiolabeled.

A - Terrestrial food crop Use Categories Key:

I - Greenhouse nonfood crop D - Aquatic food crop C - Terrestrial nonfood crop H - Greenhouse food crop 8 - Terrestrial food feed crop G - Aquatic nonfood residential F - Aquatic nonfood Industrial

FOOTNOTES: The following notes are referenced in column two (5. Study Title) of the REGUIREMENTS STATUS AND REGISTRANT'S RESPONSE form.)

M - Indoor nonfood

L · Indoor food K - Residential outdoor

N - Indoor Medical

E - Aquatic nonfood outdoor J - Forestry

0 - Indoor residential

Prod Chem - Microbial

Date on other end-use products 3 Required to support registration of each manufacturing-use product and end-use products produced by an integrated formulation system. Data on other end-use will be required on a case-by-case basis for pesticides in the production stage. A rudimentary product analytical method and data will suffice to support an experimental use permit.

Acute Toxic - Regular Chemical

- Not required if test material is a gas or highly volatile.
- Not required if test material is corrosive to skin or has pH less than 2 or greater than 11.5; such a product will be classified as Toxicity Category I on the basis of potential eye and dermal irritation effects.
 - Required if the product consists of, or under conditions of use will result in, an inhalable material (e. g., gas, volatile substances, or aerosol/particulate).

Acute Toxic - Microbial

2 Hypersensitivity incidents must be reported, if they occur.

Acute Taxic - General Footnote

The acute toxicity studies for the MP and EP are intended to provide data on the acute toxicity of the formulated product. Waivers for any or all of these studies may be granted when it is common knowledge that, or information submitted by the respondent indicates that the inert ingredients in the formulation are not likely to pose human health risks.

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INSTRUCTIONS: Please type or print in ink. Use additional sheet(s) if necessary.	ink.	e attached	d instruc	Please read carefully the attached instructions and supply the information requested on this form	rmation requested on	this form.		
1. Company name and Address BOZEMAN BIO-TECH INC	ess TECH INC		Case # and Name	ma locustae	e1	3. Date and PRODU	Date and Type of DCI PRODUCT SPECIFIC	IFIC
BOZEMAN MT 59772		EPA 1	Reg. N	No. 54735-5		C #0T	4 / 35-KU	-2348
4. Guideline Requirement	5. Study Title	7≅0 - 0	Progress Reports	6. Use Pattern	7. Test Substance	S. Fra	8. Time Frame	9. Registrant Response
Number		-	2 3	1				
	Prod Chem - Ricrobial				··			
151A-10	Product identity			ABCDEFGHIJK	MP/EP		8 mos.	
151A-11	Manufacturing process			ABCDEFGHIJK	MP/EP			
151A-12	Discussion of formation of			ABCDEFGHIJK	MP/EP		8 mos.	
151A-13	Analysis of samples (3)			ABCDEFGHIJK	MP/EP		8 mos.	
151A-15	Certification of Limits			ABCDEFGHIJK	MP/EP		8 mos.	
	Physical and chemical			ABCDEFGHIJK	MP/EP		8 mos.	
1518-16(2)	properties			ABCDEFGHIJK	MP/EP		8 mos.	
151A-16(b)	physical state			ABCDEFGHIJK	MP/EP		SOM	
151A-16(c)	000			ABCDEFGHIJK	MP/EP		ROS	
151A-16(d)	Density or specific gravity			ABCDEFGHIJK	MP/EP		8 mos.	
151A-16(e)	**************************************			ABCDEFGHIJK	MP/EP		8 mos.	
151A-16(f)	Stability			ABCDEFGHIJK	TGAI	-	8 mos.	
151A-16(g)	Storage stability			ABCDEFGHIJK	MP/EP		8 mos.	
10. Certification					11. Date	i.e		
I certify that the statements I scknowledge that any knowling or both under applicable law.	mede on this form and all attachm gly false or misleading statement	are true, e punishal	accurate ble by fi	ments are true, accurate, and complete. may be punishable by fine, imprisonment				
Signature and Title of (Signature and Title of Company's Authorized Representative							
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1. Company name and Address BOZEMAN BIO-TECH INC	CH INC	2. Case # and Name 4104 Nosema	ma locustae		_ ~ []	e of DCI SPECIFIC
BOZEMAN MT	59772	EPA Reg. N	No. 54735-5		ID# 54735-	54735-RD-2348
4. Guideline Requirement Number	9. Study Title	Progress Reports 0 1 2 3	6. Use Pattern	7. Test Substance	8. Time Frame	9. Registrant Response
151A-16(h) 151A-16(i) 151A-16(j)	Viscosity Miscibility Corrosion characteristics		ABCDEFGHIJK ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP EP	8 mos. 8 mos.	
History of the second of the s	Acute Toxic - Regular Chemical					
81-1			ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos.	
81-3 81-5	Acute inhalation toxicity-rat (3,40) Primary dermal irritation (1,2,40)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 mos.	
All the state of t	Acute Toxic - Microbial					
152A-14 152A-15	Primary eye frritation (40) Hypersensitivity incidents (2)		ABCDEFGHIJK ABCDEFGHIJK	MP/EP MP/EP	8 E05.	
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United States Environmental Protection Agency Washington, D. C. 20460

