



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

OFFICE OF PREVENTION,
PESTICIDES AND TOXIC
SUBSTANCES

| MAY 5 1993 |

MEMORANDUM

SUBJECT: Atrazine Data Review

FROM: David Wells, Hydrologist
Ground Water Section
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division (H7507C)

THRU: Elizabeth Behl, Section Head
Ground Water Section
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division (H7507C)

Henry Jacoby, Branch Chief
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division (H7507C)

TO: ~~_____~~ Kathy Pearce
Product Manager, # 62
Special Review and Reregistration Division (H7508W)

DP Barcode: D158695
PC Code No: 080803 (Atrazine)
EFGWB No: 91-0218

Discussion:

This study has been reviewed twice by EFGWB and is summarized in EFGWB's Triazine document. Briefly, the study collected data on pesticide detections in Nebraska ground water from several state agencies and the USGS, including 2,263 domestic wells which were analyzed for atrazine. More than 70% of the data (from about 1500 wells) reviewed for their report were from the statewide Department of Health Survey. Atrazine was the most commonly found pesticide and was detected in 303 wells (13.4%), concentrations ranged

from 0.01-107.2 ug/L. The average atrazine concentration for the study was 1.52 ppb and the mean was 0.37 ppb. Two wells contained concentrations above 80 ppb. One well was a shallow 10-foot monitoring well downgradient from an irrigated corn field. The well contained a 2 foot slotted interval at the top of the water table. The second well, containing the highest atrazine concentrations in the study, had a depth to water of 85 feet and was suggested that the high atrazine concentrations may be due to a spill or back-siphoning accident.

Overall, nearly 70 percent of the detections occurred in areas where the ground water was considered highly vulnerable to pesticide and nitrate leaching. These areas are mainly used for irrigated corn and are characterized by well-drained soils with water tables less than 50 feet in depth.

EFGWB Conclusions:

Atrazine has been detected most frequently in wells from the Central Platte River Valley in south-central Nebraska. Most atrazine detections occur in corn and sorghum production regions where high levels of atrazine are used, intensive irrigation is used and soils are relatively sandy and permeable.

In summary, most Nebraska atrazine detections occur in vulnerable areas, and especially near the Platte River. Concentrations of atrazine found in this study ranged from less than .01 to 107.2 ug/L.

DP BARCODE: D185563

CASE: 838836
SUBMISSION: S430949

DATA PACKAGE RECORD
BEAN SHEET

DATE: 05/04/93
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: SPECIAL REVIEW ACTION: 860 SRB OTHER
CHEMICALS: 080803 Atrazine (ANSI) 100.00 %

ID#: 080803

COMPANY:

PRODUCT MANAGER: 62

PM TEAM REVIEWER: KATHLEEN PEARCE

703-308-8016

ROOM:

ROOM: CS1 1N5

RECEIVED DATE: 12/10/92

DUE OUT DATE: 01/05/93

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 185563 EXPEDITE: N DATE SENT: 12/10/92 DATE RET.: / /

CHEMICAL: 080803 Atrazine (ANSI)

DP TYPE: 001 Submission Related Data Package

ADMIN DUE DATE: 01/05/93

CSF:

LABEL:

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	12/10/92	/ /
BRAN: EFGB	12/11/92	05/03/93
SECT: SWS	12/13/92	05/03/93
REVR : DJONES	12/14/92	04/22/93
CONTR:	/ /	/ /

* * * DATA REVIEW INSTRUCTIONS * * *

TO: David Jones, EFGWB: Please provide a table showing run-off and leaching potential of atraz simaz, cyanazine and their alternatives for briefings on potential Special Review of the three triazines. Thank you. kp/srrd/srb

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

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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DP BARCODE: D158695

CASE: 838836
SUBMISSION: S386502

DATA PACKAGE RECORD
BEAN SHEET

DATE: 05/04/93
Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: SPECIAL REVIEW ACTION: 860 SRB OTHER
CHEMICALS: 080803-Atrazine (ANSI)

100.00 %

ID#: 080803

COMPANY:

PRODUCT MANAGER: 62

PM TEAM REVIEWER: KATHLEEN PEARCE

703-308-8016

ROOM:

ROOM: CS1 1N5

RECEIVED DATE: 10/23/91 DUE OUT DATE: 12/22/91

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 158695 EXPEDITE: Y DATE SENT: 11/28/90 DATE RET.: / /

CHEMICAL: 080803 Atrazine (ANSI)

DP TYPE: 001 Submission Related Data Package

ADMIN DUE DATE: 11/28/90

CSF: N

LABEL: N

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	11/29/90	/ /
BRAN: EFGB	11/29/90	05/04/93
SECT: GTS	11/30/90	04/28/93
REVR : DWELLS	04/27/93	04/28/93
CONTR:	/ /	/ /

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

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
159423	TB-1/RS-3	12/13/90	12/13/90	Y	N	N
171014	EFGB/SWS	11/12/91	01/11/92	Y	N	N

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