

# PROPOSED RULEMAKING

## DEPARTMENT OF HEALTH

[28 PA. CODE CH. 25]

### Schedules of Controlled Substances

The Department of Health (Department) proposes to amend the schedules of controlled substances under the powers and duties contained in The Controlled Substance, Drug, Device, and Cosmetic Act (act) (35 P. S. §§ 780-101—780-144).

The Department proposes to amend § 25.72 (relating to schedules of controlled substances) to reschedule the substance dronabinol from Schedule II to Schedule III, to read as set forth in Annex A.

#### A. Purpose of the Amendment

The act recognizes the fact that there is a need to control substances which have potential for abuse while also recognizing that some of those substances have medical uses. The act provides for a system of five schedules of controlled substances as a means of grouping potentially dangerous substances based on their differing potentials for abuse and on their potential for medical use. Penalties for illegal use of the controlled substances vary according to the schedule on which the substance is listed. The health and safety of the public is protected by having a substance placed on the proper schedule. Additionally, proper scheduling ensures appropriate enforcement when a substance is abused or otherwise used illegally.

The act requires that a controlled substance be placed in Schedule II when: (1) there is a high potential for abuse; (2) there is currently accepted medical use in the United States or currently accepted medical use with severe restrictions; and (3) abuse may lead to severe psychic or physical dependence.

The act requires that a controlled substance be placed in Schedule III when: (1) there is a potential for abuse less than the substances listed in Schedules I and II; (2) there is well documented and currently accepted medical use in the United States; and (3) abuse may lead to moderate or low physical dependence or high psychological dependence.

The proposed rulemaking reschedules dronabinol, previously listed in Schedule II of the schedule of controlled substances, to Schedule III.

#### B. Requirements of the Amendment

The Drug, Device and Cosmetic Board (Board) met on December 9, 1999. The meeting notice was published in the *Pennsylvania Bulletin* at 29 Pa.B. 5957 (November 20, 1999). The Board heard the petition of Roxane Laboratories, Inc., which requested that dronabinol be rescheduled from Schedule II to Schedule III. The Board unanimously approved a motion to authorize the Secretary of Health to reschedule the substance. This motion was based on several factors:

1. The United States Drug Enforcement Agency (DEA) rescheduled dronabinol from a Schedule II to a Schedule III substance under the Controlled Substances Act (63 FR 59,751). Both DEA and the Food and Drug Administration (FDA) determined that dronabinol should be rescheduled based on an eight-factor analysis of the scientific and medical data as required by Federal law.

2. The DEA and FDA determined that there is little evidence of actual abuse of dronabinol.

3. In 1996 the Haight Ashbury Clinics, Inc., conducted a study on the abuse potential of dronabinol. No evidence of current abuse or diversion of dronabinol among populations having access to the medicine was found.

4. Cannabis dependent populations have demonstrated no interest in abuse of dronabinol. Studies demonstrate that dronabinol is not a substitute for the problem of marijuana abuse or misuse.

5. The Haight Ashbury study concluded that there is no street market for dronabinol, and no evidence of any diversion of dronabinol for sale as a street drug.

6. A review of the Drug Abuse Warning Network (DAWN) data from 1988 to 1994 shows no reports of dronabinol misuse.

7. The DEA and FDA scientific and medical evaluation determined that dronabinol had only a low to moderate potential to lead to physical dependence and an abuse potential less than Schedule II drugs.

The Secretary of Health, upon advice of the Board, finds that placing dronabinol on Schedule III will permit patients to obtain prescription refills and possibly reduce trips to physicians' offices. This action will allow pharmacies to accept telephone or facsimile prescriptions from physicians rather than mandated written prescriptions. This action will also allow pharmacies to obtain the drug product more quickly for patients. The proposed amendment to the schedules of controlled substances follows similar actions by DEA on July 2, 1999. Dronabinol was approved for marketing by the FDA on May 31, 1985, for use as a treatment for nausea and vomiting in cancer therapy patients who have failed to respond adequately to conventional antiemetic treatments. In 1992, dronabinol was approved by the FDA for use in the treatment of anorexia associated with weight loss of patients with AIDS. Studies have shown that dronabinol has improved the lives of cancer and AIDS patients. Dronabinol has demonstrated short and long term safety and effectiveness relative to appetite stimulation in AIDS patients. Patients who received dronabinol also experienced a stabilization of weight.

#### C. Affected Persons

Persons who depend on this substance for medical treatment will be able to obtain prescription refills, not available with Schedule II controlled substances. Further, physicians would be permitted to have prescriptions filled by telephone, again, not available with Schedule II substances. The patients would benefit in that they would be able to obtain the prescriptions more quickly and efficiently as a result of reduced visits to physicians' offices.

#### D. Fiscal Impact

The proposed amendment to the schedules of controlled substances will have no measurable fiscal impact on the Commonwealth, local government, the private sector or the general public.

#### E. Paperwork Requirements

A system already exists for the handling of controlled substances under the act and the proposed amendment will not increase paperwork.

F. *Effective Date/Sunset Date*

The amendment will become effective immediately upon publication as final rulemaking. The Department's regulations are continually monitored and updated as needed. There is no sunset date.

G. *Statutory Authority*

The amendment to the schedules of controlled substances is proposed under sections 3 and 4 of the act (35 P. S. §§ 780-103 and 780-104.) The amendment is also proposed under section 2102(g) of The Administrative Code of 1929 (71 P. S. § 532(g)).

H. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on July 26, 2000, the Department submitted a copy of the proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House Committee on Health and Human Services and the Senate Committee on Public Health and Welfare. In addition to submitting the proposed rulemaking, the Department has provided IRRC and the Committees with a copy of a detailed Regulatory Analysis Form prepared by the Department in compliance with Executive Order 1996-1, "Regulatory Review and Promulgation." A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, if IRRC has objections to any portion of the proposed rulemaking, it will notify the Department within 10 days of the close of the Committees' review period. The notification shall specify the regulatory review criteria which have not been met by the portion. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the regulations, by the Department, the General Assembly and the Governor, of objections raised.

I. *Contact Person*

Interested persons are invited to submit questions, comments, suggestions or objections regarding the proposal to: John C. Hair, Director, Bureau of Community Program Licensure and Certification, Department of Health, 132 Kline Plaza, Suite A, Harrisburg, PA 17104, (717) 783-8665, within 30 days after publication of this notice in the *Pennsylvania Bulletin*. Persons with a disability who wish to submit comments, suggestions or objections regarding the proposed rulemaking may do so by using V/TT (717) 783-6514 for speech and/or hearing impaired persons or the Pennsylvania AT&T Relay Service at (800) 654-5984[TT]. Persons who require an alternative format of this document may contact Mr. Hair so that necessary arrangements may be made.