FOOTNOTES AND KEY DEFINATIONS FOR GUIDELINE REQUIREMENTS

Case # and Name: 4104 Nosema locustae

Key: MP = manufacturing-use product; EP = end-use product; provided formulators purchase their active ingredient(s) from a registered source, they need not submit or cite data pertaining to the purchased product.[NOIE: If a product is a 100 percent repackage of another registered product that is purchased, and any use for the product does not differ from those of the purchased and registered source, users are not subject to any data requirements identified in the tables.]; IEP = typical end-use product; IGAI * technical grade of the active ingredient; PAI * "pure" active ingredient; PAIRA = "pure" active ingredient, radiolabeled.

Use Categories Key:

- C Terrestrial nonfood crop 8 - Terrestrial food feed crop G - Aquatic nonfood residential L - Indoor food F - Aquatic nonfood Industrial A - Terrestrial food crop
- D Aquatic food crop I Greenhouse nonfood crop M - Greenhouse food crop

J - Forestry

- M Indoor nonfood
- 0 Indoor residential N - Indoor Medical K - Residential outdoor

FOOTHOES: [The following notes are referenced in column two (5. Study Title) of the REQUIREMENTS STATUS AND REGISTRANT'S RESPONSE form.]

Prod Chem - Microbial

Data on other end-use products 3 Required to support registration of each manufacturing-use product and end-use products product by an integrated formulation system. Data on other end-use will be required on a case-by-case basis for pesticides in the production stage. A rudimentary product analytical method and data will suffice to support an experimental use permit.

Acute Toxic - Regular Chemical

- Not required if test material is a gas or highly volatile.
- 2 Not required if test material is corrosive to skin or has pM less than 2 or greater than 11.5; such a product will be classified as Toxicity Category 1 on the basis of potential eye and dermal irritation effects.
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Acute Toxic - Microbial

2 Hypersensitivity incidents must be reported, if they occur.

Acute Toxic - General Footnote

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ATTACHMENT D

EPA GROUPING OF END-USE PRODUCTS FOR MEETING DATA REQUIREMENTS FOR REREGISTRATION

EPA'S BATCHING OF END-USE PRODUCTS CONTAINING N. locustae AS THE ACTIVE INGREDIENT FOR MEETING ACUTE TOXICITY DATA REQUIREMENTS FOR REREGISTRATION

In an effort to reduce the time, resources and number of animals needed to fulfill the acute toxicity data requirements for reregistration of end-use products containing the active ingredient *N. locustae*, the Agency has batched products which can be considered similar in terms of acute toxicity. Factors considered in the sorting process include each product's active and inert ingredients (identity, percent composition and biological activity), type of formulation (e.g., emulsifiable concentrate, aerosol, wettable powder, granular, etc.), and labeling (e.g., signal word, use classification, precautionary labeling, etc.). Note that the Agency is not describing batched products as "substantially similar" since some products within a batch may not be considered chemically similar or have identical use patterns.

Batching has been accomplished using the readily available information described above, and frequently acute toxicity data on individual end-use products has been found to be incomplete. Notwithstanding the batching process, the Agency reserves the right to require, at any time, acute toxicity data for an individual end-use product should the need arise.

Registrants of end-use products within a batch may choose to cooperatively generate, submit or cite a single battery of six acute toxicological studies to represent all the products within that batch. It is the registrants' option to participate in the process with all other registrants, only some of the other registrants, or only their own products within a batch, or to generate all the required acute toxicological studies for each of their own products. If a registrant chooses to generate the data for a batch, he/she must use one of the products within the batch as the test material. If a registrant chooses to rely upon previously submitted acute toxicity data, he/she may do so provided that the data base is complete and valid by today's standards (see acceptance criteria attached), the formulation tested is considered by EPA to be similar for acute toxicity, and the formulation has not been significantly altered since submission and acceptance of the acute toxicity data. Regardless of whether new data is generated or existing data is referenced, registrants must clearly identify the test material by EPA Registration Number.

