United States
Environmental Protection
Agency

Prevention, Pesticides
And Toxic Substances
(7508W)

EPA 738-R-94-026
September 1994

Reregistration Eligibility Decision (RED)

2,2-dibromo-3-nitrilopropionamide (DBNPA)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

CERTIFIED MAIL

Dear Registrant:

I am pleased to announce that the Environmental Protection Agency has completed its reregistration eligibility review and decisions on the pesticide chemical case covering the active ingredient 2,2-dibromo-3-nitrilopropionamide (DBNPA). The enclosed Reregistration Eligibility Decision (RED) contains the Agency's evaluation of the data base of this chemical, its conclusions of the potential human health and environmental risks of the current product uses, and its decisions regarding conditions under which these uses and products will be eligible for reregistration. The RED includes the data and labeling requirements for products for reregistration.

From its assessment of DBNPA the Agency has concluded that one use--single flow-through cooling towers, presents an unreasonable adverse risk to aquatic organisms. Products labeled with this use are therefore ineligible for reregistration. The Agency plans to take regulatory action against continued registration of DBNPA products for this use. Nevertheless, registrants of such products are required to comply with labeling and data requirements as described in the enclosed document.

To assist you with a proper response, read the enclosed document entitled "Summary of Instructions for Responding to the RED". This summary also refers to other enclosed documents which include further instructions. You must follow all instructions and submit complete and timely responses. **The first set of required responses are due 90 days from the date of this letter. The second set of required responses are due 8 months from the date of this letter.** Complete and timely responses will avoid the Agency taking the enforcement action of suspension against your products.

If you have questions on the product specific data requirements or wish to meet with the Agency, please contact the Special Review and Reregistration Division representative Franklin Gee at (703) 308-8008.

Sincerely yours,

Louis P. True, Jr., Acting Director
Special Review
and Reregistration Division

Enclosures

SUMMARY OF INSTRUCTIONS FOR RESPONDING TO THE REREGISTRATION ELIGIBILITY DECISION (RED)

1. **DATA CALL-IN (DCI) OR "90-DAY RESPONSE"**--If **generic data** are required for reregistration, a DCI letter will be enclosed describing such data. If **product specific data** are required, another DCI letter will be enclosed listing such requirements. If **both generic and product specific data** are required, a combined Generic and Product Specific letter will be enclosed describing such data. Complete the two response forms provided with each DCI letter (or four forms for the combined) by following the instructions provided. **You must submit the response forms for each product and for each DCI within 90 days of the date of this letter (RED issuance date); otherwise, your product may be suspended.**

2. **TIME EXTENSIONS AND DATA WAIVER REQUESTS**--No time extension requests will be granted for the 90-day response. Time extension requests may be submitted only with respect to actual data submissions. Requests for data waivers must be submitted as part of the 90-day response. Requests for time extensions should be submitted in the 90-day response, but certainly no later than the 8-month response date. All data waiver and time extension requests must be accompanied by a full justification. All waivers and time extensions must be granted by EPA in order to go into effect.

3. **APPLICATION FOR REREGISTRATION OR "8-MONTH RESPONSE"--You must submit the following items for each product within eight months of the date of this letter (RED issuance date).**

a. **Application for Reregistration** (EPA Form 8570-1). Use only an original application form. Mark it "Application for Reregistration." Send your Application for Reregistration (along with the other forms listed in b-e below) to the address listed in item 5.

b. **Five copies of draft labeling** which complies with the RED and current regulations and requirements. Only make labeling changes which are required by the RED and current regulations (40 CFR 156.10) and policies. Submit any other amendments (such as formulation changes, or labeling changes not related to reregistration) separately. You may delete uses which the RED says are ineligible for reregistration. For further labeling guidance, refer to the labeling section of the EPA publication "General Information on Applying for Registration in the U.S., Second Edition, August 1992" (available from the National Technical Information Service, publication #PB92-221811; telephone number 703-487-4650).

c. **Generic or Product Specific Data**. Submit all data in a format which complies with PR Notice 86-5, and/or submit citations of data already submitted and give the EPA identifier (MRID) numbers. Before citing these studies, you must **make sure that they meet the Agency's acceptance criteria** (attached to the DCI).

d. **Two copies of the Confidential Statement of Formula (CSF)** for each basic and each alternate formulation. The labeling and CSF which you submit for each product must comply with P.R. Notice 91-2 by declaring the active ingredient as the **nominal concentration**. You have two options for submitting a CSF: (1) accept the standard certified

limits (see 40 CFR §158.175) or (2) provide certified limits that are supported by the analysis of five batches. If you choose the second option, you must submit or cite the data for the five batches along with a certification statement as described in 40 CFR §158.175(e). A copy of the CSF is enclosed; follow the instructions on its back.

e. **Certification With Respect to Data Compensation Requirements**. Complete and sign EPA form 8570-31 for each product.

4. **COMMENTS IN RESPONSE TO FEDERAL REGISTER NOTICE**--Comments pertaining to the content of the RED may be submitted to the address shown in the Federal Register Notice which announces the availability of this RED.

5. **WHERE TO SEND PRODUCT SPECIFIC DCI RESPONSES (90-DAY) AND APPLICATIONS FOR REREGISTRATION (8-MONTH RESPONSES)**

By U.S. Mail:

Document Processing Desk **(RED-SRRD-PRB)**
Office of Pesticide Programs (7504C)
EPA, 401 M St. S.W.
Washington, D.C. 20460-0001

By express:

Document Processing Desk **(RED-SRRD-PRB)**
Office of Pesticide Programs (7504C)
Room 266A, Crystal Mall 2
1921 Jefferson Davis Hwy.
Arlington, VA 22202

6. **EPA'S REVIEWS**--EPA will screen all submissions for completeness; those which are not complete will be returned with a request for corrections. EPA will try to respond to data waiver and time extension requests within 60 days. EPA will also try to respond to all 8-month submissions with a final reregistration determination within 14 months after the RED has been issued.

REREGISTRATION ELIGIBILITY DECISION

2,2-dibromo-3-nitrilopropionamide (DBNPA)

LIST C

CASE 3056

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDE PROGRAMS
SPECIAL REVIEW AND REREGISTRATION DIVISION

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2,2-DIBROMO-3-NITRILOPROPIONAMIDE (DBNPA) REREGISTRATION ELIGIBILITY DECISION TEAM

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Sidney Abel

GLOSSARY OF TERMS AND ABBREVIATIONS

a.i.	Active Ingredient
CAS	Chemical Abstracts Service
CSF	Confidential Statement of Formula
EEC	Estimated Environmental Concentration. The estimated pesticide concentration in an environment, such as a terrestrial ecosystem.
EP	End-Use Product
EPA	U.S. Environmental Protection Agency
FDA	Food and Drug Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FFDCA	Federal Food, Drug, and Cosmetic Act
HDT	Highest Dose Tested
LC_{50}	Median Lethal Concentration. A statistically derived concentration of a substance that can be expected to cause death in 50% of test animals. It is usually expressed as the weight of substance per weight or volume of water, air or feed, e.g., mg/l, mg/kg or ppm.
LD_{50}	Median Lethal Dose. A statistically derived single dose that can be expected to cause death in 50% of the test animals when administered by the route indicated (oral, dermal, inhalation). It is expressed as a weight of substance per unit weight of animal, e.g., mg/kg.
LD_{lo}	Lethal Dose-low. Lowest Dose at which lethality occurs
LEL	Lowest Effect Level
LOC	Level of Concern
LOEL	Lowest Observed Effect Level
MP	Manufacturing-Use Product
MPI	Maximum Permissible Intake

GLOSSARY OF TERMS AND ABBREVIATIONS

MOE	Margin Of Exposure
MRID	Master Record Identification (number). The EPA's system of recording and tracking studies submitted.
N/A	Not Applicable
NPDES	National Pollutant Discharge Elimination System
NOEL	No Observed Effect Level
OPP	Office of Pesticide Programs
ppm	Parts Per Million
RED	Reregistration Eligibility Decision
TD	Toxic Dose. The dose at which a substance produces a toxic effect.
TC	Toxic Concentration. The concentration at which a substance produces a toxic effect.
TGAI	Technical Grade Active Ingredient

EXECUTIVE SUMMARY

This Reregistration Eligibility Decision (RED) addresses pesticide uses of 2,2-dibromo-3-nitrilopropionamide (DBNPA). Products containing this active ingredient are used to control microorganisms including algae, bacteria, and fungi in various industrial processes.

The Agency has completed its review of the target database for DBNPA and has concluded that most uses of DBNPA as labeled and used as specified in this Reregistration Eligibility Decision will not pose unreasonable risks or adverse effects to humans or the environment. However, because the risk to non-target aquatic organisms from the discharge of industrial effluent containing DBNPA outweighs the potential benefits of the pesticidal use of DBNPA in single flow-through cooling towers, the Agency has concluded that this use is ineligible for reregistration. The Agency intends to take appropriate regulatory steps to adequately address the potential risk of this use.

After evaluation of all available ecotoxicological and environmental data and subsequent consultation with the Agency's Offices (Office of Water and the Office of Toxic Substances), it was determined that aquatic risk concerns for all currently registered uses except single flow-through cooling systems may be adequately mitigated by secondary biological treatment of industrial effluent. Ecotoxicological and environmental fate data indicate that DBNPA degrades rapidly by anaerobic and aerobic aquatic metabolism into less toxic degradates. Secondary biological treatment is required for all aquatic industrial uses except, 1) waste water treatment systems, 2) secondary oil recovery systems, and 3) single flow-through cooling tower systems (ineligible for reregistration). Biological treatment is not required for waste water treatment systems because biological degradation readily occurs in these systems. Although secondary biological treatment is not feasible for secondary oil recovery systems, an evaluation of the secondary oil recovery use pattern as it relates to DBNPA sufficiently reduces the Agency's concern with this use pattern. However, aquatic risk concerns for the single flow-through cooling system use of DBNPA cannot be mitigated. Single flow-through cooling systems represent a direct surface water discharge situation and a potential adverse risk to aquatic species remains.

Additionally, the Agency has a concern for the potential effect of DBNPA on human developmental toxicity. In an oral developmental toxicity study in rabbits, DBNPA was observed to produce fetal structural alterations at a dose (30 mg/kg/day) which was not maternally toxic. The NOEL for developmental effects was 10 mg/kg/day and the maternal NOEL was 30 mg/kg/day. There is a potential for mixer/loader/applicator exposure from use. Margin of Exposures (MOE) are acceptable (greater than 100) for all uses regulated by the EPA except one, that of the handler using an open pouring method to add DBNPA to cooling towers (MOE = 28). The Agency is therefore requiring use of personal protective equipment for open pouring for recirculating cooling water tower uses. The potential for post-application acute exposure is minimal. A food tolerance has been established for DBNPA for food contact with food grade paper and paperboard (21 CFR 176.300). The use of DBNPA for this purpose is regulated under the jurisdiction of the U.S. Food and Drug Administration.

The Agency is requiring that product specific data, revised Confidential Statements of Formula (CSF) and revised labeling be submitted within eight months of the issuance of this document for all products containing DBNPA. These data include product chemistry for each registration and acute toxicity testing. After reviewing these data and any revised labels and finding them acceptable in accordance with Section 3(c)(5) of FIFRA, the Agency will reregister a product. However, those products which bear uses of this or any other active ingredients which have not been determined to be eligible for reregistration will be registered only when such uses and active ingredients are determined to be eligible for reregistration.

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 database 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 eligibility of the registered uses of 2,2-dibromo-3-nitrilopropionamide (DBNPA). The document consists of six sections. Section I is the introduction. Section II describes DBNPA, 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 presents the reregistration decision for DBNPA. Section V discusses the reregistration requirements for DBNPA. Finally, Section VI is the Appendices which support this Reregistration Eligibility Decision. Additional details concerning the Agency's review of applicable data are available on request.

II. CASE OVERVIEW

A. Chemical Overview

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

- **Common Name:** DBNPA
- **Chemical Name:** 2,2-dibromo-3-nitrilopropionamide
- **Chemical Family:** Dibromo-3-nitrilopropionamide
- **CAS Registry Number:** 10222-01-2
- **OPP Chemical Code:** 101801
- **Empirical Formula:** $C_3H_2Br_2N_2O$
- **Molecular Weight:** 242
- **Trade and Other Names:** DBNPA
  Slimicide 508
  XD-7287L Antimicrobial
  XD-1603
  2,2-dibromo-2-carbamoylacetonitrile
  2,2-dibromo-2-cyano-acetamide
- **Basic Manufacturers:** Dow Chemical Company
  Ameribrom, Inc

B. Use Profile

The following is information on the currently registered uses with an overview of use sites and application methods. A detailed table of these uses of DBNPA is in Appendix A.

Type of Pesticide: Algicide, bactericide and fungicide (slime-forming algae, bacteria and fungi); preservative (additive); fungicide (mold and mildew).

Use Sites: AQUATIC NON-FOOD INDUSTRIAL:

< pulp, paper and paperboard mill water systems

- air washer water systems
- commercial/industrial water cooling systems (single flow-through cooling tower systems and recirculating cooling tower systems): influent systems, flow through filters, cooling ponds, canals and lagoons
- evaporative condenser water systems
- secondary oil recovery injection water, underground flood water, non-marine underground flood water
- sewage systems
- heat exchanger water systems
- industrial auxiliary water systems
- laboratory equipment water baths
- industrial scrubbing systems

INDOOR NON-FOOD

- pasteurizer/warmer/cannery cooling water systems, brewery pasteurizers
- industrial adhesives, animal glues
- industrial and paper mill coatings
- metalworking cutting fluids
- oil recovery drilling muds, packer fluids and gypsum mud
- latex paints (in-can)
- paper/paper products
- resin/latex/polymer emulsions: emulsions, polymers and defoamers
- latex/oil/varnish paints (applied film)
- specialty industrial products (waxes, polishes and ink)
- wet-end additives/industrial (pigment slurries and sizing)

INDOOR FOOD

- food packaging (regulated by FDA)

Target Pests: Coliform bacteria; slime-forming and odor-causing algae, bacteria and fungi; yeasts; sulfide producing bacteria (enhanced oil recovery)

Formulation Types Registered:

TYPE:

End-use, manufacturing use

FORM:

Tablets, solid soluble concentrate, liquid soluble concentrate.

Method and Rates of Application:

Aquatic non-food industrial:	Water treatment, water recirculating system treatment, water once-through system treatment.
Indoor non-food:	Water treatment, water recirculating system treatment, industrial preservative treatment (added during manufacture), preservative treatment.
Equipment:	Metering pump and not specified.
Timing:	Intermittent (slug initial and subsequent), continuous feed (initial and subsequent), during manufacture (industrial preservative treatment) and not specified.

Table 1: Rates of Application

Aquatic non-food industrial:	
Pulp/paper mills	2 to 200 ppm of active ingredient by weight
Air washers	less than 1 ppm of active ingredient by volume to 24 ppm by weight
Cooling water systems	less than 1 ppm of active ingredient by volume to 24 ppm by weight
Evaporative condensers	6 ppm of active ingredient by volume to 24 ppm by weight
Heat exchangers	7 to 24 ppm of active ingredient by weight
Lab equipment (water bath)	20 ppm by weight
Scrubbing system	6 ppm of active ingredient by weight to 24 ppm by weight
Oil recovery injection water	less than 1 ppm of active ingredient by volume to 100 ppm by weight
Indoor non-food	
Preservative uses: Industrial adhesives; Industrial coatings; Metalworking cutting fluids; Latex/oil/varnish paints (applied film); Paper/paper products; Specialty industrial products; Wet-end additives /industrial (processing chemicals)	20 to 2000 ppm of active ingredient by weight
Industrial preservative uses: Industrial adhesives; Industrial coatings; Resin/latex/polymer emulsions; Metalworking cutting fluids; Oil recovery drilling (muds/packer fluids); Latex paints (in-can); Latex/oil/varnish paints (applied film); Specialty industrial products; Wet-end additives/industrial (processing chemicals)	10 to 2000 ppm of active ingredient by weight

Use Practice Limitations:

An NPDES permit is required for discharges to waterways.

C. Regulatory History

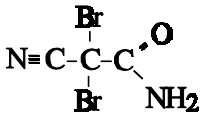
Pesticide products containing DBNPA as an active ingredient were first registered in the United States in 1972 as a microbicide. There are currently 44 products registered by the EPA to 27 companies containing DBNPA as an active ingredient. There is also one Special Local Need, FIFRA 24(c) registration for this chemical's use in Missouri to control bacteria in a specified industrial water system.

III. SCIENCE ASSESSMENT

A. Physical Chemistry Assessment

, **Chemical name** 2,2-Dibromo-3-nitrilopropionamide

, **Chemical Structure:**



, **Color** white to "off white" color

, **Physical State** crystalline solid

, **Odor** mild "medicinal antiseptic"

, **Melting point** 123-126E C.

, **Boiling point** decomposes at 190E C.

, **Density** 2.375 at 21E C., 0.934-1.370 g/ml.

