



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

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CERTIFIED MAIL

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Dear Dr. Landis:

Background

This is the Environmental Protection Agency's (hereafter referred to as EPA or the Agency) "Report of the Food Quality Protection Act (FQPA) Tolerance Reassessment Progress and Risk Management Decision (TRED) for Diuron" which was approved on July 30, 2002. A Notice of Availability of this tolerance reassessment decision will be published in the *Federal Register* (FR) shortly.

The Federal Food, Drug and Cosmetic Act (FFDCA), as amended by FQPA, requires EPA to reassess all the tolerances for registered chemicals in effect on or before the date of the enactment of the FQPA, which was in August of 1996. The Agency is required by FQPA to have 2/3 (approximately 6,416) of all tolerances reassessed prior to August 5, 2002. In order to meet the FQPA tolerance reassessment goal, the tolerance portion of the reregistration will be completed prior to the issuance of the Reregistration Eligibility Decision (RED). A RED for diuron will be completed in 2003, which will address any occupational or ecological risk concerns.

In reassessing these tolerances, the Agency must consider, among other things, aggregate risks from non-occupational sources of pesticide exposure, whether there is increased susceptibility to infants and children, and the cumulative effects of pesticides with a common mechanism of toxicity. Once a safety finding has been made that aggregate risks are not of concern, the tolerances are considered reassessed.

Diuron Assessment

For diuron, acute and chronic (non-cancer) dietary food risks are not of concern. Drinking water derived from ground water is not a concern for any duration or sub-population. Drinking water derived from surface water is not of concern except for the estimated chronic risk in the flatwood area of Florida at the maximum application rate. For other areas of Florida where the citrus application rate is 3.2 lbs ai/A (up to two applications per year) the estimated environmental concentration (EECs) are 30 ppb, with

a drinking water level of comparison (DWLOC) of 28 ppb for the most sensitive subpopulation, children 1-6. This represents a slight exceedance and, given the protective assumptions in the dietary assessment, does not pose a risk of concern.

EPA's risk assessment identified some areas of potential concern. These include: chronic surface drinking water risk for the flatwood area of Florida; a slight exceedance for cancer risk from food; potential cancer risk of MCPDMU (N'-(3-chlorophenyl)-N,N-dimethyl urea) in water; residential applicator risk from paint or stain use; and aggregate risk.

FQPA Finding

Although some risks potentially of concern have been identified, EPA is able to make a determination of reasonable certainty of no harm for diuron, based on further characterization of these risks, the registrant's commitment to mitigation measures designed to reduce exposure to diuron and its metabolites in drinking water, and the development of data to confirm that the mitigation measures are adequate. Each risk of potential concern, related to the tolerance reassessment, with its characterization and the mitigation designed to address the concern, is discussed below. It should be noted that when the Agency evaluates the ecological and worker risks during the development of the RED, additional risk mitigation may be necessary.

Cancer Risk from Food

- The estimated cancer dietary risk associated with the use of diuron indicates a borderline exceedance above 1×10^{-6} and shows a lifetime risk estimate of 1.68×10^{-6} for the general population but, is not of concern.
- The residues used in the calculations are from field trials conducted at the highest application rates and some processing data are still outstanding, which will allow further refinement of the risk assessment and likely lower the risk estimates.
- USDA Pesticide Data Program (PDP) monitoring data are available for diuron alone, indicating no detectable residues of the parent compound in citrus, milk and other sampled commodities.
- Conservative assumptions were used in risk assessment; therefore, the exposure calculation for cancer dietary risk is a conservative estimate.

Chronic Drinking Water Risk from Surface Water

- Potential chronic drinking water risk concerns from surface water are limited to high use rate areas located in the southern Florida flatwood. In this area, the EECs at the maximum application rate of 6.4 lbs ai/A (9.6 lbs ai/A per year) are 42 ppb, with a DWLOC of 28ppb. Residue data to support the 9.6 lbs ai/A per year rate are required. The registrant may provide data to support this use rate or change the labels to reflect the use rate of 6.4 lbs ai/A per year, as supported by current residue data.