In deciding how to meet the product specific data requirements, registrants must follow the directions given in the Data Call-In Notice and its attachments appended to the RED. The DCI Notice contains two response forms which are to be completed and submitted to the Agency within 90 days of receipt. The first form, "Data Call-In Response," asks whether the registrant will meet the data requirements for each product. The second form, "Requirements Status and Registrant's Response," lists the product specific data required for each product, including the standard six acute toxicity tests. A registrant who wishes to participate in a batch must decide whether he/she will provide the data or depend on someone else to do so. If a registrant supplies the data to support a batch of products, he/she must select one of the following options: Developing Data (Option 1), Submitting an Existing Study (Option 4), Upgrading an Existing Study (Option 5) or Citing an Existing Study (Option 6). If a registrant depends on another's data, he/she must choose among: Cost Sharing (Option 2), Offers to Cost Share (Option 3) or Citing an Existing Study (Option 6). If a registrant does not want to participate in a batch, the choices are Options 1, 4, 5 or 6. However, a registrant should know that choosing not to

participate in a batch does not preclude other registrants in the batch from citing his/her studies and offering to cost share (Option 3) those studies.

Table 1

Batch	EPA Reg. No.	% N. locustae	Formulation Type
	36488-3	0.049%	wettable powder
I	36488-7	0.08%	wettable powder
	46149-2	0.05%	bait / dust
	54735-5	0.001%	bait

Table 2 lists those products the Agency was unable to batch. These products were either considered not to be similar to other products for purposes of acute toxicity or the Agency lacked sufficient information for decision making. Registrants of these products are responsible for meeting the acute toxicity data requirements for each product.

Table 2

EPA Reg. No.	% N. locustae	Formulation Type
46149-01	0.10%	emulsifiable concentrate
54735-3	0.05%	ready-to-use solution

ATTACHMENT E EPA ACCEPTANCE CRITERIA

SUBDIVISION D

<u>Guideline</u>	Study Title
Series 61	Product Identity and Composition
Series 62	Analysis and Certification of Product Ingredients
Series 63	Physical and Chemical Characteristics

61 Product Identity and Composition

ACCEPTANCE CRITERIA

Does	your study meet the following acceptance criteria?
1	Name of technical material tested (include product name and trade name, if appropriate)
2	Name, nominal concentration, and certified limits (upper and lower) for each active ingredient and each intentionally-added inert ingredient
3	Name and upper certified limit for each impurity or each group of impurities present at $\geq 0.1\%$ by weight and for certain toxicologically significant impurities (e.g., dioxins, nitrosamines) present at <0.1%
4	Purpose of each active ingredient and each intentionally-added inert
5	Chemical name from Chemical Abstracts index of Nomenclature and Chemical Abstracts Service (CAS) Registry Number for each active ingredient and, if available, for each intentionally-added inert
6	Molecular, structural, and empirical formulas, molecular weight or weight range, and any company assigned experimental or internal code numbers for each active ingredient
7	Description of each beginning material in the manufacturing process EPA Registration Number if registered; for other beginning materials, the following: Name and address of manufacturer or supplier Brand name, trade name or commercial designation Technical specifications or data sheets by which manufacturer or supplier describes composition, properties or toxicity

-		
	8	Description of manufacturing process Statement of whether batch or continuous process Relative amounts of beginning materials and order in which they are added Description of equipment Description of physical conditions (temperature, pressure, humidity) controlled in each step and the parameters that are maintained Statement of whether process involves intended chemical reactions Flow chart with chemical equations for each intended chemical reaction Duration of each step of process Description of purification procedures Description of measures taken to assure quality of final product
	9	Discussion of formation of impurities based on established chemical theory addressing (1) each impurity which may be present at ≥ 0.1 % or was found at ≥ 0.1 % by product analyses and (2) certain toxicologically significant impurities (see #3)

.

61 Product Identity and Composition

GUIDANCE FOR SUMMARIZING STUDIES

The following criteria apply to the technical grade of the active ingredient being reregistered. Items 1, 2, 3, and 5 can be satisfied for most registered products by submission of the Certified Statement of Formula Ingredients Page (EPA Form 8570-4). Items 7 and 8 can be satisfied for most technical grade active ingredients (TGAIs) by submission of a flow chart with chemical equations for each intended chemical reaction. The flow chart should include complete chemical structures and names for each reactant and product of all the reactions.