, **Solubility at 25E C.**

Solvent	**Solubility gms/100ml**
Acetone	35
Ethanol	25
Water	1.5

, **Vapor Pressure** 9.0 X 10^{-4} mm @ 25EC

, **Octanol/Water Partition Coefficient**

K_{ow} 6.24 ± 0.173 at pH 5.0
K_{ow} 6.31 ± 0.075 at pH 7.0
K_{ow} 6.61 ± 0.126 at pH 9.0

, **pH at 25EC** 6.61 in 0.01% aqueous solution

, **Oxidizing or Reducing Reaction** Incompatible with bases, reducing substances and nucleophiles

, **Flammability** Cannot support combustion

, **Explodability** Non-explosive, non combustible

, **Storage Stability** Stable under normal conditions, decomposition accelerated by light and heat

, **Corrosion Characteristics** Corrosive to mild steel, iron and aluminum

B. Human Health Assessment

1. Toxicology Assessment

The toxicological data base for DBNPA is adequate and will support reregistration eligibility as a non-food use pesticide. The data are reported below.

a. Acute Toxicity

Acute toxicology on DBNPA are summarized below.

Table 2: Acute toxicity values for DBNPA.

TEST	RESULT	CATEGORY
(81-1) Oral LD_{50} - rat	235 mg/kg (M); 178 mg/kg (F)	II
(81-2) Dermal LD_{50} - rabbit	> 2 g/kg	III
(81-3) Inhalation LC_{50} - rat	0.32 mg/L	II
(81-4) Eye Irritation - rabbit	corrosive	I
(81-5) Skin Irritation - rabbit	moderate dermal irritant	III
(81-6) Dermal sensitization - guinea pig	a weak dermal sensitizer	N/A

Acute oral toxicity studies resulted in an LD_{50} of 235 mg/kg for male rats and 178 mg/kg for females (MRID# 00136724). The LD_{50} for female guinea pigs was 118 mg/kg and for both sexes of rabbits was 118 mg/kg. The animals showed depression, prostration, and labored breathing, along with weight loss in some cases (MRID#s 00136724). Another acute oral toxicity study in rats showed the LD_{50} to be 375 mg/kg for males and 284 mg/kg for females (MRID# 00143642).

In male rabbits, an acute dermal toxicity test had no deaths and the LD_{50} was greater than 2 g/kg (only dose tested; 24-hr exposure). Dermal irritation (moderate to severe hyperemia/edema and slight to marked necrosis), however was observed in all treated animals (MRID#s 00136724). Another acute dermal test with rabbits of both sexes also resulted in an LD_{50} greater than 2 g/kg (only dose tested; 24-hr exposure).

Dermal irritation (encrustation and exfoliation of the skin) also was observed in this study (MRID# 00143639).

An acute inhalation study in rats gave an LC_{50} of 0.32 mg/L for a four-hour exposure; corneal opacity was present in some surviving rats (MRID# 41026502). A primary eye irritation study in rabbits resulted in severe corneal damage, which was considered permanent, in all treated eyes (MRID#s 00136724, 00143640). In another eye irritation study in rabbits DBNPA was corrosive to the eyes, with maximum opacity within one hour (MRID# 00143641). Rabbits treated with DBNPA in a primary dermal irritation study (4-hr exposure to 0.5 g) experienced erythema and edema, with exfoliation after five days (MRID# 00143641). Two dermal sensitization studies with guinea pigs found DBNPA to be a weak sensitizer (MRID#s 00143641, 00148622).

b. Subchronic Toxicity

In a subchronic toxicity study, rats were given DBNPA for 90 days by gavage at doses of 0, 5, 13, or 30 mg/kg/day. The NOEL was 5 mg/kg/day. The LOEL was 13 mg/kg/day based on dyspnea at this dose and higher. The animals with dyspnea also had weight loss and some of them died (GL# 82-1; MRID#s 41026504; 41310001).

Doses of 0, 103, 309, or 1031 mg/kg/day of DBNPA were applied to the skin of rats (6 hrs/day; 5 days/week) for 90 days. The systemic NOEL was 309 mg/kg/day. The systemic LOEL was 1031 mg/kg/day based on clinical chemistry findings of reduced triglyceride levels in males, reduced cholesterol as well as elevated alkaline phosphatase and chloride in females, and urine pH at or above 9 in some males. The dermal irritation NOEL was 103 mg/kg/day. Dermal irritation (erythema and/or edema) was transient in several rats of both sexes at the two highest doses (GL# 82-3; MRID# 41662201).

c. Developmental Toxicity

Rabbits were given DBNPA doses of 0, 2, 10, 30, or 60 mg/kg/day, by gavage, on gestation days 7-19 in a developmental toxicity study. The maternal NOEL was 30 mg/kg/day. At the maternal LOEL of 60 mg/kg/day, there were deaths, decreased body weight gain, and reduced food intake. The developmental NOEL was 10 mg/kg/day. Retarded ossification of several fetal skeletal elements was observed both at the LOEL (30 mg/kg/day) and the high dose (60 mg/kg/day). The occurrence of structural alterations at a maternally non-toxic dose indicates

that DBNPA is a developmental toxicant in rabbits (GL# 83-3; MRID# 41508301).

d. Mutagenicity

In a *Salmonella*/mammalian-microsome mutagenicity assay, DBNPA did not induce a mutagenic effect in *S. typhimurium* strains TA1535, TA1537, TA1538, TA98, or TA100, either with or without metabolic activation (MRID# 00148623). A mutation assay involving the HGPRT locus in Chinese hamster ovary cells was negative, with and without metabolic activation (MRID# 00157756). In a study with human lymphocytes, DBNPA showed a weak positive response for chromosomal aberrations, with and without metabolic activation (MRID# 41034701). Two separate studies showed no evidence of unscheduled DNA synthesis in rat hepatocytes tested with DBNPA (MRID# 41125801, 157755).

e. Other Toxic Endpoints

Several human incident reports concerning DBNPA are on file with the Agency. These include eye, throat and respiratory irritation, runny nose, and headache. Generally the effects arose with spills or misuse.

2. Exposure Assessment

a. Dietary Exposure

A food additive tolerance has been established for DBNPA from food contact with food grade paper and paperboard (see 21 CFR 176.300). The use of DBNPA as a slimicide in the manufacture of paper and paperboard that contact food, is regulated under the jurisdiction of the U.S. Food and Drug Administration and is not directly regulated by EPA.

Another food tolerance has been established for sugar from the use of DBNPA in sugar beet processing (see 21 CFR 173.320). This use is no longer registered and is not supported for reregistration.

b. Occupational and Residential

DBNPA is used in a variety of industrial applications as described in Section II.B. above. DBNPA is formulated as liquid and soluble solid concentrates. Treatments typically are made using a variety of industrial equipment (e.g., metering pumps, drip feed devices) and can be of several varieties including shock/slug, initial, intermittent, maintenance, during manufacture, and continuous feed.

c.. Mixer/Loader/Applicator Exposure (Handlers):

The formulated DBNPA products are liquids and soluble solid concentrates. The potential for exposure exists, particularly to those workers ("handlers") loading DBNPA products by open delivery or pouring methods. Potential exposure is via the dermal and inhalation routes as suggested by an exposure study submitted by the Chemical Manufacturers Association (CMA) to fulfill the data requirements. DBNPA meets both toxicity (as a developmental toxicant) and exposure criteria for requiring mixer/loader/applicator data.

Dermal and inhalation exposure to handlers via either an open pouring system (Table 4.) or a closed system (Table 5.) may be estimated using the CMA exposure data, maximum application rates based on information from use patterns in Agency files, and assumptions discussed below.

Estimates of daily exposure are calculated with the following equation:

$$\frac{MCS \times lb.\ a.i.\ used}{BW} - Daily\ exposure$$

Where:

MCS = maximum credible sum is the maximum exposure (dermal + inhalation) per pound of a.i. handled
lb. a.i. used = application rates from labels of currently registered DBNPA products
BW = 60 kg. for an adult female worker, since the toxicological endpoint is developmental effects.

(1) Assume 100 gallons of paint are treated with 20% a.i. end-use product (final diluted concentration is 1%). A total of 1.80 lb of a.i. is added.

(2) For a pulp and paper mill system, assume 0.5 lb of end-use product with 20% a.i. is added to one ton of dry pulp, and 100 tons of pulp are treated. A total of 10 lbs of a.i. is added.

(3) For a water recirculating cooling system, assume 12 fl.oz. of 20% a.i. end-use product is added into 1000 gallons of water and a total of 5000 gallons of water is treated. A total of 60 fl. oz of end-use product (= 0.78 lb of a.i.) is added.

(4) For metalworking fluid, assume 8.48 lb of 5% a.i. end-use product is added to 1000 gallons of oil. A total of 0.42 lb of a.i. is added.

Table 4. Daily Exposure Estimates from Open Delivery System

POUR LIQUID (OPEN DELIVERY SYSTEM)				
Exposure Site	MCS* (ug/lb a.i.)	lb a.i. used	BW**(kg)	Daily Exposure (ug/kg/day)
Preservative	130	1.80	60	3.90
Wood P&P	130	10	60	21.67
Cooling Tower	27130.00	0.78	60	352.69
Metal Fluid	100	0.42	60	0.67

* MCS = Maximum Credible Sum was derived from CMA Study (worst-case scenario).
** BW = Body Weight [female average body weight (60 kg) is used since the toxicological end-point is developmental toxicity].

Table 5. Daily Exposure Estimates from Closed Delivery System

PUMP LIQUID (CLOSED DELIVERY SYSTEM)				
Exposure Site	MCS*(ug/lb a.i.)	lb a.i. used	BW**(kg)	Daily Exposure(ug/kg/day)
Wood P&P	10	10	60	1.67
Preservative	10	1.80	60	0.30
Cooling Tower	930	0.78	60	12.09
Metal Fluid	470	0.40	60	3.13

* MCS = Maximum Credible Sum was derived from CMA Study (worst-case scenario).
** BW = Body Weight [female average body weight (60 kg) is used since the toxicological end-point is developmental toxicity].

Estimates of Daily Exposure are low for all uses of DBNPA, based on the above study and assumptions, except for a handler using an open pouring method to add DBNPA to cooling towers (exposure = 352.69 ug/kg/day). With appropriate Personal Protective Equipment (PPE) the estimated daily exposure from open pouring in cooling towers would be significantly reduced.

Residential exposure is not expected since DBNPA has no residential use.

d.. Post-application Exposure (Workers)

Post-application (dermal and inhalation) acute exposure is expected to be minimal since workers are not exposed to the DBNPA concentrates but potentially only to highly diluted levels in manufactured products such as paints.

3. Risk Assessment

The data available on the potential toxicological effects of DBNPA and exposure to workers are sufficient for assessing human risks. In acute toxicity studies described above, DBNPA is moderately, systemically toxic by the oral and inhalation routes (Toxicity Category II) and slightly toxic by the dermal route (Toxicity Category III). DBNPA is corrosive to the eye (Toxicity Category I). Although classified in Toxicity Category III for primary dermal irritation, DBNPA can produce necrosis of rabbit skin when administered at higher doses for a more prolonged time period. DBNPA is a dermal sensitizer. DBNPA appears to be a developmental toxicant in rabbits; structural alterations were observed at a maternally non-toxic dose. Several human incidents concerning acute exposure to DBNPA after spills or misuse report eye, throat and respiratory irritation, and runny nose or headache.

a. Dietary

The one potential food use for DBNPA in paper and paperboard is regulated by FDA.

b. Occupational and Residential

Handlers may be at risk for acute toxicity effects. They may also be at risk for developmental effects from acute exposure to DBNPA. The margin of exposure (MOE) for developmental toxicity may be estimated by the following equation:

$$\frac{NOEL\ (mg/kg/day)}{Exposure\ (mg/kg/day)} = MOE$$

Where the NOEL = 10 mg/kg/day, based on the developmental study in rabbits (MRID# 41508301). Exposure estimates are from Tables 4 and 5.

Table 6: Estimates of Margins of Exposure for Developmental Toxicity

APPLIED BY	POUR LIQUID (OPEN SYSTEM)		PUMP LIQUID (CLOSED SYSTEM)	
EXPOSURE SITE	Daily Exposure (ug/kg/day)*	MOE	Daily Exposure (ug/kg/day)*	MOE
Wood P & P	3.90	2564	1.67	5988
Preservative	21.67	461	0.30	33333
Cooling Tower	352.69	28	12.09	827
Metal Fluid	0.67	14925	3.13	3195

* 100% absorption by the dermal and inhalation routes is assumed.

MOEs are greater than 100 for all uses except for a handler using an open pouring method to add DBNPA to cooling towers (MOE = 28). With appropriate personal protective equipment, the exposure from open pouring in cooling towers would be significantly reduced and the MOE would be greater than 100.

Developmental and acute toxicity risks for post-application/reentry workers are not expected because their potential for exposure is expected to be much lower than for handlers.

C. Environmental Assessment

1. Environmental Fate

a. Environmental Chemistry, Fate and Transport

The Agency required a hydrolysis study for the uses of DBNPA to determine if and under what conditions the pesticide degrades in aqueous solution. Any significant environmental degradation products are identified if degradation occurs. Although hydrolysis were the only required environmental fate data for DBNPA given its current use patterns, additional environmental fate data were submitted to the Agency. These include aqueous photolysis and aerobic and anaerobic aquatic metabolism studies.

The hydrolysis and aqueous photolysis studies show that DBNPA degrades to an array of products: dibromoacetonitrile; dibromoacetamide; dibromoacetic acid; monobromoacetamide; monobromonitrilopropion-amide; monobromoacetic acid; cyanoacetic acid; cyanoacetamide;

oxoacetic acid; oxalic acid and malonic acid. The various pathways that generate these degradation products depend upon pH and the presence of light and nucleophiles.

As the pH increases from neutral the half-life of DBNPA decreases. For instance, at pH 5 the half-life of DBNPA is 67 days as opposed to 63 hours at pH 7 and 73 minutes at pH 9. Hydrolysis produces dibromoacetic acid (30.6% of applied) as the major degradate at pH 5, dibromoacetonitrile (54.5%) as the major degradate at pH 7, and dibromoacetonitrile (38.6%) as the major degradate at pH 9. Aqueous photolysis produces dibromoacetic acid (63.7%) as the major degradate at pH 5 ($t_{½}$ = 14.8 hrs.) in exposed solutions and dibromoacetic acid (31.4%) in the dark control, and dibromoacetic acid as the major degradate in the exposed (66.5%) and unexposed (74.9%) solutions at pH 7 ($t_{½}$ = 6.9 hrs.). Additionally, the aqueous photolysis study indicate that:

1) at pH 9 ($t_{½}$ = 0.4 hrs.) in the solutions exposed to light, bromoacetamide was present at 14.6% and an unknown degradate at 61.4%;

2) in the unexposed solutions an unknown (possibly dibromoacetonitrile from retention times) was present at 51.7% and oxalic acid at 29.9%.

In the aerobic and anaerobic aquatic metabolism studies DBNPA degraded with a half-life of < four hours. DBNPA and degradate concentrations decreased rapidly during the metabolism studies and the majority of the residues were found in the aqueous layer. The six degradates detected were oxalic acid, 2-cyanoacetamide, bromoacetamide, dibromoacetic acid, bromoacetic acid, and dibromoacetonitrile. Although DBNPA degrades into the same six degradates under aerobic or anaerobic aquatic metabolism conditions, the percent of individual degradates present during different periods of time varies with the type of metabolism.

In the anaerobic aquatic metabolism study 2-cyanoacetamide reached a maximum of 56.35% of applied by day seven, then decreased to undetectable levels at day 48. Dibromoacetic acid was at 27.3% at 0 hr then decreased to 17.0% by day 48. Oxalic acid reached 10.3% by day two, and was at 5.4% by day 48. Bromoacetamide was at 2.3% by day 48. Dibromoacetonitrile reached 1.2% then decreased to undetectable levels by day 48. Bromoacetic acid reached 0.7% at day 14 then decreased to undetectable levels by day 48.

Three degradates were identified in the sediment phase: 2-cyanoacetamide; dibromoacetonitrile; and bromoacetamide. The major degradate was 2-cyanoacetamide which reached 15.3% of applied by day seven, and decreased to 2.8% by day 48. Dibromoacetonitrile was detected once at 0.3% on day two. Bromoacetamide was detected once at 0.2% on day 30.

In the aerobic aquatic metabolism study, the degradate found in highest concentration was dibromoacetic acid. This degradate reached 66.45% of applied at 0 hr, fell to 9.0% at hr five, and was not detected at day two. 2-cyanoacetamide was present at 56.5% at hr five and fell to 2.3% at day 30. Oxalic acid was present at 7.9% at hr five and remained relatively constant throughout the experiment. Bromoacetic acid was detected once at 2.3% on day 14. Bromoacetamide was detected twice at 1.1% at hr five and 1.4% on day seven. Dibromoacetonitrile was detected at 1.8% at day zero, and 5.6% at day five. Unknowns were detected at a maximum of 10.9% on day 15.