ROBERT S. ZIMMERMAN, Jr.,  
*Secretary*

**Fiscal Note:** 10-163. No fiscal impact; (8) recommends adoption.

**Annex A**

**TITLE 28. HEALTH AND SAFETY**

**PART III. PREVENTION OF DISEASES**

**CHAPTER 25. CONTROLLED SUBSTANCES,  
DRUGS, DEVICES AND COSMETICS**

**§ 25.72. Schedules of controlled substances.**

\* \* \* \* \*

(c) *Schedule II*. In determining that a substance comes within this schedule, the Secretary will find: a high potential for abuse; currently acceptable medical use in

the United States; or currently accepted medical use with severe restrictions and abuse may lead to severe psychic or physical dependence. The following substances are included in this schedule:

\* \* \* \* \*

(5) A material, compound, mixture or preparation, unless specifically excepted, which contains a quantity of:

\* \* \* \* \*

**[ (iv) Dronabinol—synthetic—in sesame oil and encapsulated in a soft gelatin capsule but only those drug products approved by the United States Food and Drug Administration.**

**(v) ] (iv) Nabilone.**

\* \* \* \* \*

(d) *Schedule III*. In determining that a substance comes within this schedule, the Secretary will find: a potential for abuse less than the substances listed in Schedule I and II; well documented and currently accepted medical use in the United States; and abuse may lead to moderate or low physical dependence. The following classes of controlled substances are included in this schedule:

\* \* \* \* \*

**(9) A material, compound, mixture or preparation, unless specifically excepted, which contains a quantity of Dronabinol—synthetic—in sesame oil encapsulated in a soft gelatin capsule but only those drug products approved by the United States Food and Drug Administration.**

\* \* \* \* \*

[Pa.B. Doc. No. 00-1321. Filed for public inspection August 4, 2000, 9:00 a.m.]

**ENVIRONMENTAL  
QUALITY BOARD**

**[25 PA. CODE CH. 250]**

**Administration of Land Recycling Program**

The Environmental Quality Board (Board) proposes to amend Chapter 250 (relating to administration of land recycling program). The amendments provide up-to-date scientific information on toxicity and other parameters of substances and corresponding changes along with corrections to the Statewide health standard medium specific concentrations (numeric standards). The amendments also propose policy clarifications and changes raised as issues during the Department of Environmental Protection's (Department) 1998-99 land recycling program evaluation.

This proposal was adopted by the Board at its meeting of June 20, 2000.

A. *Effective Date*

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. *Contact Persons*

For further information Thomas K. Fidler, Chief, Division of Land Recycling and Cleanup Program, P. O. Box 8471, Rachel Carson State Office Building, Harrisburg, PA 17105-8471, (717) 783-7816, or Kurt E. Klapkowski,

Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposal appears in Section I of this preamble. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposal is available electronically through the Department's Web site (<http://www.dep.state.pa.us>).

### C. Statutory Authority

This rulemaking is being made under the authority of sections 104(a), 301(c) and 303(a) of the Land Recycling and Environmental Remediation Standards Act (35 P. S. §§ 6026.104(a), 6026.301(c) and 6026.303(a)) (Act 2). Section 104(a) authorizes the Board to adopt Statewide health standards, appropriate mathematically valid statistical tests to define compliance with Act 2 and other regulations that may be needed to implement the provisions of Act 2. Section 301(c) of Act 2 authorizes the Department to establish by regulation procedures for determining attainment of remediation standards when practical quantitation limits set by the United States Environmental Protection Agency (EPA) have a health risk that is greater than the risk levels established in section 301(c) of Act 2. Section 303(a) of Act 2 authorizes the Board to promulgate Statewide health standards for regulated substances for each environmental medium and methods used to calculate the standards. This rulemaking is also being made under the authority of section 105(a) of the Solid Waste Management Act (35 P. S. § 6018.105(a)) (SWMA). Section 105(a) of the SWMA grants the Board the power and duty to adopt the rules and regulations of the Department to carry out the provisions of the SWMA.

### D. Background and Purpose

Aside from minor typographical or technical corrections to the 1997 rule, there are two basic reasons for the changes in this regulatory proposal. The first is more up-to-date scientific information on parameters which effect the calculation of the Statewide health standard medium-specific concentrations (MSCs). The second is policy clarifications or developments which the Department determined would improve implementation of the Statewide health standard and attainment provisions in the rule.

The Cleanup Standards Scientific Advisory Board (CSSAB) was consulted on the proposed changes. The Department has incorporated into this proposal language suggested by the CSSAB. On February 3, 2000, the CSSAB voted to recommend approval of the proposed regulation package.

### E. Summary of Regulatory Requirements

#### *Subchapter A. General Provisions*

#### 1. Section 250.1. Definitions.

A definition has been added for the term "agricultural purposes" to clarify what they are and that they include food processing. The term is used in § 250.303(c)(1) (relating to aquifer determination; current use and currently planned use of aquifer groundwater). Its scope is important in the nonuse aquifer determination because groundwater usage for drinking water and agricultural purposes are protected.

#### 2. Section 250.5. Public notice by applicant.

The proposal contains a new requirement for newspaper and municipal notices when a request for determina-

tion of nonuse aquifer area is made. These edits are made in conjunction with the changes proposed in §§ 250.6 and 250.303.

#### 3. Section 250.6. Public participation.

Changes are proposed to provide for public participation when request is made for nonuse aquifer determination. Municipalities and public water suppliers will have the opportunity to comment on the nonuse aquifer designations made by the Department. In cases where municipalities propose to "precertify" areas as meeting nonuse aquifer provisions of § 250.303, a public participation plan is required. These edits are made in conjunction with the changes proposed in §§ 250.5 and 250.303.

#### *Subchapter C. Statewide Health Standards*

#### 1. Section 250.303. Aquifer determination; current use and currently planned use of aquifer groundwater.

The proposal includes three changes to this section. Since the determination of nonuse aquifer status affects the use of groundwater in an area, the Department feels it is important that the local municipality and public water supplier be given an opportunity for participation prior to the Department making the determination. The nonuse aquifer designation under the Statewide health standard is based on a number of factors, one of which is that there are no water supply wells in the area defined in the regulations. The proposed changes are made in conjunction with changes in §§ 250.5 and 250.6.

The proposal modifies § 250.303(b) to specify that the conditions of subsection (c) are met 1,000 feet downgradient of all points of compliance plus any areas to which the contamination would reasonably migrate at levels above the MSC for groundwater used or currently planned to be used. The proposal deletes the reference in the 1997 rule that specifically required the conditions to be met "within the property." This phrase is unnecessary because the sentence goes on to include "... any additional areas where the contamination might reasonably migrate at concentrations that exceed the MSC for groundwater used or currently planned to be used." Furthermore, the effect of the present wording is to "disqualify" properties which may be relatively large compared to their contaminant plumes, because the nonuse criteria (such as, must be greater than 1/2 mile from a municipal well which is in the upgradient direction) apply to the entire (large) property even if the contamination could not reasonably ever migrate to every part of it.

A new section is proposed for the regulation to provide for a process whereby municipal authorities, political subdivisions or Commonwealth agencies could "precertify" that a given area meets the requirements for nonuse aquifer designation in § 250.303(b). This would expedite land reuse in urban areas where nonuse aquifer criteria clearly apply. Precertification in advance of any NIR would greatly aid any remediator considering applying Act 2 nonuse aquifer standards in these areas. A public participation plan is required as part of this process.