- The registrant is developing additional information to refine the conservative percent crop area (PCA) factor (87%) used in the drinking water assessment. This research will include spatial integration of information on surface water sources for drinking water in the high use rate areas relative to citrus production and soil runoff potential.
- Existing surface water monitoring data for diuron from Florida and California show a relatively high percentage of detections, but concentrations generally one to two orders of magnitude less than modeled values.
- The registrants have agreed to rate reductions, reductions in the number of applications per year, and increases in the intervals between applications as outlined in Table 1.
- Additional targeted drinking water monitoring will be required to fully characterize drinking water risk of diuron and its metabolites.

Potential Cancer Risk of the MCPDMU Metabolite in Water

- In water only, diuron partially degrades to another chemical, MCPDMU (N'-(3-chlorophenyl)-N,N-dimethyl urea).
- The cancer estimate for MCPDMU is derived by analogy to a similar compound, monuron, and represents worst case. It is possible that MCPDMU is less toxic than monuron; it is unlikely that it is more toxic. Monuron produces kidney and liver tumors in male rats. The estimated risk for monuron is based on a Q* of $1.52 \times 10^{-2} \text{ (mg/kg/day)}^{-1}$.
- Since there is potential for MCPDMU to occur in water, the Agency considered possible exposures to MCPDMU from ingestion of catfish, as well as from drinking water.
- For chronic risk, the EECs for surface water from PRZM/EXAMS (42 ppb) exceeds the drinking water level of comparison (DWLOC) of 28 ppb for the most sensitive population subgroup (children 1 - 6), in the Flatwood area of Florida, at the highest application rate.
- Residue data to support the 9.6 lbs ai/A per year rate for citrus are required. The registrant may provide data to support this use rate or change the labels to reflect the use rate of 6.4 lbs ai/A per year, as supported by current residue data.
- Additional data are being required about the behavior and fate of MCPDMU in drinking water. This information will permit refinement of the drinking water assessment.
- The reductions in application rate and the number of applications per year shown in Table 1 will also reduce exposure to diuron metabolites.
- If the refined data and refined assessment still show drinking water concerns, drinking water monitoring and/or toxicity data on MCPDMU will be required.

Residential Cancer Risk from Paint or Stain Use

- Calculated cancer risk to adult applicators using diuron treated paints or stains applied with airless paint sprayer or paint brush is estimated to range from 9.5×10^{-7} to 3.4×10^{-6} , depending on the exposure assumptions used, application method employed and the amount applied.
- Post-application exposure to children is expected to be minimal as indicated in modeled estimates of inhaled diuron from a screening-level inhalation assessment combined diuron's low vapor pressure.
- The assessment assumes two gallons for paints to five gallons for stains applied with a brush per day or fifteen gallons applied per day with an airless sprayer, 2 applications per year, 50 years of use over a 70 year lifetime, and a high-end dermal absorption factor of 4% calculated from submitted studies.
- Less than 5% of all paint contains diuron. Therefore, it is unlikely that a homeowner would apply 2 to 5 gallons of paint containing diuron two times per year for 50 years.

Aggregate Risk

The aggregate risk assessment for diuron examines the combined risk from exposure through food, drinking water, and residential use.

- There are no adverse effects expected from a single exposure to diuron; therefore, an acute risk assessment was not conducted. Short-term aggregate risks from food, residential inhalation, and drinking water are not of concern.
- Estimated aggregate chronic risk (noncancer) concentrations of diuron and its metabolites in surface water slightly exceed the chronic DWLOC in the Flatwood area of Florida. Because field trial residue levels (from maximum labeled rates) were used in the assessments, dietary risks are high end estimates and may be refined further.
- An aggregate cancer estimate has not been calculated since conservative assumptions were used in both the dietary and drinking water assessments. Thus, aggregation of these assessments would result in an even more conservative expression of risk.
- Dietary risk estimates can be further refined with processing data and monitoring data that accounts for diuron and its metabolites.
- Additional targeted drinking water monitoring will be required to fully characterize drinking water risk of diuron and its metabolites.
- Because of the low percent of paint containing diuron, exposure to home applicators is not likely to be a significant contributor to aggregate risk.