Three degradates were identified in the sediment layer: oxalic acid; 2- cyanoacetamide; and bromoacetamide. The degradate found in highest concentration in the sediment was 2-cyanoacetamide which reached 16% of the applied at day two and fell to 1.1% by day 30. Bromoacetamide was present at 0.2% at 0 hr, rose to 2.1% by day two, and was not detected by day 30. Oxalic acid reached 4.5% at hr five, then fell to 0.2% by day 30. Unknowns were detected during various times at 0.2%.

b. Environmental Fate Assessment

Because of its use pattern, DBNPA would not generally contaminate ground water, but would likely contaminate surface waters by discharge or spill. In general, DBNPA hydrolyses rapidly ($t_{1/2}$ = < five hours) in natural waters to many degradates which continue to degrade rapidly by aerobic and anaerobic aquatic metabolism. This would decrease their threat to surface water contamination. Although the hydrolysis and aquatic photolysis rate is rapid under aquatic conditions, the primary degradation pathway is through aerobic and anaerobic metabolism.

Hydrolysis and supplemental aqueous photolysis data suggest that DBNPA degrades to an array of products as follows: dibromoacetonitrile; dibromoacetamide; dibromoacetic acid; monobromoacetamide; monobromonitrilo-propionamide; monobromoacetic acid; cyanoacetic acid; cyanoacetamide; oxoacetic acid; oxalic acid; and malonic acid. The

various pathways that generate these degradation products depend upon pH, and the presence of light and nucleophiles. As the pH increases from neutral the half-life of the parent decreases.

In the aerobic and anaerobic aquatic metabolism studies the parent degraded with a half-life of less than four hours. The parent and degradate concentrations decreased rapidly during the metabolism studies and most of the residues were found in the aqueous layer.

2. Ecological Effects

a. Ecological Effects Data

There are sufficient ecotoxicological data submitted to characterize the toxicity of DBNPA to nontarget terrestrial and aquatic organisms. Results of these studies are summarized below.

(1) Terrestrial Data

Results from toxicology studies suggest that DBNPA is highly toxic to mammals and avian species on an acute oral basis, but has low toxicity to avian species on a dietary basis. A study (described above in Section III. B.) with female laboratory rats using 95% a.i. resulted in an estimated LD_{50} of 178 mg/kg on an acute oral basis. Three acute oral avian toxicity studies on mallard ducks and bobwhite quail resulted in LD_{50}s for combined sexes ranging from 150-354 mg/kg. The subacute dietary data on mallard ducks and bobwhite quail using 95% and 100% a.i. resulted in an LC_{50} > 10,000 ppm and an LC_{50} > 5620 ppm, respectively. Table 7 below summarizes these results.

Table 7: Results from Acute and Subacute Avian Toxicology Studies with DBNPA

Species	% i.a.	Acute LD_{50}s	MRID
Mallard	technical grade	205(160-262)mg/kg	00025586
Bobwhite	technical grade	150(118-190)mg/kg	00025586
Bobwhite	100%	354(250-500)mg/kg	00151654

Species	% i.a.	Subacute LC_{50}s	MRID
Mallard	95%	> 10,000 ppm	00123205
Mallard	100%	> 5620 ppm	00151656
Bobwhite	95%	> 10,000 ppm	00123205
Mallard	100%	> 5620 ppm	00151656

(2) Aquatic Data

Many aquatic toxicological studies have been reviewed by the Agency. The study results are summarized below. DBNPA appears to be moderately toxic to freshwater fish species and moderately to highly toxic to freshwater crustacea. In addition, study results suggest that DBNPA is moderately toxic to estuarine fish and shrimp, highly toxic to estuarine mysids and very highly toxic to estuarine shellfish and larvae. Acute effects to estuarine oyster (Eastern Oyster) were seen at levels below the analytical detection limit, 0.070 mg/L. Therefore, actual levels at which effects begin for shellfish have not been established. It must be noted that, due to chemical degradation, many toxic effects to aquatic organisms occurred within 24 hours of exposure. Some degradates of DBNPA are highly (dibromoacetonotrile), moderately (monobromonitrilo-propionamide), and slightly (dibromoacetamide) toxic to fathead minnow.

Table 8: Results from Acute and Chronic Aquatic Toxicology Studies with DBNPA

Species Tested: Acute	AI %	LC_{50} (EC_{50}) in mg/l	MRID #
Bluegill sunfish	100	2.3(1.8-3.2)	00151657
Bluegill sunfish	tech	1.3(1-1.6)	00104507
Rainbow trout	tech	1.0(0.61-0.5)	00104507
Rainbow trout	100	2.3(1.8-3.2)	00151658
Fathead minnow	99.1	1.8(1.5-2.1)	00118432
Sheepshead minnow	99.5	3.4(3-4.9)	41669702
Sheepshead minnow	95	1.7	00096362
Daphnia magna	95	0.9(0.87-0.93)	00073951
Daphnia magna	100	0.86(0.56-1)	00151659
Mysidopsis bahia	99.5	0.72(0.5-1.3)	41669701
Eastern oyster	99.5	< 0.07*	41711701
Eastern oyster larvae	95	0.74(0.56-1), 48 hr. study	00025605
Pink shrimp	95	2.4(1.8-3.2)	00025605
Fiddler crab	95	13.9(10-32)	00025605
Chronic		**MATC**	
Rainbow trout	98	> 0.47 < 0.98	40195701
Daphnia magna	98	NOEL < 0.02	40195702

*** 0.070 mg/L stated to be the limit of detection in this study**

b. Ecological Effects Risk Assessment

Sufficient information exists to suggest that DBNPA will display moderate toxicity to terrestrial mammals and avian species if they are exposed to oral doses of concentrated residues of DBNPA. This might occur under such conditions as an accidental spill or excessive discharge of the chemical into a static pool. This information will be used for product hazard labeling purposes. However, based on submitted avian dietary studies, dietary toxicity to avian species is low. Median lethal concentrations were above 5620 ppm for both mallard duck and bobwhite quail.

The available data suggests, however, that DBNPA, without any mitigation measures, poses a high risk to aquatic organisms. These data include environmental fate data, ecotoxicological data on aquatic organisms, and an exposure screening model.

To aid in the aquatic risk assessment of DBNPA, the Agency used a screening model. This model provides the estimated environmental concentrations of DBNPA residues in receiving streams from effluent of pulp/paper mills, cooling towers, oil well/drilling muds, and metal finishing uses. The model, Tier Ic EEC, determines the maximum concentration that occurs immediately downstream from an industrial (point source) discharge site. The calculated EECs are those for a high exposure site with a return frequency of one in 10 years and for a typical site at mean stream flow. The high exposure site represents a site that would be expected to produce larger EECs than 90% of all sites with the specified use pattern. A one in 10 year EEC has a 10% probability of being equaled or exceeded in any single year at a given site or, would be equalled or exceeded once every ten years at that site on a long term average. This is similar to the site and frequency assumptions that are generally being used for agricultural pesticides. These EECs are presented for 50% of the industries as high (low stream flow) and typical (mean stream flow) exposure scenarios in Table 9 below.

Table 9: Tier 1c EECs of DBNPA at Discharge Sites

Use Site, Type	Typical Exposure Scenarios Residues (ppm) of DBNPA	High Exposure Scenarios Residues (ppm) of DBNPA
Metal Finishing (all uses)	0.200	2.000
Metal Finishing (direct discharge)	0.004	0.070
Pulp and Paper Mills	0.050	0.400
Cooling Water Systems	0.030	0.400
Secondary Oil Recovery Systems	0.100	3.000

The EECs range from 0.004 to 0.200 ppm of DBNPA for typical exposure scenarios and from 0.070 to 3.000 ppm for high exposure scenarios. For both scenarios the model suggests DBNPA EECs will be higher in receiving streams from effluent discharged from secondary oil recovery systems and metal finishing plants, than from the other three uses.

To compare these EECs to DBNPA's aquatic toxicity profile the Agency has calculated levels of concern (LOC) for aquatic organisms including endangered species potentially exposed to DBNPA. These LOCs are derived from the toxic potency indicated from the studies summarized in Table 8. The LOCs of four indicator species are shown in Table 10. below.

Table 10. LOCs for DBNPA and Indicator Aquatic Species

Aquatic Indicator Species	Typical Species LOC (½ LC_{50} (ppm))	Endangered Species LOC (1/20 LC_{50} (ppm))
Daphnia magna	0.43	0.04
Freshwater fish (Rainbow Trout)	0.50	0.05
Mysid shrimp	0.36	0.04
Shellfish (Eastern Oyster)	< 0.035	< 0.004

Half the LC_{50} for DBNPA for four types of aquatic indicator species are . 0.43 ppm for *Daphnia*; 0.5 ppm for freshwater fish (rainbow trout); . 0.36 for Mysid shrimp; and < 0.035 ppm for shellfish (Eastern Oyster).

An LOC is met or exceeded when the EEC value equals or exceeds ½ the LC_{50} values for non-endangered aquatic organisms (Table 11). The EEC values (Table 9.) are approximately equal to or greater than the LOC value for shellfish for typical and high scenarios except for metal finishing at typical exposure scenarios. Therefore, if the receiving streams have a flow rate below their mean flow condition, there potentially is a high risk to shellfish in these waters under direct discharge.

If an EEC is less than the LOC that suggests a high likelihood the chemical can be discharged into receiving waters without causing adverse effects. If the EEC equals or exceeds the LOC, it may indicate that the pesticide can have a potential adverse impact on non-target organisms.

The LOCs for endangered aquatic species are 1/20 the LC_{50} values, which for DBNPA are 0.04 ppm for *Daphnia*; 0.05 ppm for freshwater fish (rainbow trout); 0.04 ppm for Mysid shrimp; and < 0.004 for shellfish (Eastern Oyster). The EECs for the high and typical exposure scenarios for all uses of DBNPA exceed the LOCs for endangered aquatic invertebrates. The EECs for the high exposure scenario for all uses of DBNPA exceed the level of concern for freshwater fish. In addition, the typical exposure scenario EEC values for metal finishing, pulp and paper, and secondary oil recovery systems exceed the LOC for endangered freshwater fish. As DBNPA will be discharged at several different sites, it is reasonable to assume that endangered species are located in some of these aquatic habitats and are likely to be adversely affected.

Table 11: Non-endangered Indicator Species Which Meet or Exceed LOCs

Use Site, Type	Typical Exposure Scenarios	High Exposure Scenario
Metal Finishing (all)	shellfish	*Daphnia*, fresh water fish, Mysid shrimp, and shellfish
Metal Finishing (direct discharge)	none	shellfish
Pulp and Paper Mills	shellfish	*Daphnia*, Mysid shrimp and shellfish
Cooling Water Systems	shellfish	*Daphnia*, Mysid shrimp and shellfish
Secondary Oil Recovery Systems	shellfish	*Daphnia*, freshwater fish, Mysid shrimp, and shellfish

3. Mitigation of Risk to Aquatic Organisms

After evaluating available data and consultations between Agency Offices (Office of Pesticide Programs, Office of Water, and the Office of Pollution Prevention and Toxics), the Agency has determined that aquatic risk concerns for all uses of DBNPA, except single flow-through cooling systems, may be adequately mitigated by secondary biological treatment of waste water.

Factors considered in the consultation include:

1) DBNPA's use sites;
2) available environmental fate and ecotoxicological information;
3) information regarding waste water treatments.

The recommended mitigation measure is secondary biological effluent treatment. Environmental fate data suggest that DBNPA degrades rapidly by anaerobic and aerobic aquatic metabolism into less toxic degradates.

Secondary biological effluent treatment is required for all aquatic industrial uses of DBNPA except:

1) waste water treatment systems;
2) secondary oil recovery systems;
3) single flow-through cooling systems.

Biological effluent treatment is not needed for waste water treatment systems because biological degradation readily occurs in these systems. Secondary biological treatment is not feasible for secondary oil recovery systems. An evaluation of the secondary oil recovery use pattern for DBNPA adequately reduces the Agency's concern with this use pattern. However, aquatic risk

concerns (Table 11) for the single flow-through cooling system use of DBNPA remains since secondary biological effluent treatment is not practical for this use.

The Agency has determined that based on expected "end-of-pipe" effluent concentrations from single flow-through cooling towers, unacceptable risk to aquatic organisms may occur with presently labeled rates. Without some type of mitigatory measure before direct release of the effluent, present environmental concerns are expected to remain high for the single flow-through cooling tower use of DBNPA.

IV. RISK MANAGEMENT AND REREGISTRATION DECISION

A. Determination of Eligibility

Section 4(g)(2)(A) of FIFRA calls for the Agency to determine, after submission of relevant data concerning an active ingredient, whether products containing the active ingredient are eligible for reregistration. The Agency has previously identified and required the submission of the generic (i.e. active ingredient specific) data required to support reregistration of products containing DBNPA. The Agency has completed its review of these generic data, and has determined that the data and measures stipulated in this document are sufficient to support reregistration of products containing DBNPA except for those labeled with the single flow-through cooling tower use. Appendix B identifies the generic data requirements that the Agency reviewed as part of its determination of reregistration eligibility of DBNPA, and lists the submitted studies that the Agency found acceptable or supplemental.

The data identified in Appendix B are sufficient to allow the Agency to assess the registered uses of DBNPA and to determine that DBNPA, as labeled and specified in this document, can be used in most applications without resulting in unreasonable adverse effects to humans and the environment. The Agency has determined that the use of DBNPA in single flow-through cooling towers is ineligible for reregistration due to the potential high risks of toxicity to nontarget aquatic organisms and its relatively low benefits. This decision is further discussed in sections B and C below.

The Agency made its reregistration eligibility determination based upon the target data base required for reregistration and benefits information for the single flow-through cooling tower use. The current guidelines for conducting acceptable studies to generate such data and the data are identified in Appendix B. Although the Agency has found that all uses but the single flow-through cooling tower use of DBNPA are eligible for reregistration, it should be understood that the Agency may take appropriate regulatory action, and/or require the submission of additional data to support the registration of products containing DBNPA, if new information comes to the Agency's attention or if the data requirements for registration (or the guidelines for generating such data) change.

B. Eligibility Decision

Based on the reviews of the generic data for the active ingredient DBNPA the Agency has sufficient information on the health effects of DBNPA and on its potential for causing adverse effects in fish and wildlife and the environment. Therefore, the Agency concludes that specific products containing DBNPA for all uses except single flow-through cooling tower uses are eligible for reregistration when labeled and used as specified in this Reregistration Eligibility Decision, since they will not pose unreasonable risks or adverse effects to humans or the environment.

As described in Section III. C. above, available information indicates that DBNPA without any mitigation measures poses a high risk to aquatic organisms when released to bodies of water during normal use. However, when secondary biological treatment is performed, data suggest DBNPA and its degradates would be sufficiently degraded to adequately mitigate the risk. While this remedy is available for most current uses of DBNPA products, it is not considered practical for release of DBNPA treated water from single flow-through cooling towers. This is primarily because of the typical large size of these single flow-through cooling tower systems and the high volume of water which passes through them.

Information provided by the principal registrants of DBNPA indicate that current usage of this pesticide in single flow-through cooling towers in the U.S. is negligible. The registrants contend that this is because, while DBNPA is effective at pest control in this site, it is more costly than currently registered alternative pesticides. Consequently, since the current benefits of DBNPA for this use are low or non-existent, and the potential risk to aquatic organisms is potentially high when used, the Agency, as required by Section 4(g)(2)(A) of FIFRA, concludes this use is unreasonable as described in Section 3(c)5. Therefore, the Agency will take appropriate regulatory action against DBNPA products labeled for this use.

C. Regulatory Position

The following is a summary of the regulatory positions and rationales for DBNPA. Where labeling revisions are imposed, specific language is set forth in Section V of this document.

1. Secondary Biological Effluent Treatment Statement

The required aquatic risk mitigation measure is secondary biological effluent treatment. Environmental fate data indicates that DBNPA degrades rapidly by anaerobic and aerobic aquatic metabolism into less toxic degradates.

Therefore, DBNPA residues from treatment sites would be reduced before release into surface waters.

2. Endangered Species Statement

The Agency has concerns about the exposure of threatened and endangered shellfish (mollusk) species to DBNPA as discussed above in the science assessment chapter (Section III.). Currently, the Agency is developing a program ("The Endangered Species Protection Program") to identify all pesticides whose use may cause adverse impacts on endangered and threatened species and to implement mitigation measures that will eliminate the adverse impacts. The program would require use modifications or a generic product label statement, requiring users to consult county-specific bulletins. These bulletins would provide information about specific use restrictions to protect endangered and threatened species in the county. Consultations with the Fish and Wildlife Service will be necessary to assess risks to newly listed species or from proposed new uses.

The Agency plans to publish a description of the Endangered Species Program in the Federal Register by 1995 and have enforceable county-specific bulletins available. Because the Agency is taking this approach for protecting endangered and threatened species, it is not imposing label modifications at this time through the RED. Any requirements for product use modifications will occur in the future under the Endangered Species Protection Program.