#### 2. Section 250.304. MSCs for groundwater.

The 1997 rule did not establish a hierarchy for the use of sources of data for aqueous solubility used to calculate the caps for the groundwater MSCs. Section 250.304(f) is proposed to be revised to provide such a hierarchy. This hierarchy was developed in close consultation with the CSSAB. The CSSAB also provided a methodology for selecting the appropriate solubility value as follows:

If the values in the first two references agree within 5%, then the lower of the two values is used.

If the values in the first two references do not agree within 5%, or there are not two values in those references, then the next reference is consulted, until two values within 5% are found. The selected value is the median of all values examined.

If none of the values for a compound agree within 5% from all references, then the selected value is the median of all values examined.

### 3. Section 250.311. Evaluation of ecological receptors.

The third step of the ecological screen evaluates whether Constituents of Potential Ecological Concern (CPECs) are present on the site. A number of CPECs (such as iron) occur naturally and were not originally intended to be included in the evaluation of the presence of CPECs. The proposal amends subsections (c) and (d) to clarify that the evaluation of CPECs on a site includes only those associated with the releases at a site.

#### *Subchapter G. Demonstration of Attainment*

### 1. Section 250.703. General attainment requirements for soil.

The proposal amends this section to make it clear that attainment tests for soils are applied to the volume of soil initially found to be exceeding the selected standards unless that soil is removed from the site. If the contaminated soil is removed from the site, attainment sampling is applied to the base of the excavation outlined by that volume of soil.

### 2. Section 250.707. Statistical tests.

The Department is proposing new wording to this section to address small excavation cleanups of petroleum releases where no prior site characterization is performed. The proposal establishes a quick, clear, nonexceedance demonstration test that could be applied in these situations. This would include sites such as tank sites or spills along highway interstates. Commonly on these small sites excavation is conducted prior to any site characterization sampling. The sampling conducted is at the end of the excavation and is simply to confirm that the excavation is complete. Although such an approach eliminates the site characterization sampling which would typically be required, a nonexceedance test is applied to the excavation attainment samples. This will save time, money and will be more practically applied for remediators of small excavations. Optionally, a remediator could fully characterize the site prior to excavation, and ultimately apply any of the statistical tests provided for under § 250.707.

#### *Appendix A Tables 1—5, and Table 6*

The 1997 rule contained a finite listing of MSCs for regulated substances in Appendix A, Tables 1—4 and in Table 6, Threshold of Regulation Compounds, for substances that had no toxicology information available (Table 6 substances). For some Table 6 substances, toxicology information has become available from the sources listed in § 250.605 (relating to sources of toxicity information) since 1997. For those substances, MSCs under Tables 1—4 have been calculated, appropriate chemical properties added in Table 5, Physical and Toxicological Properties, and those substances have been removed from Table 6. Additionally, several substances that were not included in either Tables 1—5 or Table 6, but which did have toxicology information available, were recommended for inclusion in Tables 1—5 by the CSSAB. Finally, several typographical errors were corrected.

This proposal amends Table 5, Physical and Toxicological Properties, to incorporate updates in toxicity values. These updates in toxicity values can be classified into four categories:

1. New toxicity values that are different from what are presented in Table 5 of the 1997 rule. These are new values developed by the EPA and other agencies since the final-form regulations were promulgated in 1997.

2. Toxicity values for new regulated substances proposed to be added to the current Statewide health standard tables.

3. Toxicity values for the Table 6 substances. Table 6 substances did not have toxicity values available when the final-form regulations were promulgated in 1997. Due to continuous development of toxicity values by the EPA and other agencies, some of the Table 6 substances may have toxicity values now. This proposal contains new MSCs for these substances.

4. Additional toxicity values for the compounds on the current Statewide health standard tables. For some regulated substances, the MSCs in the 1997 rule were developed based on carcinogenic effects only because no toxicity values based on noncarcinogenic effects were available when the final regulation was promulgated in 1997. When additional appropriate carcinogenic or noncarcinogenic toxicity values have been developed since 1997 for regulated substances that are on the current Statewide health standard tables, the Department is proposing to use these new toxicity values to make changes in existing MSCs.

#### *Table 1—MSCs for Organic Regulated Substances in Groundwater*

The 1997 rule contained groundwater MSCs for individual PCB aroclors. The CSSAB recommended that the EPA MCL for total PCB be included in Table 1, in addition to the individual PCB aroclors. Section 303(b)(3) of Act 2 requires MCLs established by the EPA to be the MSC for groundwater in aquifers used or currently planned to be used for drinking water or agricultural purposes.

#### *Table 2—MSCs for Inorganic Regulated Substances in Groundwater*

The 1997 rule applied the groundwater MCL for total chromium in calculating the generic numeric soil to groundwater value for chromium III, but did not do so in calculating the generic value for chromium VI. The CSSAB recommended that the calculation for chromium VI be changed to be consistent with the calculation for chromium III, by utilizing the EPA MCL for total chromium for both.

#### *F. Benefits, Costs and Compliance*

Executive Order 1996-1 requires a cost/benefit analysis of the proposed rulemaking.

##### *Benefits*

Remediators will benefit from the additional flexibility being proposed for demonstrating attainment on groundwater cleanups and in cases where small excavation of soil cleanups are performed. The remediators will also benefit from having information and standards that incorporate more current scientific information than was available when the final-form regulations were promulgated in 1997. The public will benefit from the increased opportunity to participate in the designation of nonuse aquifer areas. Local governments will benefit from their ability to provide comments on nonuse aquifer area designation

decisions and in their ability to "precertify" areas in their community as meeting the nonuse aquifer conditions of § 250.303.

*Compliance Costs*

These proposed amendments do not directly increase costs of compliance. Indirectly, there may be increased costs in some areas and decreased costs in other areas. Increased costs for remediators will occur in cases where the local municipality requests a public involvement plan in the designation of a nonuse aquifer area. These costs will be related to the development of a public participation plan, interaction with the municipality and project delays related to the additional time required to have the municipality involved in the process. Decreased costs will occur associated with the demonstration of attainment of a standard in cases of minor groundwater or soil contamination.

*Compliance Assistance Plan*

The land recycling program regularly provides outreach in two areas: updates to the technical guidance manual supporting Chapter 250, and in annual client workshops where training on the regulations, guidance and policies takes place.

*Paperwork Requirements*

No new paperwork is required by this proposed rulemaking. Additional paperwork will be required when an area-wide determination of nonuse aquifer status is voluntarily sought under § 250.303. It should be noted, however, that a determination will ultimately lead to a reduction in paperwork for remediators who wish to use the area-wide nonuse aquifer determination in future cleanups.

