

US EPA ARCHIVE DOCUMENT



R.E.D. FACTS

Pesticide Reregistration

Metolachlor

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 0001, metolachlor.

Use Profile

Metolachlor is a broad spectrum herbicide used for general weed control in many agricultural food and feed crops (primarily corn, soybeans and sorghum), and on lawns and turf, ornamental plants, trees, shrubs and vines, rights of way, fencerows and hedgerows, and in forestry. The emulsifiable concentrate formulation is most commonly used, but granular formulations also are available. Ground application is the use method of choice for all sites, although aerial, irrigation, and chemigation application methods also are permitted.

Use practice limitations prohibit applying metolachlor in greenhouses or other enclosed structures, on muck or peat soils, on sweet potatoes or yams, to trees or vines transplanted less than 30 days (and only after depressions around the trees and vines have been filled in), on sand or loamy sand soils, to trees or vines that will bear harvestable fruit within 12 months, to Taloka Silt Loam, on English peas in Northeastern U.S., and on sorghum grown under dry-mulch tillage. They also prohibit grazing livestock in treated areas, feeding or grazing cover crops grown in treated orchards, and grazing or feeding peanut forage or fodder to livestock for 30 days following application.

Regulatory History

Metolachlor was first registered in the U.S. in 1976 for general weed control on turf. This pesticide was the subject of EPA's first Registration Standard, in March 1980. The Agency issued a second Registration Standard for metolachlor in January 1987, and Data Call-In notices in December 1993 and May 1994.

Human Health Assessment

Toxicity

Metolachlor displayed a low level of toxicity in acute tests. It is slightly toxic by the oral, dermal, and inhalation routes, and has been placed in Toxicity Category III (the second-lowest of four categories) for these effects. It is non-irritating to the eyes and skin (Toxicity Category IV), but is positive for skin sensitization in guinea pigs.

While a three-month subchronic feeding study in beagle dogs produced no effects, a six-month study resulted in reduced body weight gains and food consumption in the high dose dogs. A dermal toxicity study using New Zealand white rabbits resulted in increased bilirubin, increased liver weights in males, and increased kidney weights in females. In a chronic feeding study using beagle dogs, metolachlor caused decreased body weight gain.

Metolachlor has been evaluated for carcinogenic activity in both rats and mice. No treatment-related cancer effects were observed in two studies using mice. In studies using rats, metolachlor caused a significant increase in liver nodules and carcinomas in high dose females. In 1991, the Agency's HED Peer Review Committee recommended that metolachlor be classified as a Group C possible human carcinogen, based on increases in liver tumors in the female rat. However, a Peer Review conducted in July 1994 recommended a margin of exposure (MOE) approach to assessing chronic risk since there was no supportable mutagenicity concern, and in light of new information on the relative metabolism of metolachlor indicating that formation of the derivative presumed to be the ultimate carcinogen actually is very low.

Metolachlor shows some evidence of causing developmental toxicity effects in rats but none in rabbits. It was not mutagenic in several tests.

Dietary Exposure

People may be exposed to residues of metolachlor through the diet. Tolerances or maximum residue limits have been established for residues in/on a variety of food and feed commodities including corn, cotton, peanuts, pod crops, potatoes, safflower, sorghum, soybeans, stone fruits, tree nuts, nonbearing citrus and grapes, and cabbage; straw, forage and grain of barley, buckwheat, oats, rice, rye, and wheat; several types of peppers; and eggs, milk, and the fat, meat and meat byproducts of poultry, cattle, goats, hogs, horses, and sheep (please see 40 CFR 180.368(a),(b) and (c)).

Sufficient data are available to determine the adequacy of most established tolerances. (Certain studies generated by Craven Laboratories are being replaced.) However, some tolerances need to be revoked, some need to be replaced, and some separate ones need to be established to bring them up to date with current commodity definitions.