3. Risk Mitigation to Handlers

Personal Protective Equipment (PPE) for Handlers (Mixer/Loader/ Applicators)

For each end-use product, PPE requirements for pesticide handlers will be set during reregistration in one of two ways:

(a) If EPA has no special concerns about the acute or other adverse effects of an active ingredient, the PPE for pesticide handlers will be based on the acute toxicity of the end-use product. For occupational-use products, PPE will be established using the process described in PR Notice 93-7 or more recent EPA guidelines.

(b) If EPA has special concerns about an active ingredient due to very high acute toxicity or to certain other adverse effects, such as allergic effects or delayed effects (cancer, developmental toxicity, reproductive effects, etc):

- In the RED for that active ingredient, EPA may establish minimum or "baseline" handler PPE requirements that pertain to all or most occupational end-use products containing that active ingredient.

- These minimum PPE requirements must be compared with the PPE that would be designated on the basis of the acute toxicity of each end-use product.

- The more stringent choice for each type of PPE (i.e., bodywear, hand protection, footwear, eyewear, etc.) must be placed on the label of the end-use product.

There are special toxicological concerns about DBNPA (developmental toxicity). However, the risk assessment indicates that only one use warrants the establishment of active-ingredient-based PPE requirements for handlers. The MOE's were calculated as being acceptable for all uses, except open pouring into cooling towers. For that use, the MOE is acceptable only when handlers were wearing long-sleeved shirt, long pants, chemical-resistant apron, chemical-resistant gloves and shoes plus socks. Therefore, that suite of PPE is required for handlers engaged in open pouring into cooling towers. If a closed (metering) system is used to add DBNPA to cooling towers, the handler only must wear long sleeved shirt, long pants, shoes, and socks.

V. ACTIONS REQUIRED BY REGISTRANTS

This section specifies the data requirements and responses necessary for the reregistration of both manufacturing-use and end-use products.

A. Manufacturing-Use Products

1. Additional Generic Data Requirements

The generic database supporting the reregistration of DBNPA for the above eligible uses has been reviewed and determined to be substantially complete. No additional generic data are required to support the current uses.

2. Labeling Requirements for Manufacturing-Use Products

Personal Protective Equipment and Engineering Controls

Handler PPE for Occupational-Use Products

The minimum (baseline) PPE for handlers engaged in open pouring of DBNPA into cooling towers is: long sleeve shirt, long pants, shoes plus socks, chemical-resistant gloves, and a chemical-resistant apron.

Other Labeling Requirements

The Agency is requiring the following labeling statements to be located on all end-use products containing DBNPA that are intended primarily for occupational use:

Application Restrictions:

> "Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application."

Engineering Controls:

> "When handlers use closed metering systems the handler requirements may be reduced or modified to long-sleeve shirt, long pants, shoes and socks."

User Safety Requirements:

> "Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry."

User Safety Recommendations:

> "Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet"

> "Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing."

> "Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing."

Sensitization Statement:

The following statement is required in the "Hazards to Humans (and Domestic Animals)" section of the Precautionary Statements on the labeling of all end-use products containing DBNPA, because it is classified as a skin sensitizer:

> "This product may cause skin sensitization reactions in some people."

Type of Respirator:

If the acute inhalation toxicity of the end-use product is in category I or II and, therefore, a respirator is required for pesticide handlers, the following type of respirator is appropriate to mitigate DBNPA inhalation concerns:

> "A respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)."

Effluent Discharge Labeling Statements

All DBNPA manufacturing-use or end-use pesticide products that may be contained in an effluent discharged to the waters of the United States or municipal sewer systems must bear the following effluent discharge labeling statement.

"This product is toxic to fish and invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Secondary biological treatment of DBNPA effluent is required for all uses except for use in secondary oil recovery systems. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA."

All affected pesticide products distributed or sold by registrants and distributors (supplemental registrants) must bear the above labeling by October 1, 1995. All products distributed or sold by persons other than registrants or supplemental registrants after October 1, 1997 must bear the correct labeling. Refer to PR Notice 93-10 or 40 CFR 152.46(a)(1) for additional information.

B. End-Use Products

1. Additional Product-Specific Data Requirements

Section 4(g)(2)B) of FIFRA calls for the Agency to obtain any needed product-specific data regarding the pesticide after a determination of eligibility has been made. The product specific data requirements and instructions are listed in Appendix G, the Product Specific Data Call-In Notice.

2. Labeling Requirements for End-Use Products

The labels and labeling of all products must comply with EPA's current regulations and requirements as specified in 40 CFR §156.10. Please follow the instructions in the Pesticide Reregistration Handbook with respect to labels and labeling.

Protective Equipment and Engineering Controls

Refer to subsection "A" above for labelling requirements and controls.

Effluent Discharge Labeling Statements

Refer to subsection A. above for labeling requirements for effluent discharge.

C. Existing Stocks

Registrants may generally distribute and sell products bearing old labels/labeling for 26 months from the date of the issuance of this Reregistration Eligibility Decision (RED). Persons other than the registrant may generally distribute or sell such products for 50 months from the date of the issuance of this RED. However, existing stocks time frames will be established case-by-case, depending on the number of products involved, the number of label changes, and other factors. Refer to "Existing Stocks of Pesticide Products; Statement of Policy"; Federal Register, Volume 56, No. 123, June 26, 1991.

The Agency has determined that registrants may distribute and sell DBNPA products bearing old labels/labeling for 26 months from the date of issuance of this RED. Persons other than the registrant may distribute or sell such products for 50 months from the date of the issuance of this RED. Registrants and persons other than registrants remain obligated to meet preexisting Agency imposed label changes and existing stocks requirements applicable to products they sell or distribute.

VI. APPENDICES

APPENDIX A. Table of Use Patterns Subject to Reregistration

APPENDIX A - **Case 3056, [Dibromo-3-nitrilopropionamide] Chemical 101801 [2,2-Dibromo-3-nitrilopropionamide]**

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations		Use Pattern Limitations
								Allowed	Disallowed	
USES ELIGIBLE FOR REREGISTRATION										
NON-FOOD/NON-FEED USES										
Site: Adhesives, Industrial **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Industrial preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	40 W	160 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction.
Site: Air Washer Water Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**										
Water treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim.
Water treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Proper ventilation required.
Water treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	10 V	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. NPDES license restriction.
Water treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 W	12 W	NS	NS	NS	NS	NA	NA	Preclean claim. NPDES license restriction. Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Air Washer Water Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim.
Water treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Proper ventilation required.
Water treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	9 V	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim.
Water treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 W	12 W	NS	NS	NS	NS	NA	NA	Preclean claim. NPDES license restriction. Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water treatment, NOL, NA, NA EIF: Not applicable for this use	SC/S	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Site: Coatings, Industrial **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Industrial preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	40 W	160 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction.

APPENDIX A - **Case 3056, [Dibromo-3-nitrilopropionamide] Chemical 101801 [2,2-Dibromo-3-nitrilopropionamide]**

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Commercial/Industrial Water Cooling Systems (Use Group: AQUATIC NON-FOOD INDUSTRIAL)										
Water once-through system treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction.
Water once-through system treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 W	24 W	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction.
Water once-through system treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority.Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction. Proper ventilation required.
Water once-through system treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 W	24 W	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction. Proper ventilation required.
Water recirculating system treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	20 V	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction. Proper ventilation required.
Water recirculating system treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction. Proper ventilation required.
Water recirculating system treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	20 V	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction. Proper ventilation required.

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Commercial/Industrial Water Cooling Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water recirculating system treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 V	24 V	NS	NS	NS	NS	NA	NA	Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). NPDES license restriction. Proper ventilation required. Do not apply in marine and/or estuarine oil fields.
Water recirculating system treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	20 V	NS	NS	NS	NS	NA	NA	Preclean claim. Proper ventilation required. NPDES license restriction. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water recirculating system treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Preclean claim. Proper ventilation required. NPDES license restriction. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields.
Water recirculating system treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	20 V	NS	NS	NS	NS	NA	NA	Preclean claim. Proper ventilation required. NPDES license restriction. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water recirculating system treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Preclean claim. Proper ventilation required. NPDES license restriction. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields.
Water treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/S	1 W	2 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Preclean claim.
Water treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Commercial/Industrial Water Cooling Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/S	< 1 W	1 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Preclean claim.
Water treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/S	1 W	2 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Preclean claim.
Water treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/S	1 W	2 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Preclean claim.
Water treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water treatment, NOL, NA, NA EIF: Not applicable for this use	SC/S	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Emulsions, Resin/Latex/Polymer **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/Ly	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Industrial preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Site: Evaporative Condenser Water Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**										
Water recirculating system treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Evaporative Condenser Water Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water recirculating system treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields.
Water recirculating system treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 W	24 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields.
Water recirculating system treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields.
Water recirculating system treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields.

APPENDIX A - **Case 3056, [Dibromo-3-nitrilopropionamide] Chemical 101801 [2,2-Dibromo-3-nitrilopropionamide]**

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Heat Exchanger Water Systems		**(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**								
Water recirculating system treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Water recircualting system treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Water recirculating system treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Water recirculating system treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Site: Industrial Auxiliary Water Systems		**(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**								
Water treatment, NOL, NA, NA EIF: Not applicable for this use	SC/S	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Industrial Processing Water		**(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**								
Water treatment, Continuou feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	MO	NS	Preclean claim. NPDES license restriction.
Water treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	MO	NS	Preclean claim. NPDES license restriction.

APPENDIX A - **Case 3056, [Dibromo-3-nitrilopropionamide] Chemical 101801 [2,2-Dibromo-3-nitrilopropionamide]**

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Industrial Processing Water **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	MO	NS	Preclean claim. NPDES license restriction.
Water treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	MO	NS	Preclean claim. NPDES license restriction.
Site: Industrial Scrubbing System **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**										
Water recirculating system treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields. NPDES license restriction. Preclean claim.
Water recirculating system treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Water recirculating system treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.

APPENDIX A - **Case 3056, [Dibromo-3-nitrilopropionamide] Chemical 101801 [2,2-Dibromo-3-nitrilopropionamide]**

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Industrial Scrubbing System **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water recirculating system treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	1 W	1 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Site: Laboratory Equipment Water Baths **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**										
Wtare recirculating system treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	2O V	20 V	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Metalworking Cutting Fluids **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Preservative treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	50 V	50 V	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Preservative treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	20 V	44 V	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields. NPDES license restriction. Preclean claim.
Preservative treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	50 V	220 V	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields. NPDES license restriction. Preclean claim.

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Metalworking Cutting Fluids **(Use Group: INDOOR NON-FOOD)** *(Continued from previous page)*										
Preservative treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	20 V	176 V	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Do not apply in marine and/or estuarine oil fields. NPDES license restriction. Preclean claim.
Site: Oil Recovery Drilling Muds/Packer Fluids **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Paints, Latex (In-Can) **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Paints, Latex/Oil/Varnish (Applied Film) **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	20 V	20 V	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Paper/Paper Products **(Use Group: INDOOR NON-FOOD)**										
Preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	40 W	160 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Site: Pasteurizer/Warmer/Cannery Cooling Water Systems **(Use Group: INDOOR NON-FOOD)**										
Water recirculating system treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Pasteurizer/Warmer/Cannery Cooling Water Systems **(Use Group: INDOOR NON-FOOD)** *(Continued from previous page)*										
Water recirculating system treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not apply in marine and/or estuarine oil fields. NPDES license restriction. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim.
Water recirculating system treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Water recirculating system treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields.
Water recirculating system treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 V	19 V	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim.
Water recirculating system treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	1 W	24 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. Do not apply in marine and/or estuarine oil fields. NPDES license restriction.
Water treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 V	7 V	NS	NS	NS	NS	NA	NA	Preclean claim. NPDES license restriction.

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Pasteurizer/Warmer/Cannery Cooling Water Systems **(Use Group: INDOOR NON-FOOD)** *(Continued from previous page)*										
Water treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	1 V	7 V	NS	NS	NS	NS	NA	NA	Preclean claim. NPDES license restriction.
Water treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	< 1 V	2 V	NS	NS	NS	NS	NA	NA	Preclean claim.
Site: Pulp/Paper Mill Water Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**										
Water treatment, Continuous feed (initial), Drip-feed device, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Water treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L SC/S	NC	NC	NS	NS	NS	NS	NA	NA	Preclean claim. Proper ventilation required. NPDES license restriction. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water treatment, Continuous feed (initial), NOL, NA EIF: Not applicable for this use	SC/L	12 V	96 V	NS	NS	NS	NS	NA	NA	Preclean claim. Proper ventilation required. NPDES license restriction. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L SC/S	NC	NC	NS	NS	NS	NS	NA	NA	Proper ventilation required. NPDES license restriction. Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water treatment, Continuous feed (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	2.4 V	36 V	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim.
Water treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim.

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Pulp/Paper Mill Water Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water treatment, Intermittent (slug) (initial), NOL, NA EIF: Not applicable for this use	SC/L	12 V	96 V	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim. NPDES license restriction.
Water treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L SC/S	NC	NC	NS	NS	NS	NS	NA	NA	Proper ventilation required. NPDES license restriction. Preclean claim. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water treatment, Intermittent (slug) (subsequent), NOL, NA EIF: Not applicable for this use	SC/L	6 V	48 V	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction). Preclean claim.
Site: Secondary Oil Recovery Injection Water **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**										
Water treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	2 W	16 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Proper ventilation required. Do not apply in marine and/or estuarine oil fields. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water treatment, Continuous feed (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 W	3 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Proper ventilation required. Do not apply in marine and/or estuarine oil fields. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Water treatment, Intermittent (slug) (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	2 W	16 W	NS	NS	NS	NS	NA	NA	NPDES license restriction. Preclean claim. Proper ventilation required. Do not apply in marine and/or estuarine oil fields. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).

APPENDIX A - **Case 3056, [Dibromo-3-nitrilopropionamide] Chemical 101801 [2,2-Dibromo-3-nitrilopropionamide]**

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Secondary Oil Recovery Injection Water **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)** *(Continued from previous page)*										
Water treatment, Intermittent (slug) (subsequent), Metering pump, NA EIF: Not applicable for this use	SC/L	2 W	16 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. NPDES license restriction. Do not apply in marine and/or estuarine oil fields.
Water treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	2 W	100 W	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Sewage Systems **(Use Group: AQUATIC NON-FOOD INDUSTRIAL)**										
Water treatment, Continuous feed (initial), Metering pump, NA EIF: Not applicable for this use	SC/L	< 1 W	2 W	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Water treatment, NOL, NA, NA EIF: Not applicable for this use	SC/S	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Site: Specialty Industrial Products **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Industrial preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	40 W	160 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).
Site: Wet-End Additives/Industrial Processing Chemicals **(Use Group: INDOOR NON-FOOD)**										
Industrial preservative treatment, During manufacture, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	NPDES license restriction.
Industrial preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	NC	NC	NS	NS	NS	NS	NA	NA	Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).

APPENDIX A - **Case 3056, [Dibromo-3-nitrilopropionamide] Chemical 101801 [2,2-Dibromo-3-nitrilopropionamide]**

Application Type / Application Timing / Application Equipment / Surface Type / Efficacy Influencing Factor	Form	Minimum Application Rate (ppm a.i.)	Maximum Application Rate (ppm a.i.)	Max. # Apps.	Max. # Apps. @ Max. Rate	Min. Interval Between Apps. @ Max. Rate (Days)	Restricted Entry Interval	Geographic Limitations: Allowed	Geographic Limitations: Disallowed	Use Pattern Limitations
USES ELIGIBLE FOR REREGISTRATION										
Site: Wet-End Additives/Industrial Processing Chemicals **(Use Group: INDOOR NON-FOOD)** *(Continued from previous page)*										
Preservative treatment, NOL, NOL, NA EIF: Not applicable for this use	SC/L	40 W	160 W	NS	NS	NS	NS	NA	NA	Proper ventilation required. Do not discharge effluent containing this pesticide into sewage systems without notifying the sewage treatment plant authority. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public water (NPDES license restriction).

Abbreviations used

Header: ppm a.i. = parts per million of active ingredient; Max. # Apps. = maximum number of applications
Max. # Apps. @ Max. Rate = maximum number of applications at maximum rate
Min. Interval Between Apps. @ Max. Rate (Days) = minimum interval between applications at maximum rate (in days)

Form: SC/S = Soluble Concentrate/Solid; SC/L = Soluble Concentrate/Liquid
Rate: W = calculated by weight; V = calculated by volume; NC = not calculated
Geographic limitations: MO = Missouri
In general: NOL = not on the label; NA = not applicable; NS = not specified

APPENDIX B. Table of the Generic Data Requirements and Studies Used to Make the Reregistration Decision

GUIDE TO APPENDIX B

Appendix B contains listings of data requirements which support the reregistration for active ingredients within the case covered by this Reregistration Eligibility Decision Document. It contains generic data requirements that apply to in all products, including data requirements for which a "typical formulation" is the test substance.