*G. Sunset Review*

These regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

*H. Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on July 11, 2000, the Department submitted a copy of these proposed amendments to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department in compliance with Executive Order 1996-1, "Regulatory Review and Promulgation." A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, if IRRC has objections to any portion of the proposed amendments, it will notify the Department within 10 days of the close of the Committees' review period. The notification shall specify the regulatory review criteria which have not been met by that portion of the proposed amendments to which an objection is made. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the amendments, by the Department, the General Assembly and the Governor of objections raised.

*I. Public Comments*

*Written Comments*—Interested persons are invited to submit comments, suggestions or objections regarding the proposed amendments to the Environmental Quality

Board, P. O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 15th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by September 27, 2000 (within 60 days of publication in the *Pennsylvania Bulletin*). Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by September 27, 2000 (within 60 days following publication in the *Pennsylvania Bulletin*). The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

*Electronic Comments*—Comments may be submitted electronically to the Board at RegComments@dep.state.pa.us and must also be received by the Board by September 27, 2000. A subject heading of the proposal and a return name and address must be included in each transmission. If an acknowledgment of electronic comments is not received by the sender within 2 working days, the comments should be retransmitted to ensure receipt.

JAMES M. SEIF,  
*Chairperson*

**Fiscal Note:** 7-356. No fiscal impact; (8) recommends adoption.

**Annex A**

**TITLE 25. ENVIRONMENTAL PROTECTION**  
**PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**Subpart D. ENVIRONMENTAL HEALTH AND SAFETY**  
**ARTICLE VI. GENERAL HEALTH AND SAFETY**  
**CHAPTER 250. ADMINISTRATION OF LAND RECYCLING PROGRAM**  
**Subchapter A. GENERAL PROVISIONS**

**§ 250.1. Definitions.**

In addition to the words and terms defined in the act, the following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

\* \* \* \* \*

***Agricultural purposes***—Commercial agricultural activities, including, but not limited to, irrigation of crops, watering of livestock, and food production, processing or packaging.

\* \* \* \* \*

**§ 250.5. Public notice by applicant.**

\* \* \* \* \*

**(d) At the same time a request for a nonuse aquifer designation under the Statewide health standard is made to the Department, the remediator shall send notice to every municipality and community water supplier servicing the area requested for designation as nonuse under § 250.303(b) (relating to aquifer determination; current use and currently planned use of aquifer groundwater). The notice shall include a copy of the request for determination of nonuse aquifer submitted to the Department.**

(e) Upon receipt of a request for a nonuse aquifer designation, the municipality and community water supplier shall have 45 days to indicate to the Department and the remediator any information relevant to the requirements of § 250.303.

§ 250.6. Public participation.

\* \* \* \* \*

(e) A public involvement plan shall be developed by the person making a precertification determination request under § 250.303(f) (relating to aquifer determination; current use and currently planned use of aquifer groundwater) in conjunction with all municipalities serving the proposed nonuse aquifer area. The public involvement plan shall be implemented prior to submission of the precertification request to the Department. The public involvement plan shall contain at a minimum:

(1) A notice published in a local newspaper of general circulation and provided to the applicable municipality by letter. The notice to the municipality shall be made by the person initiating the request for nonuse aquifer determination. This notice shall provide a brief description of the area for which the nonuse aquifer designation is being requested.

(2) A public involvement plan with a 90-day comment period. The comment period shall be initiated at the time of the newspaper publication. The nonuse aquifer precertification request may not be submitted to the Department until the conclusion of the 90-day comment period. Comments received during the comment period shall be responded to and provided with the precertification request.

(3) Public access at convenient locations for document review.

(4) Designation of a single contact person to address questions from the community.

(5) A location near the proposed nonuse aquifer designation site for any public hearings and meetings that may be part of the public involvement plan.

Subchapter C. STATEWIDE HEALTH STANDARDS

§ 250.303. Aquifer determination; current use and currently planned use of aquifer groundwater.

\* \* \* \* \*

(b) All groundwater in aquifers is presumed to be used or currently planned for use. The Department may determine, in writing, based on a demonstration by the person remediating the site that groundwater is not used or currently planned to be used, if the public participation requirements of §§ 250.5 and 250.6 (relating to public notice by applicant; and public participation) are met, and if the requirements in subsection (c) are met within the site on the property and within a radius of 1,000 feet downgradient of the points of compliance plus any additional areas to which the contamination has migrated and might reasonably migrate at concentrations that exceed the MSC for groundwater used or currently planned to be used. Methods appropriate for determining current or currently planned future use may include door-to-door surveys, verifying community water system billing records and interviewing community water system suppliers with regard to their currently planned future groundwater use.

(c) The following requirements shall be met within the area described in subsection (b):

(1) No groundwater derived from wells or springs is used [ or currently planned to be used ] for drinking water or agricultural purposes.

\* \* \* \* \*

(4) There are no currently planned future uses of the groundwater in that area by any community water supplier or use for agricultural purposes.

\* \* \* \* \*

(f) After receipt of a nonuse aquifer determination request, and receipt of the required public involvement plan, the Department may make a "precertification" determination that a specific geographic area meets the conditions of subsection (c). Only municipal authorities and political subdivisions are eligible to request this determination. If a municipal ordinance exists which provides for the fulfillment of all aspects of subsection (c), the person applying for a nonuse aquifer designation may use the existence of such an ordinance to demonstrate that the requirements of subsection (c) have been met. A determination made under this subsection expires after 3 years and may be updated at any time additional relevant information comes to the attention of the Department. At the end of the 3-year period, the applicant may request a renewal of determination from the Department.

(g) Public participation requirements of § 250.6(e) shall be met on all "precertification" requests.

§ 250.304. MSCs for groundwater.

\* \* \* \* \*

(f) In addition to the requirements in this section, the MSCs are further limited by solubility as identified in Appendix A, Table 5. The solubility limits are derived from the [ following ] references in subsection (g), which are keyed to the numbers in Table 5 [ : ]. The following procedure was used to determine the appropriate solubility value for each regulated substance: where multiple sources are cited in Table 5, the value for the solubility limit is the median of the values in the indicated references.

(1) Using the hierarchy established in subsection (g), the first two references were consulted. If the solubility values agreed within 5%, the selected value is the lower of the two values.

(2) If the values in step (1) did not agree within 5%, the next references in order were consulted until two values that did agree within 5% were found. The selected value is then the median of all the values consulted.

(3) If none of the values in all of the references in subsection (g) agreed within 5%, the selected value is the median of all values in all references.

(g) The references referred to in subsection (f) are:

[ (1) Howard, P. H. 1991. Handbook of Environmental Fate and Exposure Data for Organic Chemicals. Vol. III, Pesticides. Lewis Publishers.

(2) Lyman, W. J., W. F. Reehl, and D. H. Rosenblatt. 1982. Handbook of Chemical Property Estimation Methods. McGraw-Hill Book Co. N. Y.

(3) Mabey, et. al. 1982. *Aquatic Fate Process Data for Organic Priority Pollutants*. SRI. EPA Contract Nos. 68-01-3867, 68-03-2981.

(4) Milne, G.W.A., Ed. 1995. *CRC Handbook of Pesticides*. CRC Press, Inc.