New food/feed additive tolerances are needed for processed potatoes (dry peel, wet peel, granules, and waste from processing) and soybean hulls, and, based on some replacement studies, will likely be needed for peanuts. Under the Delaney clause of the Federal Food, Drug, and Cosmetic Act (FFDCA), however, food and feed additive tolerances may not be established for pesticides that induce cancer in man or animals. Although its cancer-causing potential in humans is weak, EPA still considers metolachlor to be a chemical that "induces cancer" within the meaning of the Delaney clause. Therefore, under current policy EPA would not issue these food and feed additive tolerances, and would not continue in effect tolerances for the associated raw agricultural commodities potatoes, soybeans, and peanuts.

EPA currently is evaluating its policies regarding pesticide tolerances, registrations, and the Delaney clause in light of ongoing legal challenges. Because of these issues, the Agency is unable to make a reregistration eligibility decision at this time regarding the potato, soybean, and peanut uses of metolachlor.

EPA has assessed the dietary risk posed by metolachlor. The Anticipated Residue Concentration (ARC) for the overall U.S. population represents less than 0.2% of the Reference Dose (RfD), or amount believed not to cause adverse effects if consumed daily over a 70-year lifetime. The most highly exposed subgroup, non-nursing infants less than one year old, has an ARC which represents less than 0.6% of the RfD. This low fraction of the allowable RfD is considered to be an acceptable dietary exposure risk.

Occupational and Residential Exposure

Based on current use patterns, handlers (mixers, loaders and applicators) may be exposed to metolachlor during normal use of both granular and liquid formulations. The potential for post-application exposure also exists for people entering treated sites. For many uses of metolachlor, however, this potential is diminished since the herbicide is incorporated into the soil following application. For post-emergent applications, especially applications to turf, there is more of a risk of post-application exposure.

Because metolachlor is a possible human carcinogen and systemic toxicity may result from intermediate exposure (one week to several months), EPA assessed exposure and risk to workers using several major exposure scenarios. Margins of Exposure (MOEs) for subchronic systemic effects are unacceptable (less than 100) for mixers/loaders during aerial applications of liquid metolachlor. In addition, MOEs for

mixers/loaders/applicators during ground applications of liquid metolachlor are acceptable only when certain personal protective equipment (PPE) (gloves and coveralls) is worn by those handlers.

To mitigate these risks to metolachlor handlers, EPA is requiring use of a closed mixing and loading system by mixers/loaders supporting aerial applications of liquid formulations. In addition, mixers/loader/applicators must wear appropriate PPE--chemical-resistant gloves and coveralls over short-sleeved shirts and short pants--during/supporting ground applications of liquid metolachlor formulations.

Post-application exposures do not appear to pose an unreasonable risk to people entering treated areas, as long as they do not reenter immediately after application. Therefore, for all uses within the scope of the Worker Protection Standard (WPS), EPA is requiring a 24-hour restricted entry interval (REI), strengthening the interim 12-hour REI in place until now, as well as PPE for workers who enter treated areas before the REI has expired.

For uses outside the scope of the WPS, EPA is requiring, for liquid applications, a prohibition on entry until sprays have dried, and for granular applications, a prohibition on entry until dusts have settled or the treated area is dry following watering-in.

Human Risk Assessment

Metolachlor is of low acute toxicity but can cause dermal sensitization. It is classified as a "Group C," possible human carcinogen based on increases in liver tumors in the female rat. Metolachlor also shows some evidence of causing developmental toxicity in rats.

Although people may be exposed to residues of metolachlor through the diet, dietary risks appear to be minimal. Systemic toxicity risks to certain handlers (mixers/loaders/applicators) are of concern from intermediate exposure to metolachlor, but will be mitigated by requiring use of closed mixing and loading systems for aerial applications of liquid formulations, and use of certain minimum, baseline PPE (gloves and coveralls) for all handlers during ground use of liquid formulations. To reduce post-application exposure and risk, a more stringent 24-hour REI is being imposed, as is early entry PPE.

Environmental Assessment

Environmental Fate

Parent metolachlor appears to be moderately persistent to persistent. It ranges from mobile to highly mobile in different soils, and has been detected in ground water. Metolachlor is stable to hydrolysis under normal environmental conditions. Degradation is dependent on microbially mediated and abiotic processes. Five major degradates have been identified.

Metolachlor has the potential to range from a moderately mobile to a highly mobile material in different types of soil. It is persistent in surface soil with a half-life in the 6-12 inch soil layer ranging from 7 to 292 days.