- Name of technical material (include product name and trade name, if appropriate).
- Description of each active and intentionally-added inert ingredient, including name, concentration, and certified limits.
- 3. Name and upper limit for all impurities present at \geq 0.1% and those toxicologically significant impurities present at <0.1%.
- 4. The purpose of each active and intentionally-added inert ingredient.
- 5. Chemical name and Registry Number for each active and intentionally-added inert ingredient (if available).
- 6. Molecular, structural, and empirical formulas, molecular weight, and any experimental or internal code number for each active ingredient.
- 7. Description of each beginning material in the manufacturing process.
- 8. Description of manufacturing process.
- 9. Discussion of formation of impurities based on established chemical theory.

62 Analysis and Certification of Product Ingredients

ACCEPTANCE CRITERIA

The following criteria apply to the technical grade of the active ingredient being reregistered. Use a table to present the information in items 6, 7, and 8.

Does your study meet the following acceptance criteria? 1. ___ Five or more representative samples (batches in case of batch process) analyzed for each active ingredient and all impurities present at > 0.1% 2. Degree of accountability or closure > ca 98% 3. __ Analyses conducted for certain trace toxic impurities at lower than 0.1% (examples, nitrosamines in the case of products containing dinitroanilines or containing secondary or tertiary amines/alkanolamines plus nitrites; polyhalogenated dibenzodioxins and dibenzofurans) [Note that in the case of nitrosamines both fresh and stored samples must be analyzed.] 4. ___ Complete and detailed description of each step in analytical method used to analyze above samples 5. ___ Statement of precision and accuracy of analytical method used to analyze above samples 6. ___ Identities and quantities (including mean and standard deviation) provided for each analyzed ingredient 7. Upper and lower certified limits proposed for each active ingredient and intentionally added inert along with explanation of how the limits were determined 8. Upper certified limit proposed for each impurity present at ≥ 0.1% and for certain toxicologically significant impurities at <0.1% along with explanation of how limit

determined

- Analytical methods to verify certified limits of each active ingredient and impurities (latter not required if exempt from requirement of tolerance or if generally recognized as safe by FDA) are fully described
- Analytical methods (as discussed in #9) to verify certified limits validated as to their precision and accuracy

62 Analysis and Certification of Product Ingredients

GUIDANCE FOR SUMMARIZING STUDIES

The following criteria apply to the technical grade of the active ingredient being reregistered.

- 1. Number of representative samples analyzed for all active ingredients and all impurities at \geq 0.1%.
- 2. Degree of accountability or closure in analyses in item #1.
- Chemical names of toxic impurities which were analyzed for levels <0.1%.
- 4. Brief description(s) of analytical method(s) used to measure active ingredients and impurities in items #1 and #3.
- 5. Statement of precision and accuracy of method(s) in item #4.
- 6. Chemical name and quantities observed (range, mean, standard deviation) for each ingredient (actives and impurities) analyzed in item #1.
- 7. Proposed upper and lower certified limits for each active ingredient and intentionally added inert with brief explanation of how limits were determined.
- 8. Proposed upper certified limit for each impurity present at >=0.1% and certain toxicologically significant impurities at <0.1% with brief explanation of how limits were determined.
- 9. Brief description of analytical method(s) used to verify certified limits (if same methods as item #4, may reference latter).
- 10. Statement of precision and accuracy of method(s) in item #9 (may reference item #5 if applicable).

63 Physical and Chemical Characteristics

ACCEPTANCE CRITERIA

The following criteria apply to the technical grade of the active ingredient being reregistered.

Does	your study meet the following acceptance criteria?
63-2	Color Verbal description of coloration (or lack of it) Any intentional coloration also reported in terms of Munsell color system
63-3	Physical State Verbal description of physical state provided using terms such as "solid, granular, volatile liquid" Based on visual inspection at about 20-25° C
63-4	Odor Verbal description of odor (or lack of it) using terms such as "garlic-like, characteristic of aromatic compounds" Observed at room temperature
53 - 5	Melting Point Reported in C° Any observed decomposition reported
53-6	Boiling Point Reported in C° Pressure under which B.P. measured reported Any observed decomposition reported
	Density, Bulk Density, Specific Gravity Measured at about 20-25° C Density of technical grade active ingredient reported in g/ml or the specific gravity of liquids reported with reference to water at 20° C. [Note: Bulk density of registered products may be reported in lbs/ft or lbs/gallon.]