(5) Montgomery, J. H. 1991. *Groundwater Chemicals Desk Reference*. Vol. II. Lewis Publishers.

(6) Montgomery, J. H., and L. M. Welkom. 1990. *Groundwater Chemicals Desk Reference*. Vol. I. Lewis Publishers.

(7) Montgomery, J. H. 1993. *Agrochemicals Desk Reference, Environmental Data*. Lewis Publishers.

(8) National Library of Medicine (Grateful Med). *Hazardous Substances Databank*.

(9) Nirmalakhandan, N. N., and R. E. Speece. 1988a. *Prediction of Aqueous Solubility of Organic Chemicals Based on Molecular Structure*. ES&T 22:328-337.

(10) Nirmalakhandan, N. N., and R. E. Speece. 1988b. *Prediction of Aqueous Solubility of Organic Chemicals Based on Molecular Structure. 2. Application to PNAS, PCBs, PCDDs, etc.* ES&T. 23:708-713.

(11) Sax, N. I. 1989. *Dangerous Properties of Industrial Materials*. Seventh Edition. Vol. 1-3, Van Nostrand Reinhold.

(12) Environmental Protection Agency. Undated. *IRIS—The Integrated Risk Information System*.

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§ 250.311. Evaluation of ecological receptors.

\* \* \* \* \*

(c) If none of the criteria in subsection (b) are met and if no Constituents of Potential Ecological Concern (CPECs) associated with a release at the site, as identified in Appendix A, Table 8, are detected onsite, an onsite evaluation shall be conducted to document any indications of ecological impact. Ecological impacts requiring more detailed evaluation exist if there are differences of greater than 50% in the density or diversity of species or habitats of concern when compared with nearby reference areas representing equivalent ecological areas without contamination, if available. This evaluation shall also document the presence of threatened and endangered species and exceptional value wetlands. If no ecological impacts requiring further evaluation are identified, and no threatened and endangered species exist within a 2,500-foot radius of the site and no exceptional value wetlands exist on the site, no further evaluation is required and that determination shall be documented in the final report.

(d) If none of the criteria in subsection (b) are met and if CPECs associated with the release at the site are detected onsite or ecological impacts requiring more detailed evaluation, threatened and endangered species, or exceptional value wetlands as identified in subsection (c) exist, a detailed onsite evaluation shall be conducted by a person qualified to perform environmental risk assessments to document any substantial ecological impacts. Substantial ecological impacts exist if there are differences of greater than 20% in the density of species of concern or greater than 50% in the diversity and extent of habitats of concern when compared with nearby reference areas representing equivalent ecological areas without contamination, if available. If there are no substantial ecological impacts identified and there are no threatened or endangered species on or within a 2,500-foot radius of the site and no exceptional value wetlands on the site, that determination shall be provided in the final report.

\* \* \* \* \*

**Subchapter G. DEMONSTRATION OF ATTAINMENT**

**§ 250.703. General attainment requirements for soil.**

\* \* \* \* \*

(b) The [ **volume** ] location of soil to which the attainment criteria is applied shall be determined by circumscribing with an irregular surface those concentrations detected during characterization which exceed the selected standard. **Where this soil is to be removed from the site, the attainment applies to the base of the excavation outlined by that irregular surface.**

\* \* \* \* \*

**§ 250.707. Statistical tests.**

\* \* \* \* \*

(b) The following statistical tests may be accepted by the Department to demonstrate attainment of the Statewide health standard. The statistical test for soil shall apply to each distinct area of contamination. The statistical test for groundwater will apply to each compliance monitoring well. Testing shall be performed individually for each regulated substance identified in the final report site investigation as being present at the site for which a person wants relief from liability under the act. The application of a statistical method shall meet the criteria in subsection (d).

(1) For soil attainment determination at each distinct area of contamination, subparagraph (i), (ii) or (iii) shall be met in addition to the attainment requirements in §§ 250.702 and 250.703 (relating to attainment requirements; and general attainment requirements for soil).

\* \* \* \* \*

(iii) [ **For sites that qualify as localized contamination sites under the document entitled "Closure Requirements for Underground Storage Tank Systems" (DEP Technical Guidance Document No. 2530-BK-DEP2008), where samples are taken in accordance with that document that result in fewer samples being taken than otherwise required in this section, no sample may exceed the Statewide health standard.** ] For sites with a petroleum release where full site characterization has not been done in association with an excavation remediation, attainment of the Statewide health standard shall be demonstrated using the following procedure:

(A) For sites where there is localized contamination as defined in the document "Closure Requirements for Underground Storage Tank Systems" (DEP technical document 2530-BK-DEP2008), samples shall be taken in accordance with that document.

(B) For sites not covered by clause (A), samples shall be taken from the bottom and sidewalls of the excavation in a biased fashion that concentrates on areas where any remaining contamination above the Statewide health standard would most likely be found. The samples shall be taken from these suspect areas based on visual observation and the use of field instruments. If a sufficient number of samples has been collected from all suspect locations and the minimum number of samples has not been collected, or if there are no suspect areas, the locations to meet the minimum number of samples shall be based on a random procedure. The number of sample points required shall be determined in the following way:

(I) For 250 cubic yards or less of excavated contaminated soil, five samples shall be collected.

(II) For each additional 100 cubic yards of excavated contaminated soil, one sample shall be collected.

(III) For excavation involving more than 1,000 cubic yards of contaminated soil, the Department will approve the confirmatory sampling plan.

(IV) Where water is encountered in the excavation and obvious contamination is observed or indicated, soil samples collected just above the soil/water interface shall meet the MSC determined by using the saturated soil component of the soil-to-groundwater numeric value.

(V) Where water is encountered in the excavation and no obvious contamination is observed or indicated, a minimum of two samples shall be collected from the water surface in the excavation.

(C) All sample results shall meet the Statewide health standard.

(iv) For sites where there is a release to surface soils resulting in excavation of 50 cubic yards or less of contaminated soil, samples shall be collected as described in subparagraph (iii)(B), except that two samples shall be collected.

\* \* \* \* \*



**APPENDIX A**

**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R	NR	R	NR	R	NR	R	NR	R	NR		
ACENAPHTHENE	83329	2,200	G	[3,500] 3,800	S	[3,500] 3,800	S	[3,500] 3,800	S	[3,500] 3,800	S	[3,500] 3,800	S
ACENAPHTHYLENE	208968	2,200	G	[3,900] 6,100	[S] G	[3,900] 16,000	S	[3,900] 16,000	S	[3,900] 16,000	S	[3,900] 16,000	S
ACEPHATE	030560-19-1	76	G	300	G	7,600	G	30,000	G	76	G	300	G
ACETALDEHYDE	75070	19	N	[57] 52	N	1,900	N	[5700] 5,200	N	19	N	[57] 52	N
* * * * *													
ACETONITRILE	75058	[58] 1,700	N	[120] 3,500	N	[5,300] 170,000	N	[12,000] 350,000	N	[680] 17,000	N	[1,200] 35,000	N
* * * * *													
AMMONIA	007664-41-7	30,000	H	30,000	H	3,000,000	H	3,000,000	H	30,000	H	30,000	H
AMMONIA SULFAMATE	007773-06-0	2,000	H	2,000	H	200,000	H	200,000	H	2,000	H	2,000	H
* * * * *													
ANTHRACENE	120127	[43] 66	S	[43] 66	S	[43] 66	S	[43] 66	S	[43] 66	S	[43] 66	S
* * * * *													
BAYGON (PROPOXUR)	00114-26-1	3	H	3	H	300	H	300	H	3,000	H	3,000	H
BENOMYL	017804-35-2	1,800	G	2,000	G	2,000	S	2,000	S	1,800	G	2,000	S
BENTAZON	025057-89-0	1,100	G	3,100	G	110,000	G	310,000	G	1,100	G	3,100	G
* * * * *													
BENZIDINE	000092-87-5	0.0029	G	0.01	G	0.29	G	1	G	3	G	11	G