Mitigation and Best Management Practices

The registrant has agreed to the following measures to reduce exposure to diuron:

- Best Management Practices for managing spray drift.
- No aerial applications except for rights-of-way, alfalfa, and cotton.
- Eliminate use in areas with muck soils.
- Rate reductions, increased application intervals, and limits on the number of application as noted below in Table 1.
- Revise the product labels consistent with the changes outlined in the Residue Chemistry Chapter and submits the required residue data to support the 9.6 lbs ai/A per year rate for citrus.

Table 1: Revised Application Parameters

Crop	Current Maximum Application Rate	Current Number of Applications/Retreatment Interval	Revised Maximum Application Rate	Revised Number of Applications/Retreatment Interval
Right-of Way	12 lb ai/A (typically 18 lb ai/A year)	Not Restricted (Typically 2)	12 lb ai/A per year	2 , with a 90-day retreatment interval
Citrus (other than Flatwood area)	3.2 lb ai/A	No Limit (1.6 - 3.2 lb/A per application to max of 6.4 lb/A per year)	3.2 lb ai/A (6.4 lb ai/A per year)	2 , with a 60-day retreatment interval (Trees < 4 years)
				2 , with a 80-day retreatment interval (Trees > 4 years)
Citrus (Flatwood area)*	6.4 lb ai/A (9.6 lb ai/A per year)	No Limit (1.6 - 6.4 lb/A per application to max of 9.6 lb/A per year)	6.4 lb ai/A (9.6 lb ai/A per year)	2 , with a 60-day retreatment interval (Trees < 4 years)
				2 , with a 80-day retreatment interval (Trees > 4 years)
Apple	3.2 lb ai/A	1-2 (1.6 - 3.2 lb/A to max of 3.2 lb/A per year)	3.2 lb ai/A per year	1-2 (1.6 - 3.2 lb/A to max of 3.2 lb ai/A per year), with a 90-day retreatment interval
Alfalfa	3.2 lb ai/A	1 app./ year	2.4 lb ai/A per year	1
Cotton	2.2 lb ai/A	Not Restricted	Preplant/Pre- emergence: (0.8 - 1.6 lb ai/A)	3, with total ai per season limited to 0.8 lb ai/A on coarse soils, 1.5 lb ai/A on medium soils and 2.2 lb ai/A on fine soils, with a 21-day retreatment interval
			Post-emergence: (0.8 - 1.2 lb ai/A, depending upon soil texture)	
Grapes	9.6 lb ai/A	2	4 lb ai/A (8 lb ai/A per year)	2, with a 90-day retreatment interval

* Residue data to support the 9.6 lbs ai/A per year rate is required, or labels modified to reflect a maximum of 6.4 lbs ai/A applied per year.

Cumulative Assessment

FQPA requires that EPA consider “available information” concerning the cumulative effects of a particular pesticide’s residues and “other substances that have a common mechanism of toxicity.” The reason for considering other substances is because of the possibility that low-level exposures to multiple chemical substances that cause a common toxic effect by a common mechanism could lead to the same adverse health effect, as would a higher level of exposure to any of the other substances individually. EPA did not perform a cumulative risk assessment as part of this review of diuron, because the Agency has not determined that there are any other chemical substances that have a mechanism of toxicity common with that of diuron. If EPA identifies other substances that share a common mechanism of toxicity with diuron, then a cumulative risk assessment will be conducted that includes diuron once the final framework EPA will use for conducting cumulative risk assessments is available. Further, EPA is in the process of developing criteria for characterizing and testing endocrine disrupting chemicals and plans to implement an Endocrine Disruptor Screening Program. Diuron will be reevaluated at that time and additional studies may be required.