Detections were made as far as the 36-48 inch soil layer in some tests. Metolachlor has a low potential to bioaccumulate in fish.

Residues of metolachlor have been detected in ground water in 20 states. Detections in three states have been found to contain residues that exceed the lifetime Health Advisory of 100 ppb for metolachlor. In five other states, concentrations in well water exceed 10% of the Health Advisory Level (HAL). Because of these detections, EPA is concerned about the degradation of water quality that occurs in metolachlor use areas.

Metolachlor is among the top five pesticides found in surface water in the mid-western corn belt. It is detected in a high percentage of surface water samples collected from numerous locations within the corn belt for several months post-application. Comparable levels are found in streams, rivers, and reservoirs.

It appears unlikely that metolachlor concentrations will exceed the 1-10 day or lifetime Health Advisory levels. Although metolachlor is not yet formally regulated by the Safe Drinking Water Act, water supply systems are required to sample and analyze for it. EPA will review these data when they become available.

Ecological Effects

Metolachlor is practically nontoxic to birds on both an acute and a subacute dietary basis. New avian reproduction studies are required to determine its chronic toxicity to birds. Metolachlor is moderately toxic to freshwater fish on an acute basis. It is slightly toxic to aquatic invertebrates on an acute basis. A reproduction study is required to confirm that chronic risks to aquatic invertebrates are similar to risks to fish. Metolachlor is slightly toxic to estuarine fish in acute exposures. Since metolachlor is a herbicide, potential risk to nontarget plants is likely.

Ecological Effects Risk Assessment

Metolachlor is registered for many outdoor uses. Acute as well as chronic exposures to nontarget organisms can result from direct applications, spray drift, and runoff from treated areas.

The level of concern (LOC) for endangered birds is exceeded at an application rate of 6 lbs active ingredient (ai) per acre. In addition, the LOC is exceeded for waterfowl at 6 lbs. ai/acre in short grass.

In addition, the endangered species LOC is exceeded for small mammals eating short grass at an application rate of 2 lbs/acre. The endangered species and restricted use LOCs are exceeded for small mammals eating short grass at an application rate of 4 lbs./acre and higher.

Although no acute effects to aquatic organisms are expected as a result of exposure to metolachlor in deeper water, freshwater fish (the most sensitive aquatic species) trigger the endangered species LOC in a shallow water body one foot deep or less. Risk to non-target plants also is expected.

In summary, endangered species levels of concern are exceeded in some circumstances for birds, small mammals, and endangered fish.

Limitations may be imposed on the use of metolachlor in the future to protect threatened and endangered species when EPA implements the Endangered Species Protection Program.

Risk Mitigation

EPA is requiring the following risk mitigation measures for metolachlor, as discussed earlier:

- An environmental hazard statement is required on product labeling to protect endangered plants.
- Metolachlor will be considered a candidate for classification as a restricted use pesticide for groundwater concerns when the Restricted Use Rule for Ground Water goes into effect.
- Since metolachlor has been detected in ground water as a result of normal agricultural use, EPA will consider metolachlor as a candidate for state management plans when the State Management Plan rule is promulgated.
- The ground water advisory on existing product labels must be modified to reflect current advisory language.
- A surface water advisory also is required since metolachlor can contaminate surface water through ground spray drift and run-off.
- Interim spray drift advisory language must be placed on product labels.
- Metolachlor products applied as liquids that have uses within the scope of the WPS warrant the establishment of minimum PPE requirements for handlers. In addition, mixers and loaders must use closed mixing systems to support aerial applications (see discussion above).
- EPA also is requiring a strengthened 24-hour REI for uses that are within the scope of the WPS.
- Early entry PPE for dermal protection also is required for emulsifiable concentrate formulations.
- Certain entry restrictions also are required for uses outside the scope of the WPS and for homeowner use products.
- To protect ground water, EPA is requiring two small-scale prospective ground water studies on metolachlor, as well as a report on the results of a 19-state monitoring program.

Label statements also are required to reduce mixing and loading risks.

