

US EPA ARCHIVE DOCUMENT

9.30-92

Shaughnessy No.: 080803
DP Barcode: D178618 D181922
Case: 283640 283194
Submission: 8418385 5424208
Date Out of EFGWB: SEPT 30, 1992

TO: R. Taylor
Product Manager #25
Registration Division (H7505C)

FROM: Henry Nelson, Ph.D., Head *H Nelson*
Surface Water Section
Environmental Fate and Groundwater Branch/EFED (H7507C)

THRU: Hank Jacoby, Chief *Hank Jacoby*
Environmental Fate and Groundwater Branch
Environmental Fate and Effects Division (H7507C)

Attached, please find the EFGWB review of:

Reg./File #(s): 080803-0

Common Names: Atrazine

Type of Product: Herbicide

Product Name: _____

Company Name: CIBA-GEIGY

Purpose: Review of FIFRA 6(a)(2) surface water monitoring data

Action Code: 405

EFGWB #(s): 92-1303

Total Review Time: 0.5 day

This review is of a summary of data (424432-01) on the concentrations of atrazine, atrazine degradates, simazine, and metolachlor in 11 samples collected in May 1992 from the Chesapeake Bay in Maryland. The data summary was submitted by CIBA-GEIGY in compliance with FIFRA 6(a)(2).

1. CHEMICAL:

Common Name: Atrazine

Chemical Name: 2-Chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine

Type of Product: Herbicide

Chemical Structure:

Physical/Chemical Properties

Molecular Weight: 354

Physical State : White crystalline solid

Aqueous Solubility: 70 mg/L @ 22°C

Vapor Pressure: 3.0×10^{-7} mm Hg

Log Octanol/Water Partition Coefficient 2.33 to 2.71

2. TEST MATERIALS:

Not applicable.

3. STUDY/ACTION TYPE:

Review of FIFRA 6(a)(2) surface water monitoring data.

4. STUDY IDENTIFICATION:

D181922/424432-01: Letter dated 8/10/92 from K. Stumpf of CIBA-GEIGY to R. Taylor of RD/OPP.

5. REVIEWED BY:

Henry Nelson, Ph.D., Head *H Nelson*
Surface Water Section
Environmental Fate and Groundwater Branch/EFED

6. APPROVED BY:

Hank Jacoby, Chief
Environmental Fate and Groundwater Branch
Environmental Fate and Effects Division/OPP

7. CONCLUSIONS:

(1) Atrazine was detected (detection limit 0.1 ug/L) in 7 of the 11 samples collected. In 6 of those samples, concentrations ranged from 0.1 to 0.48 ug/L. One sample had a much higher atrazine concentration of 8.5 ug/L.

(2) Between one and 3 chloro-atrazine degradates (desethyl-atrazine, desisopropyl-atrazine, and desalkyl-atrazine) were detected in 10 of the 11 samples collected at concentrations ranging from 0.10 to 4.0 ug/L.

(3) Simazine was detected in 9 of the 11 samples. In 8 of those samples, concentrations ranged from 0.10 to 2.6 ug/L. One sample had a much higher simazine concentration of 5.2 ug/L.

(4) Metolachlor was detected in 7 of the 11 samples collected at concentrations ranging from 0.12 to 3.6 ug/L.

5) In a previous submission (see EFGWB #92-0951) of data on samples collected in February/March 1992 (pre-application) from the Chesapeake Bay, CIBA-GEIGY reported that atrazine was detected (detection limit 0.1 ug/L) in 9 of the 23 samples at concentrations ranging from 0.15 to 0.28 ug/L.

8. RECOMMENDATIONS:

It is unclear why this data were submitted under 6(a)(2). Chesapeake Bay is a saline estuary unfit to supply drinking water. In addition, except for atrazine in one sample and simazine in one sample, the reported concentrations are well below drinking water MCLs or lifetime drinking water HAs. Are the reported concentrations of potential concern from an aquatic toxicity standpoint? It should be determined why CIBA-GEIGY considers this data to represent potential adverse effects.

9. BACKGROUND:

This review is of a summary of data (423151-01) on the concentrations of atrazine, atrazine degradates, simazine, and metolachlor in 11 samples collected in May 1992 from the Chesapeake Bay in Maryland. The data summary was submitted by CIBA-GEIGY in compliance with FIFRA 6(a)(2).

10. DISCUSSION:
See conclusions.

11. COMPLETION OF ONE-LINER
Not applicable

12. CBI INDEX:
Not applicable.

DP BARCODE: D181922

CASE: 283914
SUBMISSION: S424208

DATA PACKAGE RECORD
BEAN SHEET

DATE: 08/25/92
Page 1 of 1

*** CASE/SUBMISSION INFORMATION ***

CASE TYPE: MISCELLANEOUS ACTION: 405 6(A)(2) ADVERSE DATA
CHEMICALS: 080803 Atrazine (ANSI)

0.0000%

ID#: 283914

COMPANY: CIBA-GEIGY CORP.

PRODUCT MANAGER: 25 ROBERT TAYLOR

703-305-6800 ROOM: CM2 241

PM TEAM REVIEWER: JAMES MORRILL

703-305-5705 ROOM: CM2 251

RECEIVED DATE: 08/14/92

DUE OUT DATE: 10/23/92

*** DATA PACKAGE INFORMATION ***

DP BARCODE: 181922 EXPEDITE: N DATE SENT: 08/25/92 DATE RET.: / /

CHEMICAL: 080803 Atrazine (ANSI)

DP TYPE: 001 Submission Related Data Package

ADMIN DUE DATE: 09/19/92

CSF: N

LABEL: N

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	08/26/92	/ /
BRAN: EFGB	/ /	/ /
SECT: SWS	/ /	/ /
REVR :	/ /	/ /
CONTR:	/ /	/ /

*** DATA REVIEW INSTRUCTIONS ***

Attention Henry Nelson:

Please review attached report of atrazine in surface water
in Maryland MRID# 424432-01

*** ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION ***

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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(a)(2)

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Page ___ is not included in this copy.

Pages 5 through 8 are not included.

The material not included contains the following type of information:

- Identity of product inert ingredients.
 - Identity of product impurities.
 - Description of the product manufacturing process.
 - Description of quality control procedures.
 - Identity of the source of product ingredients.
 - Sales or other commercial/financial information.
 - A draft product label.
 - The product confidential statement of formula.
 - Information about a pending registration action.
 - FIFRA registration data.
 - The document is a duplicate of page(s) _____.
 - The document is not responsive to the request.
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The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.