Tolerance Reassessment

The Agency’s tolerance reassessment for the pesticide diuron, has been discussed with interested stakeholders and a closure call will be held prior to issuance of the RED. In addition, both the human health effects and the environmental risk assessments are summarized in the enclosed *Overview of the Diuron Risk Assessment* document. The risk assessments and other documents pertaining to the diuron tolerance reassessment decision are available on the Internet at <http://www.epa.gov/pesticides/reregistration/status.htm> and are in the public docket for viewing. As mentioned previously, other risks posed by diuron will be addressed through the reregistration process in 2003.

The Agency has reassessed all 81 existing, permanent tolerances for diuron and can make a FQPA safety determination. In addition, two new tolerances are proposed for use on prickly pear (0.05 ppm), and spearmint (1.5 ppm). The Agency has sufficient residue data for reassessing the tolerances for diuron and is requiring additional confirmatory data for alfalfa forage; globe artichokes; barley hay; citrus (9.6 lbs ai/A per year rate), cotton gin byproducts; field corn aspirated grain fractions, forage and stover; sweet corn, stover; sweet corn, forage; filberts; grass forage, hay seed screenings and straw; lemon; pear; oat forage, hay; olive; field pea vines and hay; sorghum aspirated grain, fractions, stover, and forage; and wheat forage and hay. For commodities that require additional residue data, the current tolerance value is protective of human health and will continue to be used for enforcement purposes until new data are received. If the new data indicate that adjustments to tolerances are warranted, they will be adjusted at that time. Anticipated residues for all commodities were calculated from field trial data and subsequently utilized to estimate the dietary exposure to diuron. Dietary risks from exposure do not exceed the Agency’s level of concern. Final tolerances for most crops are being proposed as part of this tolerance reassessment. Additional tolerances may be revised once the confirmatory field trial data have been submitted to and reviewed by the Agency. In addition, processing data for field corn and olives and a metabolism study in fish are required.

Table 2. Tolerance Reassessment Summary for Diuron

Commodity	Established Tolerance (ppm) ¹	Reassessed Tolerance (ppm) ²	Comment <i>Correct Commodity Definition</i>
Tolerances Listed Under 40 CFR §180.106(a)			
Alfalfa	2	2/(TBD ³)	[<i>Alfalfa, forage</i>]
		2.0	[<i>Alfalfa, hay</i>]
Apples	1	0.10	The available data indicate that the tolerance should be reduced to 0.10 ppm. [<i>Apple</i>]
Artichokes	1	1/(TBD)	[<i>Artichoke, globe</i>]
Asparagus	7	7.0	Treatment of asparagus is restricted to early season, prior to the appearance of asparagus spears.
Bananas	0.1	0.05	This tolerance should be reclassified under 180.106(c), as use of diuron on banana will be restricted to HI. The available data indicate that the tolerance should be reduced to 0.05 ppm. [<i>Banana</i>]
Barley, grain	1	0.20	These tolerances should be reclassified under 180.106(c), as use of diuron on barley is restricted to western OR and WA. The available data indicate that the tolerance should be reduced to 0.20 ppm for barley, grain; and to 1.5 ppm for barley, straw.
Barley, hay	2	2/(TBD)	
Barley, straw	(2) ⁶	1.5	
Birdsfoot trefoil, forage	2	0.10	These tolerances should be reclassified under 180.106(c), as use of diuron on trefoil is restricted to western OR. The available data indicate that the tolerance should be reduced to 0.10 ppm for birdsfoot trefoil, forage and to 0.15 ppm for birdsfoot trefoil, hay.
Birdsfoot trefoil, hay	2	0.15	
Blackberries	1	Reassign; 0.10	The established tolerances for blackberries, blueberries, boysenberries, currants, dewberries, gooseberries, huckleberries, loganberries, and raspberries should be revoked concomitant with the establishment of a tolerance for: The available data indicate that these tolerances should be reduced to 0.10 ppm. [<i>Berry Group</i>].
Blueberries	1		
Boysenberries	1		
Currants	1		
Dewberries	1		
Gooseberries	1		
Huckleberries	1		
Loganberries	1		
Raspberries	1		