Additional Data Required

EPA is requiring the following generic studies for metolachlor to confirm its regulatory assessments and conclusions: a Foliar Residue Dissipation study and a Dermal Passive Dosimetry Exposure study for use on residential turf. The Agency also 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

All metolachlor end-use products must comply with EPA's current

Changes Required

pesticide product labeling requirements, and with the following (for detailed labeling instructions, please see the metolachlor RED):

Personal Protective Equipment (PPE) Requirements for Pesticide Handlers

Sole-active-ingredient products must be revised to adopt the PPE requirements set forth in this section. Any conflicting PPE requirements on current labeling must be removed. Multiple-active-ingredient products must compare these handler PPE requirements to those on current labeling and retain the more protective.

Handler PPE for Occupational-Use Products (products NOT intended primarily for home use):

Minimum (Baseline) Personal Protective Equipment Requirements: Some uses of metolachlor are within the scope of the Worker Protection Standard (WPS) and some are outside its scope. The minimum (baseline) PPE requirements pertain to both the WPS and nonWPS uses by occupational handlers, since potential exposure is similar.

Granular Formulations: The Agency is establishing no minimum (baseline) PPE for WPS and nonWPS uses of metolachlor products formulated as granules.

EC Formulations: The minimum (baseline) PPE for all WPS and nonWPS occupational uses of metolachlor products formulated as liquids is:

"Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves (see instructions * below)
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading" (see instructions ** below)

* The glove statement for metolachlor is the statement established through instructions in Supplement Three of PR Notice 93-7.

** The words "mixing, or loading" may be removed if the product is formulated as "ready-to-use."

Actual End-Use Product Personal Protective Equipment Requirements: The PPE that would otherwise be established based on the acute toxicity of each end-use product must be compared to the minimum (baseline) PPE specified above, and the more protective must be placed on product labeling.

Placement in Labeling: The PPE must be placed on end-use product labeling in the location specified in PR Notice 93-7, and the format and language of the PPE requirements must be the same as specified there.

Products Intended Primarily for Homeowner Use:

EPA is not establishing minimum (baseline) handler PPE for metolachlor end-use products intended primarily for homeowner use. Any necessary PPE will be established based on the acute toxicity of the end-use product. *Placement in Labeling:* PPE requirements, if any, must be placed on end-use product labeling immediately following the precautionary statements in "Hazards to Humans (and domestic animals)."

Entry Restrictions

Sole-active-ingredient products must be revised to adopt the entry restrictions set forth in this section. Any conflicting entry restrictions on current labeling must be removed. Multiple-active-ingredient products must compare the entry restrictions set forth in this section to those on current labeling and retain the more protective. A specific time-period in hours or days is considered more protective than "sprays have dried" or "dusts have settled."

Occupational-Use Products (products NOT intended primarily for home use):

--Uses Within the Scope of the WPS:

Restricted-Entry Interval: A 24-hour restricted entry interval (REI) is required for uses within the scope of the WPS on all end-use products.

Early-Entry Personal Protective Equipment (PPE):

EC Formulations: The PPE required for early entry following applications of the emulsifiable concentrate is:

- coveralls over short-sleeve shirt and short pants,
- chemical-/resistant gloves,
- chemical-resistant footwear plus socks,
- chemical-resistant headgear for overhead exposures.

Granular Formulations: The PPE required for early entry following applications of granular formulation is:

- coveralls,
- chemical-resistant gloves,
- shoes plus socks.

Placement in Labeling: The REI must be inserted into the standardized REI statement and the PPE required for early entry must be inserted into the standardized early entry PPE statement required by Supplement Three of PR Notice 93-7.

--Uses Not Within the Scope of the WPS:

For liquid applications:

"Do not enter or allow others to enter the treated area until sprays have dried."

For granular applications:

"Do not enter or allow others to enter the treated area until dusts have settled. If soil incorporation is required following the application, do not enter or allow others to enter the treated area (except those persons involved in the incorporation) until the incorporation is complete. If the incorporation is accomplished by watering-in, do not enter or allow others to enter the treated area until the surface is dry following the watering-in."

Placement in Labeling:

If WPS uses also are on label: Follow instructions in PR Notice 93-7 for establishing Non-Agricultural Use Requirements box and place appropriate nonWPS entry restriction in that box.