63-8	Solubility Determined in distilled water and representative polar and non-polar solvents, including those used in formulations and analytical methods for the pesticide
	Measured at about 20-25° C Reported in g/100 ml (other units like ppm acceptable if sparingly soluble)
63-9	Vapor Pressure Measured at 25° C (or calculated by extrapolation from measurements made at higher temperature if pressure too low to measure at 25° C) Experimental procedure described Reported in mm Hg (torr) or other conventional units
63-10	Dissociation Constant Experimental method described Temperature of measurement specified (preferably about 20 - 25° C)
63-11	Octanol/water Partition Coefficient Measured at about 20-25° C Experimentally determined and description of procedure provided (preferred method-45 Fed. Register 77350) Data supporting reported value provided
63-12	PH Measured at about 20 - 25° C Measured following dilution or dispersion in distilled water
	Stability Sensitivity to metal ions and metal determined Stability at normal and elevated temperatures Sensitivity to sunlight determined

63 Physical and Chemical Characteristics

GUIDANCE FOR SUMMARIZING STUDIES

The following criteria apply to the technical grade of the active ingredient being reregistered.

- 1. Description of color.
- Description of physical state.
 Description of odor.

- Indication of melting point (in C°).
 Indication of boiling point (in C°).
 Indication of density, bulk density, and specific gravity.
- 7. Indication of solubility.
- 8. Indication of vapor pressure.
 9. Indication of dissociation constant.
- 10. Indication of octanol/water partition coefficient.
- 11. Indication of PH.
- 12. Description of stability.

SUBDIVISION F

<u>Guideline</u>	Study Title
81-1	Acute Oral Toxicity in the Rat
81-2	Acute Dermal Toxicity in the Rat, Rabbit or Guinea Pig
81-3	Acute Inhalation Toxicity in the Rat
81-4	Primary Eye Irritation in the Rabbit
81-5	Primary Dermal Irritation Study
81-6	Dermal Sensitization in the Guinea Pig
81-7	Acute Neurotoxicity in the Hen

81-1 Acute Oral Toxicity in the Rat

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

81-1 Acute Oral Toxicity in the Rat

- 1. The form of pesticide tested, e.g. solid, liquid, percent AI in technical, end-use product, etc.
- 2. The number of animals/dose/sex tested.
- 3. Dosing route and regimen.
- 4. Vehicle used
- 5. Doses tested and results
- 6. Individual observations on day of dosing and for at least 14 days.
- 7. Summarization of body weights8. Summarization of gross necropsy
- 9. Significance of changes from the Acceptance Criteria

81-2 Acute Dermal toxicity in the Rat, Rabbit or Guinea Pig

ACCEPTANCE CRITERIA

81-2 Acute Dermal Toxicity in the Rat, Rabbit or Guinea Pig

- The form of pesticide tested, e.g., solid, liquid, percent AI in technical, end-use product, etc.
- 2. The number of animals/sex/dose
- 3. Weight range of animals
- 4. Verification of single, dermal exposure
- 5. Duration of dermal exposure
- 6. Statement of vehicle control
- 7. Doses tested and results
- 8. Preparation of application site
- 9. Area of application site (percent body surface)
- 10. Occlusion of test material on application site
- 11. Individual observations on day of dosing and for at least 14 days or until all animals appear normal (whichever is longer).
- 12. Summarization of body weights
- 13. Summarization of gross necropsy
- 14. Significance of changes from Acceptance Criteria

81-3 Acute Inhalation Toxicity in the Rat

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

¹:	vapor hazard based on toxicity and expected use or contains
	particles of inhalable size for man (aerodynamic diameter
3.	15 um or less). At least 5 young adult rats/sex/group
<u> </u>	Dosing, at least 4 hours by inhalation.
<u></u>	Chambow air felau dumais by limitation.
	Chamber air flow dynamic, at least 10 air changes/hour, at least 19% oxygen content.
6.	Chamber temperature, 22° C (± 2), relative humidity 40-60%.
7.	Monitor rate of air flow
8	Monitor actual concentrations of test material in breathing zone.
9.	Monitor aerodynamic particle size for aerosols.
<u> </u>	Doce tested sufficient to determine the delivery
	Doses tested, sufficient to determine a toxicity category or a limit dose (5 mg/L actual concentration of respirable substance).
.1	Individual observations at least once a day.
	Observation period to last at least 14 days
<u></u>	Observation period to last at least 14 days. Individual body weights.
·~·	Control Doly Weights.
. * •	Gross necropsy on all animals.