Commodity	Established Tolerance (ppm)¹	Reassessed Tolerance (ppm)²	Comment <i>Correct Commodity Definition</i>
Cattle, fat	1	1 ⁶	
Cattle, meat	1	1 ⁶	
Cattle, meat byproducts	1	1 ⁶	
Citrus fruits	1	1/(TBD ^{3,6})	[<i>Fruit, citrus, group</i>]
Citrus pulp, dried	4	4/(TBD)	[<i>Citrus, dried pulp</i>]
Clover, forage	2	0.10	These tolerances should be reclassified under 180.106(c), as use of diuron on clover is restricted to western OR. The available data indicate that the tolerance should be reduced to 0.10 ppm for clover, forage and to 1 ppm for clover, hay.
Clover, hay	2	1	
Corn in grain or ear form (including sweet corn, field corn, popcorn)	1	0.10	Concomitant with the reassignment of this tolerance, a separate tolerance should be established for [<i>Corn, field, grain</i>]. The available data indicate that the tolerance should be reduced to 0.10 ppm.
	1	0.10	Concomitant with the reassignment of this tolerance, a separate tolerance should be established for [<i>Corn, pop, grain</i>]. The available data indicate that the tolerance should be reduced to 0.10 ppm.
	1	0.10	Concomitant with the reassignment of this tolerance, a separate tolerance should be established for [<i>Corn, sweet, grain</i>]. The available data indicate that the tolerance should be reduced to 0.10 ppm.
	1	0.10	Concomitant with the reassignment of this tolerance, a separate tolerance should be established for [<i>Corn, field, ear</i>]. The available data indicate that the tolerance should be reduced to 0.10 ppm.
	1	0.10	Concomitant with the reassignment of this tolerance, a separate tolerance should be established for [<i>Corn, pop ear</i>]. The available data indicate that the tolerance should be reduced to 0.10 ppm.

Commodity	Established Tolerance (ppm)¹	Reassessed Tolerance (ppm)²	Comment <i>Correct Commodity Definition</i>
	1	0.10	Concomitant with the reassignment of this tolerance, a separate tolerance should be established for [<i>Corn, sweet ear</i>]. The available data indicate that the tolerance should be reduced to 0.10 ppm.
Corn, sweet, fodder	2	Revoke	There are no registered uses of diuron on sweet corn.
Corn, sweet, forage	2		
Corn, field fodder	2	2/(TBD)	This tolerance was inadvertently omitted from the 1/14/98 Final Rule technical amendment consolidating 40 CFR parts 185-186 to 40 CFR part 180. This action will reinstate this tolerance to 40 CFR part 180.106. [<i>Corn, field, stover</i>]
Corn, pop, fodder	2	2/(TBD)	This tolerance was inadvertently omitted from the 1/14/98 Final Rule technical amendment consolidating 40 CFR parts 185-186 to 40 CFR part 180. This action will reinstate this tolerance to 40 CFR part 180.106. [<i>Corn, pop, stover</i>]
Corn, field forage	2	2/(TBD)	This tolerance was inadvertently omitted from the 1/14/98 Final Rule technical amendment consolidating 40 CFR parts 185-186 to 40 CFR part 180. This action will reinstate this tolerance to 40 CFR part 180.106. [<i>Corn, field, forage</i>]
Corn, pop, forage	2	2/(TBD)	This tolerance was inadvertently omitted from the 1/14/98 Final Rule technical amendment consolidating 40 CFR parts 185-186 to 40 CFR part 180. This action will reinstate this tolerance to 40 CFR part 180.106. [<i>Corn, pop, forage</i>]
Cottonseed	1	0.20	The available data indicate that the tolerance should be reduced to 0.20 ppm. [<i>Cotton, undelinted seed</i>]
Goats, fat	1	1 ⁶	[<i>Goat, fat</i>]
Goats, meat	1	1 ⁶	[<i>Goat, meat</i>]
Goats, meat byproducts	1	1 ⁶	[<i>Goat, meat byproducts</i>]
Grapes	1	0.05	The available data indicate that the tolerance should be reduced to 0.05 ppm. [<i>Grape</i>]