If no WPS uses are on label: Add appropriate nonWPS entry restriction to labels of all end-use products, except products primarily intended for homeowner use, in a section in the Directions For Use with the heading: "Entry Restrictions:"

Products Primarily Intended for Home Use:

For liquid applications:

"Do not enter or allow others to enter the treated area until sprays have dried."

For granular applications:

"Do not enter or allow others to enter the treated area until dusts have settled. If soil incorporation is required following the application, do not enter or allow others to enter the treated area (except those persons involved in the incorporation) until the incorporation is complete. If the incorporation is accomplished by watering-in, do not enter or allow others to enter the treated area until the surface is dry following the watering-in."

Placement in Labeling: Add entry restriction to labels of products primarily intended for homeowner use in section in Directions For Use with the heading: "Entry Restrictions:"

Other Labeling Requirements

The Agency is requiring the following labeling statements on all metolachlor 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:

"Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4)). When

using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS."

"When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS."

User Safety Requirements:

"Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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."

Skin Sensitizer Statement:

Because metolachlor is classified as a skin sensitizer, EPA is requiring the following statement in the "Hazards to Humans (and Domestic Animals)" section of the Precautionary Statements on the labeling of all end-use products:

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

Soil Incorporation Statement:

Registrants may add the following statement to their labeling in the Agricultural Use Requirements box immediately following the restricted entry interval:

"Exception: if the product is soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated."

Environmental Hazard Statement

"Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment wash water or rinsate."

Rotational Crops Restriction

"Do not rotate to food or feed crops other than those listed on this label."

Ground Water Labeling/Mitigation; Mixing/Loading

The following language regarding mixing/loading setbacks must appear in Precautionary Statements in the Environmental Hazards section of the label:

"This product may not be mixed or loaded within 50 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be mixed/loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash-water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site."

Ground Water Advisory

The following ground water advisory language must be placed on all metolachlor labels:

"This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination."

Surface Water Advisory

The following surface water advisory language must be placed on all metolachlor labels:

"Metolachlor can contaminate surface water through ground spray drift. Under some conditions, metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent

surface waters, frequently flooded areas, areas over-laying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water."

Endangered Plants Labeling

The following is required in the general information section of label:

"Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas."

To prevent off-site movement due to run-off or wind erosion:

"Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation."

"Do not apply to impervious substrates such as paved or highly compacted surfaces."

"Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation."

Spray Drift Labeling

The following language must be placed on the label of each product that can be applied aerially:

"Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

"The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

"The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information."

Aerial drift reduction advisory information must be contained in product labeling. See the metolachlor RED document for this additional required labeling.

Regulatory Conclusion

The use of currently registered products containing metolachlor, in accordance with labeling amended to reflect the risk mitigation measures imposed by this RED, generally will not pose unreasonable risks or adverse effects to humans or the environment. Therefore, all uses of these products, except on potatoes, soybeans, and peanuts, are eligible for reregistration.

EPA is unable to make a reregistration eligibility decision regarding the potato, soybean, and peanut uses because, under current policy, the food and feed additive tolerances needed to support these uses appear to be barred by the Delaney clause in the FFDCA.

Metolachlor products with eligible uses will be reregistered once the required product-specific data, revised Confidential Statements of Formula, and revised labeling are received and accepted by EPA.

For More Information

EPA is requesting public comments on the Reregistration Eligibility Decision (RED) document for metolachlor 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.

Electronic copies of the RED and this fact sheet can be downloaded from the Pesticide Special Review and Reregistration Information System at 703-308-7224. They also are available on the Internet on EPA's gopher server, *GOPHER.EPA.GOV*, or using ftp on *FTP.EPA.GOV*, or using WWW (World Wide Web) on *WWW.EPA.GOV*.

Printed copies of the RED and fact sheet can be obtained from EPA's National Center for Environmental Publications and Information (EPA/NCEPI), PO Box 42419, Cincinnati, OH 45242-0419, telephone 513-489-8190, fax 513-489-8695.

Following the comment period, the metolachlor RED document also 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 metolachlor RED, or reregistration of individual products containing metolachlor, 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 8:00 pm Eastern Standard Time, Monday through Friday.