81-3 Acute Inhalation Toxicity in the Rat

- 1. The form of pesticide tested, e.g., solid, liquid, percent AI in technical, end-use product, etc.
- 2. Statement of the inhalability of test substance
- 3. The number of animals/sex/dose
- 4. Duration of inhalation exposure
- 5. Number of chamber air changes/hour and the percent oxygen content of chamber air
- 6. Ranges for chamber air temperature and relative humidity
- 7. Air flow rate
- 8. Analytical concentrations of test material in breathing zone
- 9. Results of aerosol particle-size determination
- 10. Doses tested (or limit dose of 5mg/L or highest attainable)
- 11. Individual observations on day of dosing and for at least 14 days.
- 12. Summarization of body weights13. Summarization of gross necropsy
- 14. Significance of changes from Acceptance Criteria

81-4 Primary Eye Irritation in the Rabbit

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

Identify material tested (technical, end-use product, etc)
 Study not required if material is corrosive, causes severe dermal irritation or has a pH of ≤ 2 or ≥ 11.5.
 6 adult rabbits
 Dosing, instillation into the conjunctival sac of one eye per animal.
 Dose, 0.1 ml if a liquid; 0.1 ml or not more than 100 mg if a solid, paste or particulate substance.
 Solid or granular test material ground to a fine dust.
 Eyes not washed for at least 24 hours.
 Eyes examined and graded for irritation before dosing and at 1, 24, 48 and 72 hr, then daily until eyes are normal or 21 days (whichever is shorter).
 individual daily observations.

81-4 Primary Eye Irritation in the Rabbit

- 1. The form of pesticide tested, e.g., solid, liquid, percent AI in technical, end-use product, etc.
- 2. State if material is corrosive, cause severe dermal irritation or has a pH of <2 or >11.5
- 3. Number of adult rabbits tested
- 4. State method of dosing, i.e., instillation into the conjunctival sac of one eye per animal
- 5. Dose administered
- 6. Note whether solid or granular test material has been ground to a fine dust
- 7. State whether eyes were washed and at what time post
- instillation (not less than 24 hours)
 8. State whether eyes were examined and graded for irritation before dosing and at what periods after dosing
- 9. Individual daily observations afterwards, until eyes are normal or for 21 days
- 10. Significance of changes from Acceptance Criteria

81-5 Primary Dermal Irritation Study

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

_		
1	• •	Identify material tested (technical, end-use product, etc)
2		Study not required if material is corrosive or has a
		pH of ≤ 2 or ≥ 11.5 .
_		
3		6 adult animals.
4	•	Dosing, single dermal.
5		Dosing duration 4 hours.
6		Application site shaved or clipped at least 24 hours prior
_		to dosing
_		
7	•	Application site approximately 6 cm.
8	•	Application site covered with a gauze patch held in place
		with nonirritating tape
9	•	Material removed, washed with water, without trauma to
_		annication site
		application site
10	•	Application site examined and graded for irritation at 1,
		24, 48 and 72 hr, then daily until normal or 14 days
		(whichever is shorter).
11	. <u>*</u>	Individual daily observations.

81-5 Primary Dermal Irritation Study

- 1. The form of pesticide tested, e.g., solid, liquid, percent AI in technical, end-use product, etc.
- State if material is corrosive, has a pH <2 or >11.5, or has a dermal LD 50 <200 mg/kg
- 3. Number of adult animals tested
- 4. Amount applied
- 5. Duration of dermal exposure
- Preparation of application site (shaved or clipped at specified time before dosing)
- 7. Area of application site
- 8. Method for occlusion of application site
- 9. Note removal of test material and if skin was washed with water
- 10. State times post application when site was graded for irritation
- 11. Individual observations for day of dosing and individual daily observations thereafter
- 12. Significance of changes from Acceptance Criteria.