Commodity	Established Tolerance (ppm)¹	Reassessed Tolerance (ppm)²	Comment <i>Correct Commodity Definition</i>
Grass crops (other than Bermuda grass)	2	2/(TBD)	[Grass, forage, except Bermuda grass]
Grass, hay (other than Bermuda grass hay)	2	2/(TBD)	[Grass, hay, except Bermuda grass]
Hogs, fat	1	1 ⁶	[Hog, fat]
Hogs, meat	1	1 ⁶	[Hog, meat]
Hogs, meat byproducts	1	1 ⁶	[Hog, meat byproducts]
Horses, fat	1	1 ⁶	[Horse, fat]
Horses, meat	1	1 ⁶	[Horse, meat]
Horses, meat byproducts	1	1 ⁶	[Horse, meat byproducts]
Nuts	0.1	0.1/(TBD)	Concomitant with the reassignment of this tolerance, separate a separate tolerance should be established for [Filbert].
		0.05	Concomitant with the reassignment of this tolerance, separate a separate tolerance should be established for [Nut, macadamia]. The available data indicate that the tolerance should be reduced to 0.05 ppm.
		0.05	Concomitant with the reassignment of this tolerance, separate a separate tolerance should be established for [Pecan]. The available data indicate that the tolerance should be reduced to 0.05 ppm.
		0.05	Concomitant with the reassignment of this tolerance, separate a separate tolerance should be established for [Walnut]. The available data indicate that the tolerance should be reduced to 0.05 ppm.
Oats, forage	2	2/(TBD)	These tolerances should be reclassified under 180.106(c), as use of diuron on oats is restricted to ID, OR, and WA. The available data indicate that the tolerance should be reduced to 0.10 ppm for oats, grain; and to 1.5 ppm for oats, straw.
Oats, grain	1	0.10	
Oats, hay	2	2/(TBD)	
Oats, straw	2	1.5	
Olives	1	1/(TBD)	[Olive]
Papayas	0.5	0.50	[Papayas]

Commodity	Established Tolerance (ppm)¹	Reassessed Tolerance (ppm)²	Comment <i>Correct Commodity Definition</i>
Peaches	0.1	0.10	[<i>Peach</i>]
Pears	1	1/(TBD)	[<i>Pear</i>]
Peas	1	0.10	The available data indicate that the tolerance should be reduced to 0.10 ppm. [<i>Pea, field, seed</i>]
Peas, forage	2	2/(TBD)	[<i>Pea, field, vines</i>]
Peas, hay	2	2/(TBD)	[<i>Pea, field, hay</i>]
Peppermint, hay	2	1.5	The available data indicate that the tolerance should be reduced to 1.5 ppm. [<i>Peppermint, tops</i>]
Pineapple	1	0.10	The available data indicate that the tolerance should be reduced to 0.10 ppm.
Potatoes	1	Revoke	There are no registered uses of diuron on potatoes.
Rye, forage	2	Revoke	There are no registered uses of diuron on rye.
Rye, grain	1		
Rye, hay	2		
Rye, straw	2		
Sheep, fat	1	1 ⁶	
Sheep, meat	1	1 ⁶	
Sheep, meat byproducts	1	1 ⁶	
Sorghum, fodder	2	2/(TBD)	[<i>Sorghum, grain, stover</i>]
Sorghum, forage	2	2/(TBD)	[<i>Sorghum, grain, forage</i>]
Sorghum, grain	1	0.50	The available data indicate that the tolerance should be reduced to 0.50 ppm. [<i>Sorghum, grain, grain</i>]
Sugarcane	1	0.20	The available data indicate that the tolerance should be reduced to 0.20 ppm.
Vetch, forage	2	0.10	These tolerances should be reclassified under 180.106(c), as use of diuron on vetch is restricted to ID, OR, and WA. The available data indicate that these tolerances should be reduced to 0.10 ppm for vetch, forage and to 1.5 ppm for vetch, hay.
Vetch, hay	2	1.5	
Vetch, seed	1	Revoke	No longer considered a significant livestock feed item.