All concentrations in µG/L  
 R = Residential  
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		TDS ≤ 2500				TDS > 2500				R		NR	
		R	NR	R	NR	R	NR	R	NR	R	NR		
BENZO[A]ANTHRACENE	56553	0.9	G	3.6	G	[14] 11	S	[14] 11	S	[14] 11	S	[14] 11	S
* * * * *													
BENZOIC ACID	65850	150,000	G	410,000	G	[3,400,000] 2,700,000	S	[3,400,000] 2,700,000	S	150,000	G	410,000	G
<b>BENZOTRICHLORIDE</b>	<b>000098-07-7</b>	<b>0.051</b>	<b>G</b>	<b>0.2</b>	<b>G</b>	<b>5.1</b>	<b>G</b>	<b>20</b>	<b>G</b>	<b>51</b>	<b>G</b>	<b>200</b>	<b>G</b>
* * * * *													
BHC, BETA-	319857	0.37	G	1.4	G	37	G	[140] 100	[G] S	[370] 100	[G] S	[1,400] 100	[G] S
BHC, DELTA-	319868	[11] 22	G	[31] 61	G	[1,100] 2,200	G	[3,100] 6,100	G	[11,000] 8,000	[G] S	[21,000] 8,000	S
* * * * *													
<b>BIPHENYL, 1, 1-</b>	<b>000092-52-4</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>7,200</b>	<b>S</b>	<b>7,200</b>	<b>S</b>	<b>7,200</b>	<b>S</b>	<b>7,200</b>	<b>S</b>
* * * * *													
BIS[2-ETHYLHEXYL] PHTHALATE	117817	6	M	6	M	[340] 290	S	[340] 290	S	[340] 290	S	[340] 290	S
<b>BISPHENOL A</b>	<b>000080-05-7</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>120,000</b>	<b>S</b>	<b>120,000</b>	<b>S</b>	<b>120,000</b>	<b>S</b>	<b>120,000</b>	<b>S</b>
<b>BROMACIL</b>	<b>000314-40-9</b>	<b>80</b>	<b>H</b>	<b>80</b>	<b>H</b>	<b>8,000</b>	<b>H</b>	<b>8,000</b>	<b>H</b>	<b>80</b>	<b>H</b>	<b>80</b>	<b>H</b>
<b>BROMOCHLOROMETHANE</b>	<b>000074-97-5</b>	<b>90</b>	<b>H</b>	<b>90</b>	<b>H</b>	<b>9,000</b>	<b>H</b>	<b>9,000</b>	<b>H</b>	<b>90</b>	<b>H</b>	<b>90</b>	<b>H</b>
* * * * *													
<b>BROMOXYNIL</b>	<b>001689-84-5</b>	<b>730</b>	<b>G</b>	<b>2,000</b>	<b>G</b>	<b>73,000</b>	<b>G</b>	<b>130,000</b>	<b>S</b>	<b>730</b>	<b>G</b>	<b>2,000</b>	<b>G</b>
<b>BROMOXYNIL OCTANOATE</b>	<b>001689-99-2</b>	<b>80</b>	<b>S</b>	<b>80</b>	<b>S</b>	<b>80</b>	<b>S</b>	<b>80</b>	<b>S</b>	<b>80</b>	<b>S</b>	<b>80</b>	<b>S</b>
<b>BUTADIENE, 1, 3-</b>	<b>000106-99-0</b>	<b>0.15</b>	<b>N</b>	<b>0.65</b>	<b>N</b>	<b>15</b>	<b>N</b>	<b>65</b>	<b>N</b>	<b>15</b>	<b>N</b>	<b>65</b>	<b>N</b>

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		TDS ≤ 2500				TDS > 2500				R		NR	
		R	NR	R	NR	R	NR	R	NR	R	NR		
* * * * *													
<b>BUTYLATE</b>	<b>002008-41-5</b>	<b>350</b>	<b>H</b>	<b>350</b>	<b>H</b>	<b>35,000</b>	<b>H</b>	<b>35,000</b>	<b>H</b>	<b>350</b>	<b>H</b>	<b>350</b>	<b>H</b>
<b>BUTLYBENZENE, N-</b>	<b>000104-51-8</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>	<b>15,000</b>	<b>S</b>	<b>15,000</b>	<b>S</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>
<b>BUTYLBENZENE, SEC-</b>	<b>000135-98-8</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>	<b>17,000</b>	<b>S</b>	<b>17,000</b>	<b>S</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>
<b>BUTYLBENZENE, TERT-</b>	<b>000098-06-6</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>	<b>30,000</b>	<b>S</b>	<b>30,000</b>	<b>S</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>
* * * * *													
CAPTAN	133062	190	G	[740] 500	[G] S	[3,300] 500	S	[3,300] 500	S	[3,300] 500	S	[3,300] 500	S
CARBARYL	63252	700	H	700	H	70,000	H	70,000	H	[83,000] 120,000	S	[83,000] 120,000	S
<b>CARBAZOLE</b>	<b>000086-74-8</b>	<b>33</b>	<b>G</b>	<b>130</b>	<b>G</b>	<b>1,200</b>	<b>S</b>	<b>1,200</b>	<b>S</b>	<b>1,200</b>	<b>S</b>	<b>1,200</b>	<b>S</b>
* * * * *													
<b>CARBOXIN</b>	<b>005234-68-4</b>	<b>700</b>	<b>H</b>	<b>700</b>	<b>H</b>	<b>70,000</b>	<b>H</b>	<b>70,000</b>	<b>H</b>	<b>700</b>	<b>H</b>	<b>700</b>	<b>H</b>
<b>CHLORAMBEN</b>	<b>000133-90-4</b>	<b>100</b>	<b>H</b>	<b>100</b>	<b>H</b>	<b>10,000</b>	<b>H</b>	<b>10,000</b>	<b>H</b>	<b>100</b>	<b>H</b>	<b>100</b>	<b>H</b>
* * * * *													
<b>CHLORO-1, 1-DIFLUOROETHANE, 1-</b>	<b>000075-68-3</b>	<b>140,000</b>	<b>N</b>	<b>290,000</b>	<b>N</b>	<b>1,400,000</b>	<b>S</b>	<b>1,400,000</b>	<b>S</b>	<b>140,000</b>	<b>N</b>	<b>290,000</b>	<b>N</b>
* * * * *													
<b>CHLOROACETOPHENONE, 2-</b>	<b>000532-27-4</b>	<b>0.31</b>	<b>G</b>	<b>0.88</b>	<b>G</b>	<b>31</b>	<b>G</b>	<b>88</b>	<b>G</b>	<b>310</b>	<b>G</b>	<b>880</b>	<b>G</b>
CHLOROANILINE, P-	106478	150	G	410	G	[3,900] 15,000	[S] G	[3,900] 41,000	[S] G	150	G	410	G
* * * * *													
<b>CHLOROBUTANE, 1-</b>	<b>000109-69-3</b>	<b>15,000</b>	<b>G</b>	<b>41,000</b>	<b>G</b>	<b>680,000</b>	<b>S</b>	<b>680,000</b>	<b>S</b>	<b>15,000</b>	<b>G</b>	<b>41,000</b>	<b>G</b>