81-6 Dermal Sensitization in the Guinea Pig

ACCEPTANCE CRITERIA

81-6 Dermal Sensitization in the Guinea Pig

- The form of pesticide tested, e.g., solid, liquid, percent AI in technical, end-use product, etc.
- 2. State if material is corrosive or has pH <2 or >11.5.
- 3. State specific method utilized
- 4. Complete description of specific method
- 5. Reference for the specific method employed
- 6. Note adherence of the protocol to that in the reference for the specific method utilized
- 7. State the positive control tested
- 8. Significance of changes from Acceptance Criteria

81-7 Acute Neurotoxicity in the Hen

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

1	Study performed on an organophosphate cholinesterase
_	inhibiting compound.
2	Technical form of the active ingredient tested.
3. <u>≭</u>	Positive control utilized.
4	Species utilized, domestic laying hen 8-14 months of age Dosing oral by gavage or capsule (dermal or inhalation
5	Dosing oral by gavage or capsule (dermal or inhalation
	may be used).
6	An acute oral LD is determined.
7	Dose tested equal to an acute oral LD or a limit test of
	5000 mg/kg.
8. <u>*</u>	Dosed animals may be protected with atropine and/or 2-
	PAM.
9	Sufficient test animals so that at least 6 survive.
11. <u>*</u>	Positive control of at least 4 hens. (if used)
12	Test dose repeated if no signs of delayed neurotoxicity
	observed by 21 days after dosing.
13	Observation period 21 days after each dose.
14	Individual daily observations.
15.	Individual body weights.
16	Individual necropsy not required.
17	Histopathology performed on all animals. Tissue to be
	fixed in sin preferably using whole animal perfusion
	techniques. At least three sections of each of the
	following tissues:
	brain, including medulla oblongata
	spinal cord; upper cervical, mid-thoracic and
	lumbro-sacral regions
	tibial nerve; proximal regions and branches
	sciatic nerve

ATTACHMENT F
LIST OF ALL REGISTRANTS SENT THIS DATA CALL-IN NOTICE

.

e died		Zip	20910 81122 59772	
	cy NOTICE	City & State	BOZEMAN MT BOZEMAN MT	
	al Protection Agency C. 20460 THIS DATA CALL-IN NO	Nosema Locustae Address	1414 FEWNICK LN BOX 886 1612 GOLD AVE BOX 3146	
	ta t	Additional Name	AGENT FOR: ATTACK PESTICIDES	
	SIT	Company Name	DELTA ANALYTICAL CORP MER DURANGO, INC BOZEMAN BIO-TECH INC A	
		Co. Nr.	036488	

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$\label{eq:cost_share} \textbf{ATTACHMENT G}$ COST SHARE AND DATA COMPENSATION FORMS



United States Environmental Protection Agency Washington, DC 20450

CERTIFICATION OF OFFER TO COST SHARE IN THE DEVELOPMENT OF DATA

OMB No. 2070-0106 Approval Expires 12-31-92

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any of

of Management and Budget, Paperwork Reduction Project (207 Please fill in blanks below.	
Company Name	
Product Name	EPA Reg. No.
I Certify that:	
Insecticide, Fungicide and Rodenticide Act (FIFRA), if neces	sary. However, my company would prefer to
data. My firm has offered in writing to enter into such an agreement	relop jointly or share in the cost of developing
data. My firm has offered in writing to enter into such an agreement offer to be bound by arbitration decision under section 3 (terms could not be reached otherwise. This offer was made	elop jointly or share in the cost of developing ont. That offer was irrevocable and included an one of the cost of developing.
data. My firm has offered in writing to enter into such an agreement offer to be bound by arbitration decision under section 3 (terms could not be reached otherwise. This offer was made	elop jointly or share in the cost of developing ont. That offer was irrevocable and included an one of the cost of
data. My firm has offered in writing to enter into such an agreement offer to be bound by arbitration decision under section 30 terms could not be reached otherwise. This offer was madedate(s):	elop jointly or share in the cost of developing ont. That offer was irrevocable and included and c)(2)(B)(iii) of FIFRA if final agreement on all to the following firm(s) on the following
data. My firm has offered in writing to enter into such an agreement offer to be bound by arbitration decision under section 30 terms could not be reached otherwise. This offer was madedate(s):	elop jointly or share in the cost of developing ont. That offer was irrevocable and included an c)(2)(B)(iii) of FIFRA if final agreement on all to the following firm(s) on the following
data. My firm has offered in writing to enter into such an agreement offer to be bound by arbitration decision under section 30 terms could not be reached otherwise. This offer was madedate(s):	elop jointly or share in the cost of developing ont. That offer was irrevocable and included an c)(2)(B)(iii) of FIFRA if final agreement on all to the following firm(s) on the following
data. My firm has offered in writing to enter into such an agreement offer to be bound by arbitration decision under section 30 terms could not be reached otherwise. This offer was madedate(s):	elop jointly or share in the cost of developing ont. That offer was irrevocable and included an c)(2)(B)(iii) of FIFRA if final agreement on all to the following firm(s) on the following
data. My firm has offered in writing to enter into such an agreeme offer to be bound by arbitration decision under section 3() terms could not be reached otherwise. This offer was made date(s): Name of Firm(s) Pertification: Certify that I am duly authorized to represent the company named in some and all attachments therein are true, accurate, and complete	ent. That offer was irrevocable and included and c)(2)(B)(iii) of FIFRA if final agreement on all to the following firm(s) on the following Date of Offer above, and that the statements that I have made on the facknowledge that any knowledge foliage.
data. My firm has offered in writing to enter into such an agreeme offer to be bound by arbitration decision under section 3(terms could not be reached otherwise. This offer was madedate(s): Name of Firm(s)	ent. That offer was irrevocable and included and c)(2)(B)(iii) of FIFRA if final agreement on all to the following firm(s) on the following Date of Offer above, and that the statements that I have made on the facknowledge that any knowledge foliage.



