MAY 7 1985

MEMORANDUM

SUBJECT: 85-OK-02: Glyphosate in/on wheat in Oklahoma Section 18
Caswell No. 661A

TO: Don Stubbs
Product Manager (41)
Registration Division (TS-769)

and

Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

FROM: William L Burnam
Deputy Chief
Toxicology Branch
Hazard Evaluation Division (TS-769)

WB

This is an addendum to our previous memo of April 29, 1985.

As stated previously, there is a tolerance of 0.1 ppm of the combined residues of glyphosate and its aminomethylphosphonic acid metobolite on grain which includes wheat. According to a RCB review of the same wiper use for a petition request (PP 3F 2809, 5H5450) this use would result in a new wheat tolerance of 0.25 ppm. This would result in food additive tolerances of 0.4 ppm for wheat bran and wheat shorts. The implication of the Delaney clause (since glyphosate is currently considered oncogenic by the Toxicology Branch) has previously been discussed.

For this Section 18, an incremental risk from increasing the wheat tolerance from 0.1 ppm to 0.25 ppm can be calculated.

As stated in our March 28, 1985 memo, the dietary oncogenic risk from food listed in the TMRC printout is 1.4×10^{-6}. This includes wheat at 0.1 ppm. If wheat were raised to .25 ppm, the incremental increase in exposure would be

$$\frac{.15}{100} \times 0.1378 \times \frac{1.5}{60} = 5.2 \times 10^{-4} \text{ mg/kg/day}$$

The incremental increase in lifetime risk would be as follows:

$$5.2 \times 10^{-4} \times Q^*_1 \; (5.9 \times 10^{-5} \text{ mg/kg/day})^{-1} = 3.1 \times 10^{-8}$$

Since this is a Section 18 request, the risk from one year would be less.

It should be noted that certain scientific issues have been raised by the registrant and these are under review in the Toxcology Branch. It is possible that there may be further peer review. Other requests for additional uses have been reviewed by Toxicolgy Branch and, if approved, these may increase the TMRC and existing dietary risk.

CROP	Tolerance	Food Factor	mg/day(1.5kg)
Wheat(170)	0.200	10.36	0.03109

MPI	TMRC	% ADI
6.0000 mg/day(60kg)	1.4548 mg/day(1.5kg)	24.25

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