The data table is organized in 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 in the Pesticide Assessment Guidelines, which are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 (703) 487-4650.

2. Use Pattern (Column 2). This column indicates the use patterns for which the data requirements apply. The following letter designations are used for the given use patterns:

A	Terrestrial food
B	Terrestrial feed
C	Terrestrial non-food
D	Aquatic food
E	Aquatic non-food outdoor
F	Aquatic non-food industrial
G	Aquatic non-food residential
H	Greenhouse food
I	Greenhouse non-food
J	Forestry
K	Residential
L	Indoor food
M	Indoor non-food
N	Indoor medical
O	Indoor residential

3. Bibliographic citation (Column 3). If the Agency 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 appendix for a complete citation of the study.

APPENDIX B

Data Supporting Guideline Requirements for the Reregistration of DBNPA

REQUIREMENT		USE PATTERN	CITATION(S)
PRODUCT CHEMISTRY			
61-1	**Chemical Identity**	ALL	152342 143344
61-2A	**Start. Mat. & Mnfg. Process**	ALL	152342 143344
61-2B	**Formation of Impurities**	ALL	152342 143344
62-1	**Preliminary Analysis**	ALL	152342 143344
62-2	**Certification of limits**	ALL	152342 143344
62-3	**Analytical Method**	ALL	152342 143344
63-2	**Color**	ALL	152342 143344
63-3	**Physical State**	ALL	152342 143344
63-4	**Odor**	ALL	152342 143344
63-5	**Melting Point**	ALL	152342 143344
63-6	**Boiling Point**	ALL	WAIVED
63-7	**Density**	ALL	152342 143344

*** Indicates study has been classifed by the Agency as supplemental.**

Data Supporting Guideline Requirements for the Reregistration of DBNPA

REQUIREMENT		USE PATTERN	CITATION(S)
63-8	**Solubility**	ALL	152342 143344 41711703
63-9	**Vapor Pressure**	ALL	152342 143344 42358601
63-10	**Dissociation Constant**	ALL	41711702
63-11	**Octanol/Water Partition**	ALL	152342 143344 41733301
63-12	**pH**	ALL	152342 42158801
63-13	**Stability**	ALL	152342 143344
63-14	**Oxidizing/Reducing Action**	ALL	143344 Required as part of Product Specific DCI
63-15	**Flammability**	ALL	WAIVED Required as part of Product Specific DCI
63-16	**Explodability**	ALL	143344 Required as part of Product Specific DCI
63-17	**Storage stability**	ALL	Required as part of Product Specific DCI
63-18	**Viscosity**	ALL	Required as part of Product Specific DCI
63-19	**Miscibility**	ALL	Required as part of Product Specific DCI
63-20	**Corrosion characteristics**	ALL	143344 Required as part of Product Specific DCI
63-21	**Dielectric breakdown volt**	ALL	Required as part of Product Specific DCI

*** Indicates study has been classifed by the Agency as supplemental.**

Data Supporting Guideline Requirements for the Reregistration of DBNPA

REQUIREMENT		USE PATTERN	CITATION(S)
64-1	**Submittal of Samples**	ALL	
ECOLOGICAL EFFECTS			
71-1A	**Acute Avian Oral - Quail/Duck**	FM	151654 25586
71-1B	**Acute Avian Oral - Quail/Duck TEP**	FM	151656 123204 25586
71-2A	**Avian Dietary - Quail**	FM	151656 123204 25586
71-2B	**Avian Dietary - Duck**	FM	123205
72-1A	**Fish Toxicity Bluegill**	FM	151657 104507
72-1B	**Fish Toxicity Bluegill - TEP**	FM	104507
72-1C	**Fish Toxicity Rainbow Trout**	FM	151658 104507
72-2A	**Invertebrate Toxicity**	FM	151659 73951*
72-2B	**Invertebrate Toxicity - TEP**	FM	73951
72-3A	**Estuarine/Marine Toxicity - Fish**	FM	96362* 41669702
72-3B	**Estuarine/Marine Toxicity - Mollusk**	FM	41711701* 25605
72-3C	**Estuarine/Marine Toxicity - Shrimp**	FM	41669702 25605*

*** Indicates study has been classifed by the Agency as supplemental.**

Data Supporting Guideline Requirements for the Reregistration of DBNPA

REQUIREMENT		USE PATTERN	CITATION(S)
72-3F	**Estuarine/Marine Toxicity Shrimp - TEP**	FM	25605
72-4A	**Early Life Stage Fish**	FM	40195701
TOXICOLOGY			
81-1	**Acute Oral Toxicity - Rat**	FM	143642 136724
81-2	**Acute Dermal Toxicity - Rabbit/Rat**	FM	143639 136724
81-3	**Acute Inhalation Toxicity - Rat**	FM	41026502
81-4	**Primary Eye Irritation - Rabbit**	FM	143640 136724
81-5	**Primary Dermal Irritation - Rabbit**	FM	143641 118427 136724
81-6	**Dermal Sensitization - Guinea Pig**	FM	148622 118427 88180
82-1A	**90-Day Feeding - Rodent**	FM	41026503
82-3	**90-Day Dermal - Rodent**	FM	41662201
83-3B	**Developmental Toxicity - Rabbit**	FM	41508301
84-2A	**Gene Mutation (Ames Test)**	FM	157754 157756 148623 118425 118426 42387101

*** Indicates study has been classifed by the Agency as supplemental.**

Data Supporting Guideline Requirements for the Reregistration of DBNPA

REQUIREMENT		USE PATTERN	CITATION(S)
84-2B	**Structural Chromosomal Aberration**	FM	41034701 157754 118425 41565001
84-4	**Other Genotoxic Effects**	FM	41125801 41034701 157755 118425
ENVIRONMENTAL FATE			
160-5	**Chemical Identity**	FM	152342 127730
161-1	**Hydrolysis**	FM	127730 41924901
161-2	**Photodegradation - Water**	FM	127730 41924902
162-3	**Anaerobic Aquatic Metabolism**	FM	42358602
162-4	**Aerobic Aquatic Metabolism**	FM	41828301 42358603
163-1	**Leaching/Adsorption/Desorption**	FM	41828301

*** Indicates study has been classifed by the Agency as supplemental.**

APPENDIX C. Citations Considered to be Part of the Data Base Supporting the Reregistration of DBNPA

GUIDE TO APPENDIX C

1. CONTENTS 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 Decision 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, are 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 Agency, the Agency 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 Agency has also attempted 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 whenever a 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 identifying 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 standard of the American National Standards Institute (ANSI), expanded to provide for certain special needs.

   a Author. Whenever the author could confidently be identified, the Agency has chosen to show a personal author. When no individual was identified, the Agency has shown an identifiable laboratory or testing facility as the author. When no author or laboratory could be identified, the Agency has shown the first submitter as the author.

   b. Document date. The date of the study is taken directly from the document. When the date is followed by a question mark, the bibliographer has deduced the date from the evidence contained in the document. When the date appears as (19??), the Agency was unable to determine or estimate the date of the document.

c. Title. In some cases, it has been necessary for the Agency 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 Agency 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. 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," which stands 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.

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MRID	CITATION
00025586	Norris, J.M.; Kociba, R.; Bourne, J.E. (1971) Acute Oral Lethality of Dibromonitrilopropionamide in Mallard Duck and Bobwhite Quail. (Unpublished study received Jun 11, 1974 under 464-426; submitted by Dow Chemical U.S.A., Midland, Mich.; CDL:241465-E)
00025605	Heitmuller, T. (1976) Acute Toxicity of XD-1603L to Embryos of Eastern Oysters (Crassostrea virginica), to Pink Shrimp (Penaeus duorarum), and to Fiddler Crabs (Uca pugilator): GH-RC-78. (Unpublished study received Jun 17, 1976 under 464-426; prepared by EG&G, Bionomics, submitted by Dow Chemical U.S.A., Midland, Mich.; CDL:241465-AF)
00073951	Batchelder, T.L.; McCarty, W.M. (1977) Toxicity of 2,2-Dibromo-3nitrilopropionamide (DBNPA) to Daphnids. (Unpublished study received Oct 5, 1977 under 464-426; submitted by Dow Chemical U.S.A., Midland, Mich.; CDL:231982-A)
00088180	Rampy, L.W.; Hefner, R.E. (1972) Guinea Pig Skin Sensitization Study Conducted on Dibromonitrilopropionamide: NB T11.10-7814111. (Unpublished study received Nov 4, 1981 under 464-426; submitted by Dow Chemical U.S.A., Midland, Mich.; CDL:246329-A)
00096362	Heitmuller, T. (1980) Acute Toxicity of XD-1603L to Sheepshead Minnows (Cyprinodon variegatus): Report No. BP-80-11-216. (Unpublished study received Feb 5, 1981 under 464-389; prepared by EG & G Bionomics, submitted by Dow Chemical U.S.A., Midland, Mich.; CDL:244284-A)
00104507	Sterner, P. (1971) Acute Toxicity of DBNPA to Bluegill ... and Rainbow Trout (Salmo gairdneri). (Unpublished study received Feb 1, 1972 under 464-426; submitted by Dow Chemical U.S.A., Midland, MI; CDL:003657-D)
00118425	Davis, P. (1982) An Investigation into the Induction of Sisterchromatid Exchanges by Slimicide XD 7287: GHE-T-060-K-078141. (Unpublished study received Nov 23, 1982 under 464-426; prepared by Netherlands Organization for Applied Scientific Research, submitted by Dow Chemical U.S.A., Midland, MI; CDL:248895-A)
00118426	De Raat, W. (1982) The Mutagenicity of DBNPA Dissolved in Polyethylene Glycol in the Ames-test: GHE-T-063-K-78141. (Unpublished study received Nov 23, 1982 under 464-426; prepared by Netherlands Organization for Applied

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MRID	CITATION
	Scientific Research, submitted by Dow Chemical U.S.A., Midland, MI; CDL:248895-B)
00118427	McCartay, L. (1982) Skin Irritation and Skin Sensitization Potential of Dibromonitrilopropionamide (DBNPA) in Human Volunteers: HEB-DR-0076-4669-1. (Unpublished study received Nov 23, 1982 under 464-426; submitted by Dow Chemical U.S.A., Midland, MI; CDL:248895-C)
00118432	Mayes, M.; Blanchard, F.; Hopkins, D.; et al. (1982) The Static Acute Toxicity of Dibromonitrilopropionamide (DBNPA) and Its Degradation Products to the Fathead Minnow (Pimephales promelas Rafinesque): ES-559. (Unpublished study received Nov 23, 1982 under 464-426; submitted by Dow Chemical U.S.A., Midland, MI; CDL:248896-E)
00123204	Fink, R. (1975) Eight-day Dietary LC50--Bobwhite Quail: XD-1603L: Project No. 103-139. Final rept. (Unpublished study received 1975 under 464-426; prepared by Truslow Farms, Inc., submitted by Dow Chemical U.S.A., Midland, MI; CDL:241463-D)
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00136724	Norris, J.; Dunn, F. (1970) Acute Toxicological Properties of NC1603, an Industrial Antimicrobial: Eye and Skin Toxicity on Rabbits. (Unpublished study received May 21, 1970 under 464389; submitted by Dow Chemical U.S.A., Midland, MI; CDL: 003604-B)
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00143640	Nissimov, S. (1983) C-103 TECH: Acute Eye Irritation/Corrosion Study in Rabbits: LSRI Report No. DSB/040/C-103 TECH. Unpublished study prepared by Life Science Research Isreal Ltd. 13 p.
00143641	Nissimov, S. (1983) C-103 TECH: Primary Dermal Irritation Study in Rabbits: LSRI Report No. DSB/037/C-103 TECH. Unpublished study prepared by Life Science Research Israel Ltd. 11 p.
00143642	Nissimov, S. (1983) C-103 TECH: Acute Oral Toxicity in the Rat: LSRI Report No. DSB/036/C-103 TECH. Unpublished study prepared by Life Science Research Israel Ltd. 19 p.
00148622	Nissimov, S. (1984) Delayed Contact Hypersensitivity Study in Guinea Pigs: C-103 Tech: Report No. DSB/043/C-103 TECH. Unpublished study prepared by Life Science Research Israel Ltd. 16 p.
00148623	Evenchik, Z. (1985) Assessment of Mutagenic Potential in Histidine Auxotrophs of Salmonella typhimurium (The Ames Test): C-103: LSRI Report No. DSB/062/C-103. Unpublished study prepared by Life Science Research Israel Ltd. 22 p.
00151654	Beavers, J. (1984) An Acute Oral Toxicity Study in the Bobwhite with Biobrom C-103: Final Report: Project No. 191-103. Unpublished study prepared by Wildlife International, Inc. 16 p.
00151656	Beavers, J. (1984) A Dietary LC50 Study in the Bobwhite with Biobrom C-103: Final Report: Project No.: 191-101. Unpublished study prepared by Wildlife International Ltd. 15 p.
00151657	Forbis, A.; Burgess, D. (1984) Acute Toxicity of C-103 to Bluegill Sunfish (Lepomis macrochirus): Static Bioassay Report #31365. Unpublished study prepared by Analytical Bio-chemistry Laboratories, Inc. 52 p.
00151658	Forbis, A.; Burgess, D. (1984) Acute Toxicity of C-103 to Rainbow Trout: Static Acute Toxicity Report #31366. Unpublished study prepared by Analytical Bio-chemistry Laboratories, Inc. 54 p.

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00152342	Dow Chemical Co. (1985) Product Chemistry Data for 2,2-Dibromo3-nitrilopropionamide. Unpublished compilation. 152 p.
00157754	Bruce, R.; Gollapudi, B.; Wilkerson, J. (1985) Evaluation of 2,2-Dibromo-3-nitrilopropionamide (DBNPA) in the Mouse Bone Marrow Test: TXT:K-078141-020. Unpublished study prepared by Dow Chemical Co. 28 p.
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00157756	Mendrala, A. (1985) Evaluation of 2,2-Dibromo-3-nitrilopropionamide in the Chinese Hamster Ovary Cell/Hypoxanthine (Guanine) Phosphoribosyl Transferase (CHO/HGPRT) Forward Mutation Assay: HET K-078141-022. Unpublished study prepared by Dow Chemical U.S.A. 17 p.
40195701	Surprenant, D. (1986) The Toxicity of Biobrom C-103 to Rainbow Trout (Salmo gairdneri) Embryos and Larvae: Report #BW-86-112195: Study #11192-0585-6100-121. Unpublished study prepared by Springborn Bionomics, Inc. 45 p.
40195702	Surprenant, D. (1986) The Chronic Toxicity of Biobrom C-103 to Daphnia magna Under Flow-through Conditions: Report #BW-86-122250: Study #11192.0585.6100.130. Unpublished study prepared by Springborn Bionomics, Inc. 49 p.
41034701	Enninga, I. (1989) Evaluation of the Ability of 2,2-dibromo-3nitrilpropionamide to Induce Chromosome Aberrations in Cultured Peripheral Human Lymphocytes: Study No. 008459. Unpublished study prepared by RCC Notox B.V. 23 p.
41026502	American Biogenics Corporation (1987) Four Hour Acute Dust Aerosol Inhalation Toxicity Study in Rats of Biobrom C-103: Study 420-883. Unpublished study. 37 p.
41026503	Life Science Research Israel Ltd. (1986) Biobrom C-103: Repeated Dose Oral

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41125801 Fautz, R. (1989) CCR Project 145405: Unscheduled DNA Synthesis in Primary Hepatocytes of Male Rats in vitro with Biobrom C-103: Report. Unpublished study prepared by Laboratory for Mutagenicity Testing. 25 p.

41508301 Rubin, Y. ; Nyska, A. (1990) Biobrom C-103 Teratology Study in the Rabbit: Lab Project Number: LSRI DSB/089/BBR. Unpublished study prepared by Life Science Research Israel, Ltd. 187 p.

41565001 Bromine Compounds Ltd. (1990) Unscheduled DNA Synthesis in Primary Hepatocytes of Male Rats in vitro ; Study No. 145405--MRID 41125 801: Identification of the Test Material: Lab Project Number: 83 41/90. Unpublished study prepared by Bromine Compounds Ltd. 4 p.

41662201 Mitzell, M.; Firchau, H.; Kociba, R. (1990) 2,2-Dibromo-3-nitrilopropionamide (DBNPA): 13 Week Dermal Toxicity Study in Fischer 344 Rats: Lab Project Number: K/078141/028. Unpublished study prepared by The Toxicology Research Laboratory. 391 p.

41669701 Sousa, J. (1990) DBNPA--Acute Toxicity to Mysid Shrimp (Mysidopsis bahia) under Flow-Through Conditions: Lab Project Number: 90-83450: 11192.0590.6107.515. Unpublished study prepared by Springborn Labs, Inc. 45 p.

