

reasonable certainty there is no drinking water risk of concern.

3. *From non-dietary exposure.* The term "residential exposure" is used in this document to refer to non-occupational, non-dietary exposure (e.g., for lawn and garden pest control, indoor pest control, termiticides, and flea and tick control on pets). *S*-Metolachlor is currently registered for use on the following residential non-dietary sites: lawn, turf (including sod farms), golf courses, sports fields, and ornamental gardens. Although not labeled as a restricted-use pesticide, the label indicates that it is not intended for use by homeowners but only for use by professional lawn care applicators. On this basis, a residential handler is not expected to be exposed to residues of *S*-metolachlor. Therefore, a residential handler assessment was not conducted.

There is potential for postapplication exposure to adults and children resulting from the use of *S*-metolachlor on residential lawns. Although the use sites for *S*-metolachlor vary from golf courses to ornamental gardens, the residential lawn scenario represents what the Agency considers the likely upper-end of possible exposure. Postapplication exposures from various activities following lawn treatment are considered to be the most common and significant in residential settings.

Postapplication exposure is considered to be short-term (1 to 30

days of exposure) only, based on a label specification of a 6-week interval before the re-application of *S*-metolachlor.

A short-term dermal endpoint was not selected, since no systemic toxicity was seen at the limit dose of 1,000 mg/kg/day; therefore, a dermal risk assessment was not conducted and dermal exposures are assumed to be minimal. Postapplication inhalation exposure is also expected to be minimal since *S*-metolachlor is only applied in an outdoor setting, the vapor pressure is low (2.8×10^{-5} mm Hg at 25 °C), and the label specifies that residents should not re-enter treated areas until after sprays have dried.

The following postapplication incidental oral scenarios following application to lawns and turf have been identified: (1) Short-term oral exposure to toddlers and children following hand-to-mouth exposure; (2) short-term oral exposure to toddlers and children following object-to-mouth exposure; and (3) short-term oral exposure to toddlers and children following soil ingestion. The term "incidental" is used to distinguish the inadvertent oral exposure of small children from exposure that may be expected from treated foods or residues in drinking water.

Since the FQPA safety factor for the protection of children and infants was reduced to 1X, a target MOE value of 100 has been identified for residential

assessments. MOE values greater than 100 are not considered to be of concern to the Agency. MOE estimates are based on the dose level of 50 mg/kg/day established for short-term oral risk assessment.

The exposure and risk estimates for the three residential exposure scenarios are assessed for the day of application (day "0") since children will likely contact the lawn immediately following application.

The following estimates/assumptions were used in the risk assessment: (1) A single application at the maximum label rate of 2.47 lb ai/acre for *S*-metolachlor, (2) exposure duration for children is assumed to be 2 hours per day, (3) the exposed child's weight is 15 kg (33 pounds), and (4) turf transferable residue (TTR) value of 5%, and object-to-mouth residue value of 20% of the application rate assumed.

The exposure estimates for the three postapplication scenarios (object-to-mouth, hand-to-mouth, and incidental soil ingestion) were combined to represent the possible (if not likely) high-end oral exposure resulting from lawn (or similar use). Combined post-application oral risk estimates for *S*-metolachlor are not of concern. The following Table 4 summarizes the results of the residential postapplication assessment:

TABLE 4.—SUMMARY OF RESIDENTIAL POSTAPPLICATION MOE VALUES

Exposure Scenario ^a	S-Metolachlor ^b	Oral Dose (mg/kg/day)	Oral Short-term MOE ^c
Object-to-mouth	S-metolachlor	0.0092	5,400
Hand-to-mouth	S-metolachlor	0.037	1,400
Soil ingestion	S-metolachlor	0.00012	400,000
Combined exposure	S-metolachlor	0.046	1,100

^a Exposure scenario represents oral exposure of children, with an assumed body weight of 15 kg.

^b *S*-metolachlor application rate is 2.47 lb ai/acre.

^c Short-term oral MOE = NOAEL/Dose, where short-term oral NOAEL = 50 mg/kg/day.

S-metolachlor may be used on sports and recreational fields, as well as golf courses. However, the Agency believes that children's exposure to residues of *S*-metolachlor remaining on residential lawns after treatment represents the likely upper-end of exposure. Furthermore, since dermal and inhalation risks are not of concern, and oral exposures from sports and recreational fields, as well as golf courses, are expected to be minimal, risks for these other non-occupational settings are expected to be insignificant.

The Agency has conducted a direct exposure assessment for the use of *S*-

metolachlor on lawns, and determined that there is no risk of concern from this use. No additional risk from *S*-metolachlor is expected from spray drift.

4. *Cumulative exposure to substances with a common mechanism of toxicity.* Section 408(b)(2)(D)(v) of the FFDCA requires that, when considering whether to establish, modify, or revoke a tolerance, the Agency consider "available information" concerning the cumulative effects of a particular pesticide's residues and "other substances that have a common mechanism of toxicity."

The chloroacetanilide pesticides represent a class of food use pesticides that have been given high priority by the Agency for the reassessment of tolerances in accordance with the mandates of FQPA. The group of chloroacetanilide pesticides covered by this review consists of acetochlor, alachlor, butachlor, metolachlor and propachlor. Various members of this group of chloroacetanilide pesticides have been shown to result in several different types of tumor responses in laboratory animals (e.g., nasal, thyroid, liver, and stomach tumors). Therefore, as part of the reassessment, EPA