All concentrations in µG/L  
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		TDS ≤ 2500				TDS > 2500				R		NR	
		R	NR	R	NR	R	NR	R	NR	R	NR		
* * * * *													
<b>CHLORODIFLUOROMETHANE</b>	<b>000075-45-6</b>	<b>100</b>	<b>H</b>	<b>100</b>	<b>H</b>	<b>10,000</b>	<b>H</b>	<b>10,000</b>	<b>H</b>	<b>100</b>	<b>H</b>	<b>100</b>	<b>H</b>
CHLOROETHANE	75003	[28,000] 230	[N] G	[58,000] 900	[N] G	[2,800,000] 23,000	[N] G	[5,700,000] 90,000	[S] G	[2,800,000] 23,000	[S] G	[5,700,000] 90,000	[S] G
* * * * *													
CHLORONAPHTHALENE, 2-	91587	2,900	G	[6,700] 8,200	[S] G	[6,700] 12,000	S	[6,700] 12,000	S	2,900	G	[6,700] 8,200	[S] G
<b>CHLORONITROBENZENE, P-</b>	<b>000100-00-5</b>	<b>37</b>	<b>G</b>	<b>140</b>	<b>G</b>	<b>3,700</b>	<b>G</b>	<b>14,000</b>	<b>G</b>	<b>37</b>	<b>G</b>	<b>140</b>	<b>G</b>
* * * * *													
<b>CHLOROPROPANE, 2-</b>	<b>000075-29-6</b>	<b>280</b>	<b>N</b>	<b>580</b>	<b>N</b>	<b>28,000</b>	<b>N</b>	<b>58,000</b>	<b>N</b>	<b>280</b>	<b>N</b>	<b>580</b>	<b>N</b>
<b>CHLOROTHALONIL</b>	<b>001897-45-6</b>	<b>60</b>	<b>G</b>	<b>240</b>	<b>G</b>	<b>600</b>	<b>S</b>	<b>600</b>	<b>S</b>	<b>60</b>	<b>G</b>	<b>240</b>	<b>G</b>
<b>CHOROTOLUENE, O-</b>	<b>000095-49-8</b>	<b>100</b>	<b>H</b>	<b>100</b>	<b>H</b>	<b>10,000</b>	<b>H</b>	<b>10,000</b>	<b>H</b>	<b>100</b>	<b>H</b>	<b>100</b>	<b>H</b>
CHLORPYRIFOS	2921882	20	H	20	H	[1,300] 1,100	S	[1,300] 1,100	S	20	H	20	H
<b>CHLORSULFURON</b>	<b>064902-72-3</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>130,000</b>	<b>S</b>	<b>130,000</b>	<b>S</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>
<b>CHLORTHAL-DIMETHYL (DACTHAL) (DCPA)</b>	<b>001861-32-1</b>	<b>400</b>	<b>H</b>	<b>400</b>	<b>H</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>
CHRYSENE	218019	1.9	S	[1.8] 1.9	S	[1.8] 1.9	S	[1.8] 1.9	S	[1.8] 1.9	S	[1.8] 1.9	S
* * * * *													
<b>CRESOL, 0- (METHYLPHENOL, 2-)</b>	<b>000095-48-7</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>180,000</b>	<b>G</b>	<b>510,000</b>	<b>G</b>	<b>180,000</b>	<b>G</b>	<b>510,000</b>	<b>G</b>
<b>CRESOL, M (METHYLPHENOL, 3-)</b>	<b>000108-39-4</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>180,000</b>	<b>G</b>	<b>510,000</b>	<b>G</b>	<b>1,800,000</b>	<b>G</b>	<b>2,500,000</b>	<b>S</b>

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		R		NR		R		NR		R		NR	
<b>CRESOL, P (METHYLPHENOL, 4-)</b>	<b>000106-44-5</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>	<b>18,000</b>	<b>G</b>	<b>51,000</b>	<b>G</b>	<b>180,000</b>	<b>G</b>	<b>510,000</b>	<b>G</b>
* * * * *													
<b>CROTONALDEHYDE, TRANS-</b>	<b>000123-73-9</b>	<b>0.35</b>	<b>G</b>	<b>1.40</b>	<b>G</b>	<b>35</b>	<b>G</b>	<b>140</b>	<b>G</b>	<b>35</b>	<b>G</b>	<b>140</b>	<b>G</b>
CUMENE	98828	[25] 1,100	N	[52] 2,300	N	[2,500] 50,000	[N] S	[5,200] 50,000	[N] S	[2,500] 50,000	[N] S	[5,200] 50,000	[N] S
CYCLOHEXANONE	108941	49,000	N	100,000	N	4,900,000	N	[500,000] 10,000,000	[S] N	49,000	N	100,000	N
<b>CYFLUTHRIN</b>	<b>068359-37-5</b>	<b>1</b>	<b>S</b>	<b>1</b>	<b>S</b>	<b>1</b>	<b>S</b>	<b>1</b>	<b>S</b>	<b>1</b>	<b>S</b>	<b>1</b>	<b>S</b>
<b>CYROMAZINE</b>	<b>066215-27-8</b>	<b>270</b>	<b>G</b>	<b>770</b>	<b>G</b>	<b>27,000</b>	<b>G</b>	<b>77,000</b>	<b>G</b>	<b>270</b>	<b>G</b>	<b>770</b>	<b>G</b>
* * * * *													
DDE, 4,4'-	72559	[1.3] 1.9	[S] G	[1.3] 7.6	[S] G	[1.3] 40	S	[1.3] 40	S	[1.3] 40	S	[1.3] 40	S
DDT, 4,4'-	50293	[1.7] 1.9	[S] G	[1.7] 5.5	S	[1.7] 5.5	S	[1.7] 5.5	S	[1.7] 5.5	S	[1.7] 5.5	S
<b>DI(2-ETHYLHEXYL)ADIPATE</b>	<b>000103-23-1</b>	<b>400</b>	<b>M</b>	<b>400</b>	<b>M</b>	<b>40,000</b>	<b>M</b>	<b>40,000</b>	<b>M</b>	<b>200,000</b>	<b>S</b>	<b>200,000</b>	<b>S</b>
* * * * *													
<b>DIAMINOTOLUENE, 2, 4-</b>	<b>000095-80-7</b>	<b>0.21</b>	<b>G</b>	<b>1</b>	<b>G</b>	<b>21</b>	<b>G</b>	<b>81</b>	<b>G</b>	<b>210</b>	<b>G</b>	<b>819</b>	<b>G</b>
* * * * *													
DIBENZO[A,H]ANTHRACENE	53703	0.09	G	0.36	G	[0.5] 0.6	S	[0.5] 0.6	S	[0.5] 0.6	S	[0.5] 0.6	S
* * * * *													
<b>DIBROMOBENZENE, 1, 4-</b>	<b>000106-37-6</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>	<b>20,000</b>	<b>S</b>	<b>20,000</b>	<b>S</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>
* * * * *													