41669702 Sousa, J. (1990) DBNPA--Acute Toxicity to Sheepshead Minnow (Cyprinodon variegatus) under Flow-Through Conditions: Lab Project Number: 90-08-3441: 11192.0590.6107.505. Unpublished study prepared by Springborn Labs, Inc. 45 p.

41711701 Dionne, E. (1990) Biobrom C-103 (DBNPA,2,2-DIbromo-3-Nitrilopropionamide) Acute Toxicity to Eastern Oysters (Crassostrea Virginica) Under Flow-through Conditions: Lab Project Number: SLI 9010-3509: 11192.0590.6107.504. Unpublished study prepared by Springborn Laboratories, Inc. 41 p.

41711702 Smith, A. (1990) Biobrom C-103 (DBNPA, 2,2-Dibromo-3-Nitrilopropionamide)-Determination of the Dissociation Constant:

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41711703	Fackler, P. (1990) Biobrom C-103 (DBNPA, 2,2-Dibromo-3-Nitrilopropi onamide): Determination of Water Solubility: Lab Project Number: SLI 90-10-3501: 11192-0590-6106-700. Unpublished study prepared by Springborn Laboratories, Inc. 36 p.
41733301	Weeden, D. (1990) Biobrom C-103 (DBNPA, 2,2-Dibromo-3-Nitrilopropionamide)-Determination of the N-Octanol/Water Parttion Coefficient: Lab Project Number: 90-10-3520: 11192.0590.6106.705. Unpublished study prepared by Springborn Laboratories, Inc. 33 p.
41828301	Weeden, D. (1991) Biobrom C-103: (DBNPA, 2,2-dibromo-3-nitrilopropionamide): Determination of the Adsorption and Desorption Coeffcients: SLI Report: 90-10-3524; SLI Study No. 11192-0590-6110-710: Final Report. Unpublished study prepared by Springborn Laboratories, Inc. 51 p.
41924901	Fackler, P. (1991) Biobrom C-103 (DBNPA,2,2-Dibromo-3-Nitrilopropionamide) Hydrolysis Study: Final Report: Lab Project Number: SLI 90-12-3595; 11192.0590.6108.715. Unpublished study prepared by Springborn Labs, Inc. 82 p.
41924902	Smith, A. (1991) Biobrom C-103 (DBNPA,2,2-Dibromo-3-Nitrilopropionamide) Photodegradation in Water: Final Report: Lab Project Number: SLI 90-10-3522: 11192.0990.6109.720. Unpublished study prepared by Springborn Labs, Inc. 96 p.
42358602	Smith, A. (1992) Biobrom C-103 (DBNPA, 2,2-dibromo-3-nitrilopropionamide) Determination of the Anaerobic Aquatic Metabolism: Final Report: Lab Project Number: 91-10-3952: 11192. 0590. 6111. 755. Unpublished study prepared by Springborn Laboratories, Inc. 54 p.
42358603	Smith, A. (1992) Biobrom C-103 (DBNPA, 2, 2-dibromo-3-nitrilopropionamide) Determination of the Aerobic Aquatic Metabolism: Final Report: Lab Project Number: 91-10-3951: 11192.0590.6111.750. Unpublished study prepared by Springborn Laboratoris, Inc. 55 p.

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MRID	CITATION

42387101 Lehrer, S. (1992) Biobrom C-103 (DBPNA)...Assessment of Mutagenic Potential in Histidine Auxotrophs of Salmonella Typhimurium (The Ames Test): Revised Final Report: Lab Project Number: DSB/135/BIO. Unpublished study prepared by Life Science Research Israel Ltd. 38 p.

APPENDIX D. List of Available Related Documents

The following is a list of available documents related to DBNPA. It's purpose is to provide a path to more detailed information if it is needed. These accompanying documents are part of the Administrative Record for and are included in the EPA's Office of Pesticide Programs Public Docket.

1. Health and Environmental Effects Science Chapters

2. Detailed Label Usage Information System (LUIS) Report

3. RED Fact Sheet

4. PR Notice 86-5 (included in this appendix)

5. PR Notice 91-2 (included in this appendix) pertains to the Label Ingredient Statement

APPENDIX E. PR Notices 86-5 and 91-2

PR Notice 86-5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

July 29, 1986

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

PR NOTICE 86-5

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.1. 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 (i.e., 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. Safety Studies. 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.

c. 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 requirements	Page 16
Flagging statements	For certain toxicology studies (When flagging requirements are finalized.)	
Body of Study	Always - with an English language translation if required.	
Study Appendices	At submitter's option	
Cover Sheet to Confidential Attachment	If CBI is claimed under FIFRA §10(d)(1)(A), (B), or (C)	
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. Author(s). 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. Performing Laboratory Identification. 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. Supplemental Submissions. 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. Facts of Publication. If the study is a reprint of a published document, identity 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 pet-

itions 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:

- Do not include frayed or torn pages.
- Do not include carbon copies, or copies in other than black ink.
- Make sure that photocopies are clear, complete, and fully readable.
- Do not include oversize computer printouts or fold-out pages.
- Do not bind any documents with glue or binding tapes.
- 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 ln 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 four 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".
- Remove the "Confidential Attachment".
- 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.
- 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 John Carley, Chief, Information Services Branch, Program Management and Support Division, (703) 305-5240.

/S/

James W. Akerman
Acting Director,
Registration Division

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
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 1234 West Smith Street Cincinnati, OH 98765	-and-	Jones Chemical Company 5678 Wilson Blvd 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 confidentiality is made for any information contained in this study on the basis of its falling within the scope of FIFRA 6§10(d)(1)(A), (B), or (C).

Company _____

Company Agent: _____Typed Name_____ Date:_____

_____Title_____ _____Signature_____

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

Information claimed confidential on the basis of its falling within the scope of FIFRA §10(d)(1)(A), (B), or (C) has been removed to a confidential appendix, and is cited by cross-reference number in the body of the study.

Company: _____

Company Agent: _____Typed Name_____ Date:_____

_____Title_____ Signature _____

STATEMENT OF DATA CONFIDENTIALITY CLAIMS

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 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.
- Cite the reasons why the cited passage qualifies for confidential treatment.
- Indicate the length of time--until a specific date or event, or permanently--for which the information should be treated as confidential.
- Identify the measures taken to guard against undesired disclosure of this information.
- Describe the extent to which the information has been disclosed, and what precautions have been taken in connection with those disclosures.
- Enclose copies of any pertinent determinations of confidentiality made by EPA, other Federal agencies, of courts concerning this information.
- 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.
- If you assert that the information in 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)

CROSS REFERENCE NUMBER 1 — This cross reference number is used in the study in place of the following paragraph(s) at the indicated volume and page references.

DELETED WORDS OR PHRASE: Ethylene Glycol

PAGE	LINES	REASON FOR THE DELETION	FIFRA REFERENCE
6	14	Identity of Inert Ingredient	§10(d)(C)
28	25	"	"
100	19	"	"

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

CROSS REFERENCE NUMBER 5 — This cross reference number is used in the study in place of the following paragraph(s) at the indicated volume and page references.

DELETED PARAGRAPH(S):

( )
(Reproduce the deleted paragraph(s) here)
( )

PAGE	LINES	REASON FOR THE DELETION	FIFRA REFERENCE
20.	2-17	Description of the quality control process	§10(d)(1)(C)

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

CROSS REFERENCE NUMBER 7 — This cross reference number is used in the study in place of the following paragraph(s) at the indicated volume and page references.

DELETED PAGES(S): are attached immediately behind this page

PAGES	REASON FOR THE DELETION	FIFRA REFERENCE
35-41.	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 160

      Submitter _____________________________________________

      Sponsor   _____________________________________________
```

Example 2.

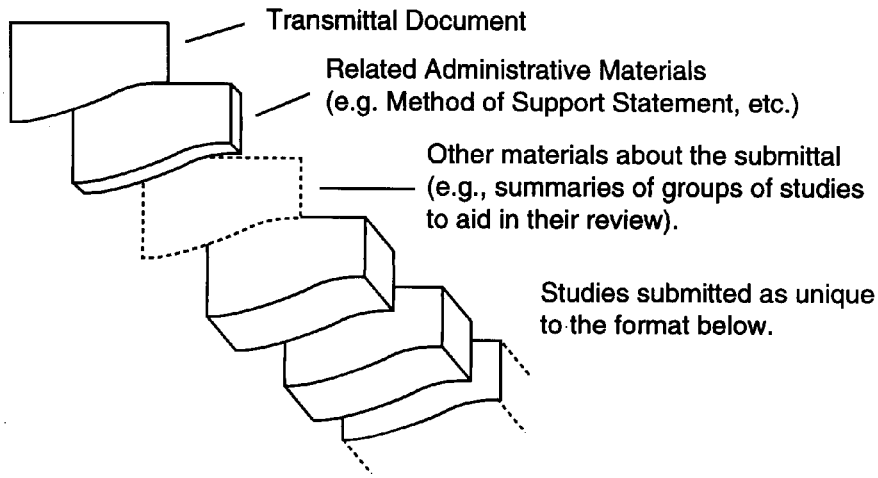
```
This study does not meet the requirements of 40 CFR Part 160, and
differs in the following ways:

1._____________________________________________

2._____________________________________________

3._____________________________________________

      Submitter_____________________________________

      Sponsor_______________________________________

      Study Director________________________________
```

Example 3.

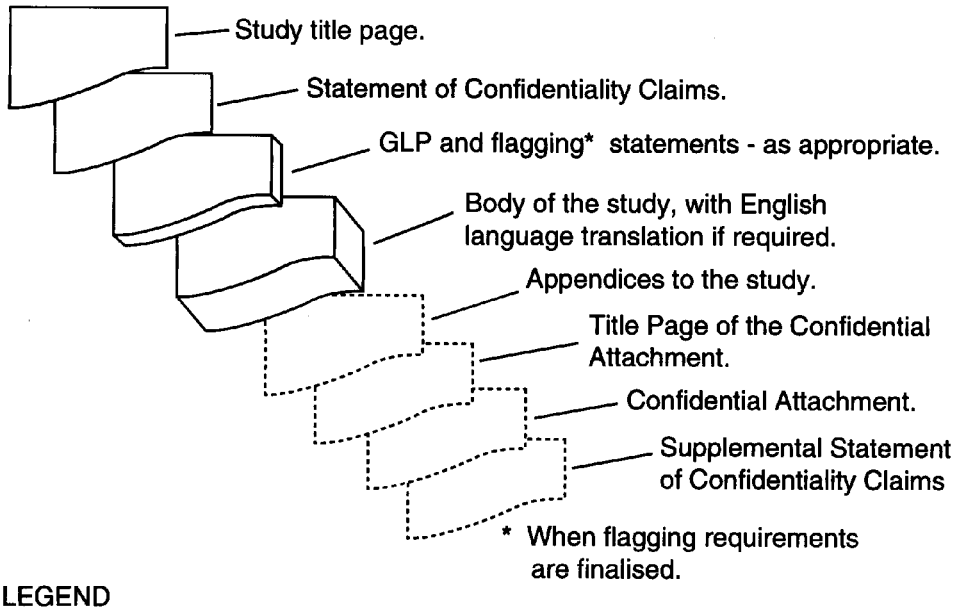
```
The submitter of this study was neither the sponsor of this study nor
conducted it, and does not know whether it has been conducted in
accordance with 40 CFR Part 160.