United States Environmental Protection Agency Washington, DC 20460

CERTIFICATION WITH RESPECT TO DATA COMPENSATION REQUIREMENTS Approval Expires 12-31-92

Form Approved OMB No. 2070-0106

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, DC 20460; and to the Office

of Management and Budget, Paperwork Reduction Project (2070-0106), Washington, DC 20503. Please fill in blanks below. Company Name Product Name EPA Reg. No. ! Certify that: 1. For each study cited in support of registration or reregistration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) that is an exclusive use study, I am the original data submitter, or I have obtained the written permission of the original data submitter to cite that study. 2. That for each study cited in support of registration or reregistration under FIFRA that is NOT an exclusive use study, I am the original data submitter, or I have obtained the written permission of the original data submitter, or I have notified in writing the company(ies) that submitted data I have cited and have offered to: (a) Pay compensation for those data in accordance with sections 3(c)(1)(D) and 3(c)(2)(D) of FIFRA; and (b) Commence negotiation to determine which data are subject to the compensation requirement of FIFRA and the amount of compensation due, if any. The companies I have notified are: [] The companies who have submitted the studies listed on the back of this form or attached sheets, or indicated on the attached "Requirements Status and Registrants' Response Form," 3. That I have previously complied with section 3(c)(1)(D) of FIFRA for the studies I have cited in support of registration or reregistration under FIFRA. Signature Date Name and Title (Please Type or Print) GENERAL OFFER TO PAY: I hereby offer and agree to pay compensation to other persons, with regard to the registration or reregistration of my products, to the extent required by FIFRA sections 3(c)(1)(D) and 3(c)(2)(D). Signature Date Name and Title (Please Type or Print)

SEPA		Registration Standard for:		EPA Registration Number		T
	Product Specific Data Report					Form Appri OMB #207 Expires 11-
Pegistration Guideline No.			Testing not	I am complying with		(For EPA U
	Name of Test		required for my	Data Requi	rements by -	1 _
		ĺ	product listed		Submitting Data	Only
		[above	Citing MR ID No.	(Attached)	Accession number
Sec. 158.120			(Check below)		(Check below)	
Product		- 1				assign:
Chemistry	•	1	•			
61-1	le de la companya de					
61-2 (a)	Identity of Ingredients					
61-2(b)	Statement of composition					
62-1	Discussion of formation of ingredients					
	Preliminary analysis					
	Certification of limits					
63-2	Analytical methods for enforcement limits Color					 -
	Physical state Odor	-				
	Melting point					 -
	Boiling point					<u> </u>
	Density, bulk-density, or specific gravity					
	Solubility					
	Vapor pressure					
	Dissociation constant					
	Octanol/water partition coefficient					
	OH CONTRACTOR					
	Stability					
	xidizing/reducing reaction					
	lammability					
	xplodability					
	torage stability					
	scosity					
	fiscibility					
	orrosion Characteristics					·
ec. 158.135	ielectric breakdown voltage					
Foxicology						
81-1 Ac	cute oral toxicity, rat					
81-2 Ac	tute dermal toxicity, rabbit /Tat/g.pi	3				
81-3 Ac	cute inhalation toxicity, rat					
	mary eye irritation, rabbit					
	mary dermal irritation				 -	
81-6 De	rmal sensitization				 -	