Commodity	Established Tolerance (ppm)¹	Reassessed Tolerance (ppm)²	Comment <i>Correct Commodity Definition</i>
Wheat, forage	2	2/(TBD)	
Wheat, grain	1	0.50	The available data indicate that the tolerance should be reduced to 0.50 ppm.
Wheat, hay	2	2/(TBD)	
Wheat, straw	2	1.5	The available data indicate that the tolerance should be reduced to 1.5 ppm.
Tolerance Listed Under 40 CFR §180.106(b)			
Catfish fillets	2.0 ⁴	2.0	Expiration date of 06/30/03 [<i>Catfish</i>]
Tolerances To Be Proposed Under 40 CFR §180.106(a)			
Aspirated grain fractions	N/A	5.0	
Barley, bran	N/A	0.7	
Citrus, oil	N/A	TBD	
Cotton, gin byproducts	N/A	TBD	
Eggs	N/A	TBD	
Grass, seed screenings	N/A	TBD	
Grass, straw	N/A	TBD	
Milk	N/A	TBD	
Pineapple, process residue	N/A	0.40	
Poultry, meat byproducts	N/A	TBD	
Prickly pear	N/A	0.05	
Spearmint	N/A	1.5	
Sugarcane, molasses	N/A	0.70	
Wheat, bran	N/A	0.70	

1. Expressed as diuron *per se*, unless otherwise stated.
2. To be expressed as the combined residues of diuron and its metabolites convertible to 3,4-DCA, expressed as diuron. The residues of 3,4-DCA are low but diuron residues are converted to 3,4-DCA for the tolerance expression based on the assumption that the metabolites would not be any more toxic than diuron and the consideration that the analytical methods used to collect the field trial data are not capable of measuring each metabolite individually. The reassessed tolerances are contingent upon the recommended label revisions outlined in Table B of the *Residue Chemistry Chapter*

For The Diuron Reregistration Eligibility Decision (RED) Document, dated 7/29/2001.

3. TBD = To be determined. These commodities were included in the dietary risk assessment using the *Current Tolerance* level. Additional confirmatory field trial residue data are required; therefore, the final tolerance may be revised.
4. Expressed as combined residues of diuron and its metabolites convertible to 3,4-DCA.
5. Feeding study data have been submitted to reassess the established tolerances for the fat, meat, and meat byproducts of cattle, goats, hogs, horses, and sheep. Residue data are not available for several potential feed items. If the maximum dietary burden does not increase when recalculated from all potential feed items after acceptable field trial data are submitted then the established tolerances for residues in fat, meat, and meat byproducts of cattle, goats, hogs, horses, and sheep can be lowered.
6. Residue data to support the 9.6 lbs ai/A per year rate on citrus are required. The registrant may provide data to support this use rate or change the labels to reflect the use rate of 6.4 lbs ai/A per year, as supported by current residue data.

No maximum residue limits (MRLs) for diuron have been established by Codex for any agricultural commodity.

If you have questions on this document, please contact the Chemical Review Manager, Diane Isbell, at (703) 308-8154.

Sincerely,

Lois A. Rossi, Director
Special Review and
Reregistration Division

Enclosure:

Overview of the Diuron Risk Assessment
Diuron Summary