      Submitter_____________________________________________
```

ATTACHMENT 7.

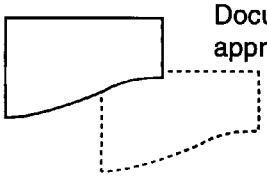
FORMAT OF THE SUBMITTAL PACKAGE



FORMAT OF SUBMITTED STUDIES



LEGEND



Documents which must be submitted as appropriate to meet established requirements.

Documents submitted at submitter's option.

PR Notice 91-2

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

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

PR NOTICE 91-2

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).

The upper and lower certified limits, which must be proposed in connection with a product's registration, represent the amounts of an ingredient that may legally be present 40 CFR 158.175. The lower certified limit is used as the enforceable lower limit for the product composition according to FIFRA

section 12(a)(1)(C), while the nominal concentration appearing on the label would be the routinely achieved concentration used for calculation of dosages and dilutions.

The nominal concentration would in fact state the greatest degree of accuracy that is warranted with respect to actual product composition because the nominal concentration would be the amount of active ingredient typically found in the product.

It is important for registrants to note that certified limits for active ingredients are not considered to be trade secret information under FIFRA section l0(b). In this respect the certified limits will be routinely provided by EPA to States for enforcement purposes, since the nominal concentration appearing on the label may not represent the enforceable composition for purposes of section 12(a)(1)(C).

III. REQUIREMENTS

As described below under Unit V. " **COMPLIANCE SCHEDULE,"** all currently registered products as well as all applications for new registration must comply with this Notice by specifying the nominal concentration expressed as a percentage by weight as the label claim in the ingredient(s) statement and equivalence statements if applicable (e.g., elemental arsenic, metallic zinc, salt of an acid). In addition, the requirement for performing sample analyses of five or more representative samples must be fulfilled. Copies of the raw analytical data must be submitted with the nominal ingredient label claim. Further information about the analysis requirement may be found in the 40 CFR 158.170. All products are required to provide certified limits for each active, inert ingredient, impurities of toxicological significance(i.e., upper limit(s) only) and on a case by case basis as specified by EPA. These limits are to be **set based on representative sampling** and chemical analysis(i.e., quality control) of the product.

The format of the ingredient statement must conform to 40 CFR 156-Labeling Requirements For Pesticides and Devices.

After July 1, 1997, all pesticide ingredient StatementS must be changed to nominal concentration.

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 153.640.

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 Concentrations on the application form. These types Or 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) 308-7031.

/s/
Anne E. Lindsay, Director
Registration Division (H-7505C)

APPENDIX F. Product Specific Data Call-In

DATA CALL-IN NOTICE

CERTIFIED MAIL

Dear Sir or Madam:

This Notice requires you and other registrants of pesticide products containing the active ingredient identified in Attachment 1 of this Notice, the Data Call-In Chemical Status Sheet, 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 3, 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 2, Data Call-In Response Form, as well as a list of all registrants who were sent this Notice (Attachment 6).

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).

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

1 - Data Call-In Chemical Status Sheet
2 - Product-Specific Data Call-In Response Form
3 - Requirements Status and Registrant's Response Form
4 - EPA Grouping of End-Use Products for Meeting Acute Toxicology Data Requirements for Reregistration
5 - EPA Acceptance Criteria
6 - List of Registrants Receiving This Notice
7 - 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 imposed. 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 3, 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 3, Requirements Status and Registrant's Response Form, within the time frames 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 chose 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 2 and Attachment 3. The Data Call-In Response Form must be submitted as part of every response to this Notice. In 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 2). 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 1.

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 chose 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 one of these options, 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 item number 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:

(1) I will generate and submit data within the specified time frame (Developing Data)
(2) I have entered into an agreement with one or more registrants to develop data jointly (Cost Sharing)
(3) I have made offers to cost-share (Offers to Cost Share)
(4) I am submitting an existing study that has not been 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 (Upgrading a Study)
(6) 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 Requirements Status and Registrant's Response Form 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, Agreement 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. You must also submit to the Agency a completed EPA Form 8570-32, Certification of Offer to Cost Share in the Development of Data, Attachment 7. In addition, you must demonstrate that the other registrant to whom the offer was made has not accepted your offer to enter into a cost sharing 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) " 'raw 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 source as raw data. 'Raw data' may include photographs, 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 the FIFRA Accelerated Reregistration Phase 3 Technical Guidance 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. Deficient, but upgradeable studies will normally be classified as supplemental. However, it is important to note that not all studies classified as supplemental are upgradeable. If you have questions regarding the classification of a study or whether a study may be upgraded, call or write the contact person listed in Attachment 1. 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 PR Notice 86-5.

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 Data Call-In Response Form and the Requirements Status and Registrant's Response 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 would 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 rationale 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 when 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 as 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 or failure of a registrant on whom you rely for a generic data exemption either to:

   a. inform EPA of intent to develop and submit the data required by this Notice on a Data Call-In Response Form and a Requirements Status and Registrant's Response 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:

1. EPA requirements specified in the Data Call-In Notice or other 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, 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 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 acceptable and good faith manner must have been submitted to the Agency, before EPA will consider granting an existing stocks provision.

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. INQUIRIES 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 1, the Data Call-In Chemical Status Sheet.

All responses to this Notice (other than voluntary cancellation requests and generic data exemption claims) must include a completed Data Call-In Response Form and a completed Requirements Status and Registrant's Response Form (Attachment 2 and Attachment 3 for product specific data) and any other documents required by this Notice, and should be submitted to the contact person(s) identified in Attachment 1. If the voluntary cancellation or generic data exemption option is chosen, only the Data Call-In Response Form 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,

Louis P. True, Jr., Acting Director
Special Review and
Reregistration Division

Attachments

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

Attachment 1. Chemical Status Sheet

DATA CALL-IN CHEMICAL STATUS SHEET

INTRODUCTION

You have been sent this Product Specific Data Call-In Notice because you have product(s) containing DBNPA.

This Product Specific Data Call-In Chemical Status Sheet, contains an overview of data required by this notice, and point of contact for inquiries pertaining to the reregistration of . This attachment is to be used in conjunction with (1) the Product Specific Data Call-In Notice, (2) the Product Specific Data Call-In Response Form (Attachment 2), (3) the Requirements Status and Registrant's Form (Attachment 3), (4) EPA's Grouping of End-Use Products for Meeting Acute Toxicology Data Requirement (Attachment 4), (5) the EPA Acceptance Criteria (Attachment 5), (6) a list of registrants receiving this DCI (Attachment 6) and (7) the Cost Share and Data Compensation Forms in replying to this Product Specific Data Call-In (Attachment 7). Instructions and guidance accompany each form.

DATA REQUIRED BY THIS NOTICE

The additional data requirements needed to complete the database for are contained in the Requirements Status and Registrant's Response, Attachment 3. The Agency has concluded that additional data on are needed for specific products. These data are required to be submitted to the Agency within the time frame listed. These data are needed to fully complete the reregistration of all eligible products.

INQUIRIES AND RESPONSES TO THIS NOTICE

If you have any questions regarding the generic database of , please contact at (703) 308-.

If you have any questions regarding the product specific data requirements and procedures established by this Notice, please contact Franklin Gee at (703) 308-8008. or Veronica Dutch at (703) 308-8585.

All responses to this Notice for the Product Specific data requirements should be submitted to:

Attn: Veronica Dutch,
Chemical Review Manager Team 81
Product Reregistration Branch
Special Review and Reregistration Branch 7508W

Office of Pesticide Programs
U.S. Environmental Protection Agency
Washington, D.C. 20460

RE: DBNPA 3056, 101801

Attachment 2. Product Specific Data Call-In Response Forms (Form A inserts) Plus Instructions

INSTRUCTIONS FOR COMPLETING THE **DATA CALL-IN RESPONSE FORM** FOR **PRODUCT SPECIFIC DATA**

Item 1-4. Already completed by EPA.

Item 5. If you wish to **voluntarily cancel** your product, answer "**yes**." If you choose this option, you will not have to provide the data required by the Data Call-In Notice and you will not have to complete any other forms. Further sale and distribution of your product after the effective date of cancellation must be in accordance with the Existing Stocks provision of the Data Call-In Notice (Section IV-C).

Item 6. Not applicable since this form calls in product specific data only. However, if your product is **identical** to another product and you qualify for a **data exemption**, you must respond with "**yes**" to Item 7a (MUP) or 7B (EUP) on this form, provide the **EPA registration numbers of your source(s)**; you would **not** complete the "Requirements Status and Registrant's Response" form. Examples of such products include **repackaged** products and **Special Local Needs (Section 24c)** products which are identical to federally registered products.

Item 7a. For each **manufacturing use product** (MUP) for which you wish to maintain registration, you must agree to satisfy the data requirements by responding "**yes**."

Item 7b. For each **end use product** (EUP) for which you wish to maintain registration, you must agree to satisfy the data requirements by responding "**yes**." If you are requesting a **data waiver**, answer "**yes**" here; in addition, on the "Requirements Status and Registrant's Response" form under Item 9, you must respond with **Option 7** (Waiver Request) for each study for which you are requesting a waiver. See Item 6 with regard to identical products and data exemptions.

Items 8-11. 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 another company or that you have already voluntarily canceled this product. For these cases, please supply all relevant details so that EPA can ensure that its records are correct.

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

Item 1-3 Completed by EPA. Note the **unique identifier number** assigned by EPA in Item 3. This number **must be used in the transmittal document for any data submissions** in response to this Data Call-In Notice.

Item 4. The guideline reference numbers of studies required to support the product's continued registration are identified. These guidelines, in addition to the requirements specified in the Notice, govern the conduct of the required studies. Note that series 61 and 62 in product chemistry are now listed under 40 CFR 158.155 through 158.180, Subpart C.

Item 5. The study title associated with the guideline reference number is identified.

Item 6. The use pattern(s) of the pesticide associated with the product specific requirements is (are) identified. For most product specific data requirements, all use patterns are covered by the data requirements. In the case of efficacy data, the required studies only pertain to products which have the use sites and/or pests indicated.

Item 7. The substance to be tested is identified by EPA. For product specific data, the product as formulated for sale and distribution is the test substance, except in rare cases.

Item 8. The due date for submission of each study is identified. It is normally based on **8 months after issuance of the Reregistration Eligibility Document** unless EPA determines that a longer time period is necessary.

Item 9. **Enter only one of the following response codes for each data requirement to show how you intend to comply with the data requirements listed in this table.** Fuller descriptions of each option are contained in the Data Call-In Notice.

1. I will generate and submit data by the specified due date (**Developing Data**). By indicating that I have chosen this option, I certify that I will comply with all the requirements pertaining to the conditions for submittal of this study as outlined in the Data Call-In Notice. By the specified due date, I will also submit: (1) a completed "**Certification With Respect To Data Compensation Requirements" form (EPA Form 8570-29)** and (2) two completed and signed copies of the **Confidential Statement of Formula (EPA Form 8570-4)**.

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**. 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 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 required data; if the required study is not submitted on time, my product may be subject to suspension. By the specified due date, I will also submit: (1) a completed "**Certification With Respect To Data Compensation Requirements" form (EPA Form 8570-29)** and (2) two completed and signed copies of the **Confidential Statement of Formula (EPA Form 8570-4)**.

3. I have made offers to share in the cost to develop data (**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 made an offer** to another registrant (who has an obligation to submit data) to share in the cost of that data. I am also submitting a completed

"**Certification of Offer to Cost Share in the Development Data**" **form**. I am 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. I understand that other terms under Option 3 in the Data Call-In Notice (Section III-C.1.) apply as well. By the specified due date, I will also submit: (1) a completed "**Certification With Respect To Data Compensation Requirements**" **form (EPA Form 8570-29)** and (2) two completed and signed copies of the **Confidential Statement of Formula (EPA Form 8570-4)**.

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. By the specified due date, I will also submit a completed "**Certification With Respect To Data Compensation Requirements**" **form (EPA Form 8570-29)** to show what data compensation option I have chosen. By the specified due date, I will also submit: (1) a completed "**Certification With Respect To Data Compensation Requirements**" **form (EPA Form 8570-29)** and (2) two completed and signed copies of the **Confidential Statement of Formula (EPA Form 8570-4)**.

5. By the specified due date, I will submit or cite data to upgrade a study classified by the Agency as partially acceptable and upgradable (**Upgrading a Study**). I will submit **evidence of the Agency's review** indicating that the study may be upgraded and what information is required to do so. I will provide the MRID or Accession number of the study at the due date. I understand that the conditions for this option outlined Option 5 in the Data Call-In Notice (Section III-C.1.) apply. By the specified due date, I will also submit: (1) a completed "**Certification With Respect To Data Compensation Requirements**" **form (EPA Form 8570-29)** and (2) two completed and signed copies of the **Confidential Statement of Formula (EPA Form 8570-4)**.

6. By the specified due date, I will cite an existing study that the Agency has classified as acceptable or an existing study that has been submitted but not reviewed by the Agency (**Citing an Existing Study**). If I am citing another registrant's study, I understand that this option is available **only** for acute toxicity or certain efficacy data and **only** if the cited study was conducted on my product, an identical product or a product which EPA has "grouped" with one or more other products for purposes of depending on the same data. I may also choose this option if I am citing my own data. In either case, I will provide the **MRID or Accession number(s)** for the cited data on a "Product Specific Data Report" form or in a similar format. By the specified due date, I will also submit: (1) a completed "**Certification With Respect To Data Compensation Requirements**" **form (EPA Form 8570-29)** and (2) two completed and signed copies of the **Confidential Statement of Formula (EPA Form 8570-4)**.

7. I request a waiver for this study because it is inappropriate for my product (**Waiver Request**). I am attaching a complete justification for this 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 P.R. Notice 86-5]. I understand that this is my **only** opportunity to state the reasons or provide information in support of my request. If the Agency approves my waiver request, I will **not** be required to supply the data pursuant to Section 3(c)(2)(B) of FIFRA. If the Agency denies my waiver request, I **must choose** a method of meeting the data

requirements of this Notice by the due date stated by this Notice. In this case, I must, within **30 days** of my receipt of the Agency's written decision, submit a revised "Requirements Status and Registrant's Response" Form indicating the option chosen. I also understand that the deadline for submission of data as specified by the original data call-in notice will not change. By the specified due date, I will also submit: (1) a completed "**Certification With Respect To Data Compensation Requirements" form (EPA Form 8570-29)** and (2) two completed and signed copies of the **Confidential Statement of Formula (EPA Form 8570-4)**.

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 another company or that you have already voluntarily canceled this product. For these cases, please supply all relevant details so that EPA can ensure that its records are correct.

Attachment 3. Product Specific Requirement Status and Registrant's Response Forms (Form B inserts) and Instructions

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

Item 1-3. Completed by EPA. Note the unique identifier number assigned by EPA in item 3. This number must be used in the transmittal document for any data submissions in response to this Data Call-In Notice.

Item 4. The guidelines reference numbers of studies required to support the product's continued registration are identified. These guidelines, in addition to the requirements specified in the Notice, govern the conduct of the required studies. Note that series 61 and 62 in product chemistry are now listed under 40 CFR 158.155 through 158.180, Subpart c.

Item 5. The study title associated with the guideline reference number is identified.

Item 6. The use patters (s) of the pesticide associated with the product specific requirements is (are) identified. For most product specific data requirements, all use patterns are covered by the data requirements. In the case of efficacy data, the required studies only pertain to products which have the use sites and/ or pests indicated.

Item 7. The substance to be tested is identified by EPA. For product specific data, the product as formulated for sale and distribution is the test substance, except in rare cases.

Item 8. The due date for submission of each study is identified. lt is normally based on 8 months after issuance of the Reregistration Eligibility Documents unless EPA determines that a longer time period is necessary.

Item 9. Enter Only one of the following response codes for each data requirement to show how you intend to comply with the data requirements listed in this table. Fuller descriptions of each option are contained in the Data Call-In Notice.

1. I will generate and submit data by the specified due date (Developing Data). By indicating that I have chosen this option, I certify that I will comply with all the requirements pertaining to the conditions for submittal of this study as outlined in the Data Call-In Notice.

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. I understand that this option is available on for acute toxicity or certain efficacy data and 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 required data; if the required study is not submitted on time, my product my be subject to suspension.

3. I have made offers to share in the cost to develop data (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 made an offer to another registrant (who has an obligation to submit data) to share in the cost of that data. I am also submitting a completed " Certification of offer to Cost Share in the Development Data" form. I am 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 require data; if the required study is not submitted on time, my product may be subject to suspension. I 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.

5. By the specified due date, I will submit or cite data to upgrade a study classified by the Agency as partially acceptable and upgrade (upgrading a study). I will submit evidence of the Agency's review indicating that the study may be upgraded and what information is required to do so. I will provide the MRID or Accession number of the study at the due date. I understand that the conditions for this Option outlined Option 5 in the Data Call-In Notice (Section III-C.1.) apply.

6. By the specified due date, I will cite an existing study that the Agency has classified as acceptable or an existing study that has been submitted but not reviewed by the Agency (Citing an Existing Study). If I am citing another registrant's study, I understand that this option is available only for acute toxicity or certain efficacy data and only if the cited study was conducted on my product, an identical product or a product which EPA has "grouped" with one or more other products for purposes of depending on the same data. I may also choose this option if I am citing my own data. In either case, I will provide the MRID or Accession number (s) number (s) for the cited data on a "Product Specific Data Report" form or in a similar format. If I cite another registratrant's data, I will submit a completed "Certification With Respect To Data Compensation Requirements" form.

7. I request a waiver for this study because it is inappropriate for my product (Waiver Request). I am attaching a complete justification for this 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 P.R. Notice 86-5]. I understand that this is my only opportunity to state the reasons or provide information in support of my request. If the Agency approves my waiver request, I will not be require to supply the data pursuant to Section 3(c) (2) (B) of FIFRA. If the Agency denies my waiver request, I must choose a method of meeting the data requirements of this Notice by the due date stated by this Notice. In this case, I must, within 30 days of my receipt of the Agency's written decision, submit a revised "Requirements Status chosen. I also understand that the deadline for submission of data as specified by the original data cal-in notice will not change.

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 another 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.

Attachment 4. EPA Batching of End-Use Products for Meeting Data Requirements for Reregistration

EPA'S BATCHING OF PRODUCTS CONTAINING 2,2-DIBROMO-3-NITRILO-PROPIONAMIDE (DBNPA) 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 products containing DBNPA, the Agency has batched products which can be considered similar for purposes 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.

Using available information, batching has been accomplished by the process described in the preceding paragraph. Frequently acute toxicity data on individual 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 product should the need arise.

Registrants of 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 cited, the registrant must clearly identify the material tested by its EPA registration number. If more than one Confidential Statement Of Formula (CSF) exists for a product registration, the registrant must indicate the formulation actually test ed by identifying the corresponding CSF.

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 I lists 37 products containing the active ingredient DBNPA (4 batches).

Table I.

Batch No.	EPA Reg. No.	% DBNPA	Formulation
1	464-426	20	Ready-to-Use Solution
	464-628	20	Ready-to-Use Solution
	1448-72	20	Ready-to-Use Solution
	1706-137	20	Ready-to-Use Solution
	1706-138	20	Ready-to-Use Solution
	1757-71	20	Ready-to-Use Solution
	1757-72	20	Ready-to-Use Solution
	3876-95	20	Ready-to-Use Solution
	4643-25	20	Ready-to-Use Solution
	5009-24	20	Ready-to-Use Solution
	8540-21	20	Ready-to-Use Solution
	8591-17	20	Ready-to-Use Solution
	10349-16	20	Ready-to-Use Solution
	10445-18	20	Ready-to-Use Solution
	10485-32	20	Ready-to-Use Solution
	10707-31	20	Ready-to-Use Solution
	10932-14	20	Ready-to-Use Solution
	11659-13	20	Ready-to-Use Solution
	15300-16	20	Ready-to-Use Solution
	35378-13	20	Soluble Concentrate
	45017-32	20	Ready-to-Use Solution
	48525-1	20	Ready-to-Use Solution

Batch No.	EPA Reg. No.	% DBNPA	Formulation
2	464-3899	5.0	Ready-to-Use Solution
	8622-189	8.0	Formulation Intermediate
	59106-1	98.0	Ready-to-Use Solution
3	464-496	5.0	Ready-to-Use Solution
	1448-73	5.0	Ready-to-Use Solution
	1757-66	5.0	Ready-to-Use Solution
	8249-10	5.0	Ready-to-Use Solution
	10445-17	5.0	Ready-to-Use Solution
	10707-30	5.0	Ready-to-Use Solution
	10932-13	5.0	Ready-to-Use Solution
	11541-13	5.0	Ready-to-Use Solution
	11659-12	5.0	Ready-to-Use Solution
	33355-13	5.0	Ready-to-Use Solution
	34571-10	5.0	Ready-to-Use Solution
	53128-1	5.0	Ready-to-Use Solution
	4875-132	5.0	Ready-to-Use Solution
	8591-23	5.0	Ready-to-Use Solution

Table II lists 5 products containing DBNPA as an active ingredient, which were not considered to be similar for purposes of acute toxicity or the Agency lacked sufficient information for decision making and were not placed in any batch. Registrants of these products are responsible for meeting the acute toxicity data requirements for each product.

Table II.

EPA Registration Number	% DBNPA	Formulation
464-500	10.0	Ready-to-Use Solution
464-624	40.0	Pelleted/tableted
1448-71	10.0	Ready-to-Use Solution
8622-20	20.0	Ready-to-Use Solution
10707-36	20.0	Ready-to-Use Solution

Attachment 5. EPA Acceptance Criteria

SUBDIVISION D

Guideline	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 $\geq$ 0.1% or was found at $\geq$ 0.1% by product analyses and (2) certain toxicologically significant impurities (see #3).

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.
9.____ 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.
10.____ Analytical methods (as discussed in #9) to verify certified limits validated as to their precision and accuracy.

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

63-5 Melting Point
- ____ Reported in °C
- ____ Any observed decomposition reported

63-6 Boiling Point
- ____ Reported in °C
- ____ Pressure under which B.P. measured reported
- ____ Any observed decomposition reported

63-7 Density, Bulk Density, Specific Gravity
- ____ Measured at about 20-25° C
- ____ Density of technical grade active ingredient reported in g/ml <u>or</u> the specific gravity of liquids reported with reference to water at 20° C. [Note: <u>Bulk</u> density of registered products may be reported in lbs/ft^3 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

63-13 Stability
- ____ Sensitivity to metal ions and metal determined
- ____ Stability at normal and elevated temperatures
- ____ Sensitivity to sunlight determined

SUBDIVISION F

Guideline	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

81-1 Acute Oral Toxicity in the Rat

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

1.____ Identify material tested (technical, end-use product, etc).
2.____ At least 5 young adult rats/sex/group.
3.____ Dosing, single oral may be administered over 24 hrs.
4.*___ Vehicle control if other than water.
5.____ Doses tested, sufficient to determine a toxicity category or a limit dose (5000 mg/kg).
6.____ Individual observations at least once a day.
7.____ Observation period to last at least 14 days, or until all test animals appear normal whichever is longer.
8.____ Individual daily observations.
9.____ Individual body weights.
10.____ Gross necropsy on all animals.

Criteria marked with an * are supplemental and may not be required for every study.

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

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

1._____ Identify material tested (technical, end-use product, etc).
2._____ At least 5 animals/sex/group.
3.*_____ Rats 200-300 gm, rabbits 2.0-3.0 kg or guinea pigs 350-450 gm.
4._____ Dosing, single dermal.
5._____ Dosing duration at least 24 hours.
6.*_____ Vehicle control, only if toxicity of vehicle is unknown.
7._____ Doses tested, sufficient to determine a toxicity category or a limit dose (2000 mg/kg).
8._____ Application site clipped or shaved at least 24 hours before dosing.
9._____ Application site at least 10% of body surface area.
10._____ Application site covered with a porous nonirritating cover to retain test material and to prevent ingestion.
11._____ Individual observations at least once a day.
12._____ Observation period to last at least 14 days.
13._____ Individual body weights.
14._____ Gross necropsy on all animals.

Criteria marked with an * are supplemental and may not be required for every study.

81-3 Acute Inhalation Toxicity in the Rat

ACCEPTANCE CRITERIA

Does your study meet the following acceptance criteria?

1.____ Identify material tested (technical, end-use product, etc).
2.____ Product is a gas, a solid which may produce a significant vapor hazard based on toxicity and expected use or contains particles of inhalable size for man (aerodynamic diameter 15 µm or less).
3.____ At least 5 young adult rats/sex/group.
4.____ Dosing, at least 4 hours by inhalation.
5.____ Chamber air flow dynamic, at least 10 air changes/hour, at least 19% oxygen content.
6.____ Chamber temperature, 22° C ($\pm 2^{\circ}$), 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.
10.___ Doses tested, sufficient to determine a toxicity category or a limit dose (5 mg/L actual concentration of respirable substance).
11.___ Individual observations at least once a day.
12.___ Observation period to last at least 14 days.
13.___ Individual body weights.
14.___ Gross necropsy on all animals.

81-4 Primary Eye Irritation in the Rabbit

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, causes severe dermal irritation or has a pH of $\leq$2 or $\geq$11.5.
3.____ 6 adult rabbits.
4.____ Dosing, instillation into the conjunctival sac of one eye per animal.
5.____ Dose, 0.1 ml if a liquid; 0.1 ml or not more than 100 mg if a solid, paste or particulate substance.
6.____ Solid or granular test material ground to a fine dust.
7.____ Eyes not washed for at least 24 hours.
8.____ 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).
9.*___ Individual daily observations.

Criteria marked with an * are supplemental and may not be required for every study.

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 $\leq$2 or $\geq$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^2.
8.____ Application site covered with a gauze patch held in place with nonirritating tape.
9.____ Material removed, washed with water, without trauma to 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.*__ Individual daily observations.

Criteria marked with an * are supplemental and may not be required for every study.

81-6 Dermal Sensitization in the Guinea Pig

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.___ One of the following methods is utilized:
  _____ Freund's complete adjuvant test
  _____ Guinea pig maximization test
  _____ Split adjuvant technique
  _____ Buehler test
  _____ Open epicutaneous test
  _____ Mauer optimization test
  _____ Footpad technique in guinea pig.
4.___ Complete description of test.
5.*___ Reference for test.
6.___ Test followed essentially as described in reference document.
7.___ Positive control included (may provide historical data conducted within the last 6 months).

Criteria marked with an * are supplemental and may not be required for every study.

Attachment 6. List of All Registrants Sent This Data Call-In (insert) Notice

Attachment 7. Cost Share Data Compensation Forms, Confidential State-ment of Formula Form and Instructions

Confidential Business Information: Does Not Contain National Security Information (E.O. 12065) Form Approved. OMB No. 2070-0060. Approval Expires 2/28/94

EPA

United States Environmental Protection Agency
Office of Pesticide Programs (TS-767)
Washington, DC 20460

Confidential Statement of Formula

A. ☐ Basic Formulation ☐ Alternate Formulation

B. Page of

See Instructions on Back

1. Name and Address of Applicant/Registrant *(Include ZIP Code)*

2. Name and Address of Producer *(Include ZIP Code)*

3. Product Name

4. Registration No./File Symbol

5. EPA Product Mgr/Team No.

6. Country Where Formulated

7. Pounds/Gal or Bulk Density

8. pH

9. Flash Point/Flame Extension

EPA USE ONLY	10. Components in Formulation *(List as actually introduced into the formulation. Give commonly accepted chemical name, trade name, and CAS number.)*	11. Supplier Name & Address	12. EPA Reg. No.	13. Each Component in Formulation a. Amount	b. % by Weight	14. Certified Limits % by Weight a. Upper Limit	b. Lower Limit	15. Purpose in Formulation

16. Typed Name of Approving Official

17. Total Weight 100%

18. Signature of Approving Official

19. Title

20. Phone No. *(Include Area Code)*

21. Date

EPA Form 8570-4 (Rev. 12-90) **Previous editions are obsolete.** If you can photocopy this, please submit an additional copy. White - EPA File Copy (original) Yellow - Applicant copy

Instructions for Completing the Confidential Statement of Formula

The Confidential Statement of Formula (CSF) Form 8570-4 must be used. Two legible, signed copies of the form are required. Following are basic instructions:

a. All the blocks on the form must be filled in and answered completely.

b. If any block is not applicable, mark it N/A.

c. The CSF must be signed, dated and the telephone number of the responsible party must be provided.

d. All applicable information which is on the product specific data submission must also be reported on the CSF.

e. All weights reported under item 7 must be in pounds per gallon for liquids and pounds per cubic feet for solids.

f. Flashpoint must be in degrees Fahrenheit and flame extension in inches.

g. For all active ingredients, the EPA Registration Numbers for the currently registered source products must be reported under column 12.

h. The Chemical Abstracts Service (CAS) Numbers for all actives and inerts and all common names for the trade names must be reported.

i. For the active ingredients, the percent purity of the source products must be reported under column 10 and must be exactly the same as on the source product's label.

j. All the weights in columns 13.a. and 13.b. must be in pounds, kilograms, or grams. In no case will volumes be accepted. Do not mix English and metric system units (i.e., pounds and kilograms).

k. All the items under column 13.b. must total 100 percent.

1. All items under columns 14.a. and 14.b. for the active ingredients must represent pure active form.

m. The upper and lower certified limits for ail active and inert ingredients must follow the 40 CFR 158.175 instructions. An explanation must be provided if the proposed limits are different than standard certified limits.

n. When new CSFs are submitted and approved, all previously submitted CSFs become obsolete for that specific formulation.

United States Environmental Protection Agency
Washington, DC 20460

CERTIFICATION OF OFFER TO COST SHARE IN THE DEVELOPMENT OF DATA

Form Approved
OMB No. 2070-0106
2070-0057
Approval Expires 3-31-96

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	Company Number
Product Name	EPA Reg. No.

I Certify that:

My company is willing to develop and submit the data required by EPA under the authority of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), if necessary. However, my company would prefer to enter into an agreement with one or more registrants to develop jointly or share in the cost of developing data.

My firm has offered in writing to enter into such an agreement. That offer was irrevocable and included an offer to be bound by arbitration decision under section 3(c)(2)(B)(iii) of FIFRA if final agreement on all terms could not be reached otherwise. This offer was made to the following firm(s) on the following date(s):

Name of Firm(s)	Date of Offer

Certification:

I certify that I am duly authorized to represent the company named above, and that the statements that I have made on this form and all attachments therein are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature of Company's Authorized Representative	Date
Name and Title (Please Type or Print)	

EPA Form 8570-32 (5/91) Replaces EPA Form 8580, which is obsolete

United States Environmental Protection Agency
Washington, DC 20460

CERTIFICATION WITH RESPECT TO DATA COMPENSATION REQUIREMENTS

Form Approved
OMB No. 2070-0107
2070-0057
Approval Expires 3-31-96

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	Company Number
Product Name	EPA Reg. No.

I 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: (check one)

   [ ] 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)	

EPA Form 8570-31 (4-90)

APPENDIX G FACT SHEET

United States Environmental Protection Agency
Prevention, Pesticides And Toxic Substances (7508W)
EPA-738-F-94-023
September 1994

R.E.D. FACTS

2,2-dibromo-3-nitrilo-propionamide (DBNPA)

Pesticide Reregistration

All pesticides sold or distributed 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 unreasonable risks to human health or the environment.

When a pesticide is eligible for reregistration, EPA announces this and explains why in a Reregistration Eligibility Decision (RED) document. This fact sheet summarizes the information in the RED document for reregistration case 3056; 2,2-dibromo-3-nitrilopropionamide or DBNPA.

Use Profile

DBNPA is a biocide used in a variety of industrial processes to control algae, bacteria, fungi and yeasts. Formulations include tablets and both solid and liquid soluble concentrates. DBNPA is applied through shock/slug, initial, intermittent, maintenance, during manufacture and continuous feed treatments, using metering pumps, drip feed devices and other types of industrial equipment. A National Pollutant Discharge Elimination System (NPDES) permit is required for discharges to waterways.

Regulatory History

DBNPA was first registered as a pesticide in the U.S. in 1972. Currently, 44 products are registered that contain this active ingredient.

Human Health Assessment

Toxicity

DBNPA is corrosive to the eyes and has been placed in toxicity category I (the highest of four acute toxicity categories) for this effect. It is moderately, systemically toxic by oral or inhalation routes (toxicity category II), and slightly toxic by the dermal route (toxicity category III). Although classified in toxicity category III for primary dermal irritation, DBNPA can kill skin tissue in rabbits when administered at high doses for a prolonged period of time. DBNPA also is a skin sensitizer.

In a subchronic toxicity study using rats, DBNPA caused breathing difficulty associated with lung or heart disease, as well as weight loss and several deaths at the higher doses. When applied to the skin of rats in another subchronic study, DBNPA caused changes in body chemistry and dermal irritation at the higher doses.

DBNPA is a developmental toxicant in rabbits. It was shown to cause structural alterations (retarded ossification of several fetal skeleton elements) at a maternally non-toxic dose level. DBNPA is not mutagenic.

EPA has received several human incident reports in which eye, throat and respiratory irritation, runny nose and headache resulted from spills or misuse of DBNPA.

Dietary Exposure

A food additive tolerance, or maximum pesticide residue limit for processed food, has been established for food grade paper or paperboard manufactured by processes using DBNPA (please see 21 CFR 176.300). This tolerance is under the regulatory purview of the Food and Drug Administration (FDA), and EPA defers to FDA regarding the safety of dietary exposure to DBNPA.

Occupational and Residential Exposure

The potential for occupational exposure exists, particularly among those workers or "handlers" loading DBNPA products by open delivery or pouring methods. Handlers may be at risk for acute or developmental toxicity effects via dermal or inhalation exposure.

EPA estimated the Margins of Exposure (MOE) to handlers using open pouring systems and closed systems. All the MOEs are acceptable except for the scenario in which a handler uses an open pouring method to add DBNPA to cooling. With appropriate personal protective equipment (PPE), however, this handler's exposure would be significantly reduced and the MOE would be acceptable.

Risks to post-application/reentry workers are not anticipated because their potential for exposure is much less than handlers'. Residential exposure is not expected since DBNPA has no residential uses.

Human Risk Assessment

DBNPA is corrosive to the eyes, can kill skin tissue exposed to the chemical at high levels for a prolonged period of time, and is a developmental toxicant in rabbits. Several human incidents have been reported involving acute exposure to DBNPA after spills or misuse.

Handlers of DBNPA may be at risk for acute or developmental toxicity effects, particularly those using open pouring methods to add the pesticide to cooling towers. EPA is requiring use of appropriate PPE or a closed application system through this RED to mitigate these risks to workers.

Environmental Assessment

Environmental Fate

Because of its use pattern, DBNPA would not generally contaminate ground water, but could contaminate surface waters through discharge or spill. DBNPA generally hydrolyses rapidly in natural waters to many degradates which continue to degrade rapidly by aerobic and anaerobic aquatic metabolism. This decreases their threat to surface water contamination. The primary degradation pathway is through aerobic and anaerobic metabolism.

Ecological Effects

DBNPA is highly toxic to mammals and birds on an acute oral basis, but has low toxicity to birds on a dietary basis. The pesticide is moderately toxic to freshwater fish, estuarine fish and shrimp; moderately to highly toxic to freshwater crustaceans; and highly to very highly toxic to estuarine shellfish and larvae. Levels at which acute effects begin for shellfish have not been established, but are less than the analytical detection limit. Many effects to aquatic organisms occur within 24 hours of exposure.

Ecological Effects Risk Assessment

DBNPA will be of moderate toxicity to terrestrial mammals and birds if they are exposed orally to concentrated doses of the pesticide in situations such as an accidental spill or excessive discharge of the pesticide into a static pool. Under usual circumstances, however, dietary toxicity to birds is low.

Without any mitigation measures, DBNPA poses a high risk to aquatic organisms. To mitigate these risks, EPA is requiring secondary biological treatment of waste water for all uses of DBNPA except use in waste water treatment systems (since biological degradation readily occurs there, anyway); in secondary oil recovery systems (where biological treatment is

not feasible, but EPA is less concerned about this use pattern due to the potential for only limited exposure); and in single flow-through cooling tower systems.

The use of DBNPA in single flow-through cooling tower systems poses an unacceptable risk to aquatic organisms. Secondary biological effluent treatment is not practical for this use; thus, the risks it poses to aquatic organisms cannot be mitigated. Meanwhile, the benefits it affords are low or non-existent--the amount of DBNPA used for this purpose is negligible and registered alternatives are less costly. Therefore, the use of DBNPA in single flow-through cooling tower systems is not eligible for reregistration, and EPA will take appropriate regulatory action against DBNPA products labeled for this use.

Additional Data Required

No additional generic data are required to support current uses of DBNPA. The Agency is requiring product-specific data including product chemistry and acute toxicity studies, revised Confidential Statements of Formula (CSFs) and revised labeling for reregistration.

Product Labeling Changes Required

All DBNPA end-use products must comply with EPA's current pesticide product labeling requirements, and with the following:

Personal Protective Equipment (PPE), Engineering Controls, and Safety Requirements

The minimum (baseline) PPE for handlers engaged in open pouring of DBNPA into cooling towers is: long sleeve shirt, long pants, shoes plus socks, chemical-resistant gloves, and a chemical-resistant apron.

The following labeling statements are required on all DBNPA end-use products intended primarily for occupational use:

Application Restrictions:

"Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application."

Engineering Controls:

"When handlers use closed metering systems the handler requirements may be reduced or modified to long-sleeve shirt, long pants, shoes and socks."

User Safety Requirements:

"Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry."

User Safety Recommendations:

"Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet."

"Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing."

"Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing."

Sensitization Statement:

Required in the "Hazards to Humans (and Domestic Animals)" section of the Precautionary Statements on labeling of all end-use products:

"This product may cause skin sensitization reactions in some people."

Type of Respirator:

If the acute inhalation toxicity of the end-use product is in category I or II and, therefore, a respirator is required for pesticide handlers, the following type of respirator is appropriate to mitigate DBNPA inhalation concerns:

"A respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)."

Effluent Discharge Labeling Statement

All DBNPA manufacturing-use or end-use pesticide products that may be contained in an effluent discharged to the waters of the U.S. or municipal sewer systems must bear the following statement:

"This product is toxic to fish and invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Secondary biological treatment of DBNPA effluent is required for all uses except for use in secondary oil recovery systems. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA."

Regulatory Conclusion

Most uses of currently registered pesticide products containing DBNPA in accordance with approved labeling will not pose unreasonable risks or adverse effects to humans or the environment. Therefore, most DBNPA uses are eligible for reregistration, and pertinent products will be reregistered once product-specific data, revised Confidential Statements of Formula and revised labeling are received and accepted by EPA.

Because the risk to non-target organisms outweighs the potential benefits associated with the use of DBNPA in single flow-through cooling towers, this use is ineligible for reregistration. EPA will take appropriate regulatory action against DBNPA products labeled for this use.

For More Information

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

Following the comment period, the DBNPA RED document 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 EPA's pesticide reregistration program, the DBNPA RED, or reregistration of individual products containing DBNPA, please contact the Special Review and Reregistration Division (7508W), OPP, US EPA, Washington, DC 20460, telephone 703-308-8000.

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, between 8:00 am and 6:00 pm Central Time, Monday through Friday.