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		R		NR		R		NR		R		NR	
DIBUTYL PHTHALATE, N-	84742	3,700	G	10,000	G	[13,000] 370,000	[S] G	[13,000] 400,000	S	[13,000] 400,000	S	[13,000] 400,000	S
<b>DICHLORO-2-BUTENE, 1, 4-</b>	<b>000764-41-0</b>	<b>0.02</b>	<b>N</b>	<b>0.07</b>	<b>N</b>	<b>2</b>	<b>N</b>	<b>7</b>	<b>N</b>	<b>0.02</b>	<b>N</b>	<b>0.07</b>	<b>N</b>
* * * * *													
DICHLOROBENZIDINE, 3,3-	91941	1.5	G	5.8	G	150	G	580	G	1,500	G	[5,800] 3,100	[G] S
* * * * *													
<b>DICHLOROPROPENE, 1, 3-</b>	<b>000542-75-6</b>	<b>1</b>	<b>N</b>	<b>5</b>	<b>N</b>	<b>120</b>	<b>N</b>	<b>490</b>	<b>N</b>	<b>120</b>	<b>N</b>	<b>490</b>	<b>N</b>
* * * * *													
<b>DICYCLOPENTADIENE</b>	<b>000077-73-6</b>	<b>1</b>	<b>N</b>	<b>1</b>	<b>N</b>	<b>55</b>	<b>N</b>	<b>120</b>	<b>N</b>	<b>1</b>	<b>N</b>	<b>1</b>	<b>N</b>
* * * * *													
DIETHYL PHTHALATE	84662	5,000	H	5,000	H	500,000	H	500,000	H	[900,000] 1,100,000	S	[900,000] 1,100,000	S
<b>DIFLUBENZURON</b>	<b>035367-38-5</b>	<b>200</b>	<b>S</b>	<b>200</b>	<b>S</b>	<b>200</b>	<b>S</b>	<b>200</b>	<b>S</b>	<b>200</b>	<b>S</b>	<b>200</b>	<b>S</b>
* * * * *													
<b>DIMETHOXYBENZIDINE, 3, 3-</b>	<b>000119-90-4</b>	<b>47</b>	<b>G</b>	<b>190</b>	<b>G</b>	<b>4,700</b>	<b>G</b>	<b>19,000</b>	<b>G</b>	<b>47,000</b>	<b>G</b>	<b>60,000</b>	<b>S</b>
DIMETHYLAMINOAZOBENZENE, P-	60117	0.14	G	0.57	G	14	G	57	G	140	G	[230] 570	[S] G
<b>DIMETHYLANILINE, N, N-</b>	<b>000121-69-7</b>	<b>73</b>	<b>G</b>	<b>200</b>	<b>G</b>	<b>7,300</b>	<b>G</b>	<b>20,000</b>	<b>G</b>	<b>7,300</b>	<b>G</b>	<b>20,000</b>	<b>G</b>
<b>DIMETHYLBENZIDINE, 3, 3-</b>	<b>000119-93-7</b>	<b>0.07</b>	<b>G</b>	<b>0.28</b>	<b>G</b>	<b>7</b>	<b>G</b>	<b>28</b>	<b>G</b>	<b>72</b>	<b>G</b>	<b>280</b>	<b>G</b>
* * * * *													

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		TDS ≤ 2500				TDS > 2500				R		NR			
		R		NR		R		NR		R		NR			
<b>DIPHENAMID</b>	<b>000957-51-7</b>	<b>200</b>	<b>H</b>	<b>200</b>	<b>H</b>	<b>20,000</b>	<b>H</b>	<b>20,000</b>	<b>H</b>	<b>200</b>	<b>H</b>	<b>200</b>	<b>H</b>		
* * * * *															
DIPHENYLHYDRAZINE, 1,2-	122667	0.83	G	3.3	G	83	G	[330]	250	[G]	[S]	[330]	250	[G]	[S]
* * * * *															
<b>ENDOSULFAN</b>	<b>000115-29-7</b>	<b>58</b>	<b>N</b>	<b>120</b>	<b>N</b>	<b>480</b>	<b>S</b>	<b>480</b>	<b>S</b>	<b>480</b>	<b>S</b>	<b>480</b>	<b>S</b>		
ENDOSULFAN I (ALPHA)	959988	220	G	[530]	500	S	[530]	500	S	220	G	[530]	500	S	
ENDOSULFAN II (BETA)	33213659	220	G	[280]	450	S	[280]	450	S	220	G	[280]	450	S	
* * * * *															
<b>ETHEPHON</b>	<b>016672-87-0</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>	<b>18,000</b>	<b>G</b>	<b>51,000</b>	<b>G</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>		
ETHION	563122	18	G	51	G	[600]	850	S	[600]	850	S	18	G	51	G
ETHOXYETHANOL, 2- (EGEE)	110805	[3,900]	N	[8,200]	N	[390,000]	N	[820,000]	N	[390,000]	N	[820,000]	N		
		550		1,200		55,000		120,000		55,000		120,000			
* * * * *															
<b>ETHYL DIPROPYLTHIOCARBAMATE, S- (EPTC)</b>	<b>000759-94-4</b>	<b>910</b>	<b>G</b>	<b>2,600</b>	<b>G</b>	<b>91,000</b>	<b>G</b>	<b>260,000</b>	<b>G</b>	<b>910</b>	<b>G</b>	<b>2,600</b>	<b>G</b>		
* * * * *															
<b>ETHYL METHACRYLATE</b>	<b>000097-63-2</b>	<b>870</b>	<b>N</b>	<b>1,800</b>	<b>N</b>	<b>87,000</b>	<b>N</b>	<b>180,000</b>	<b>N</b>	<b>870</b>	<b>N</b>	<b>1,800</b>	<b>N</b>		
* * * * *															

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<b>ETHYLENE THIOUREA (ETU)</b>	<b>000096-45-7</b>	<b>3</b>	<b>H</b>	<b>3</b>	<b>H</b>	<b>300</b>	<b>H</b>	<b>300</b>	<b>H</b>	<b>3,000</b>	<b>H</b>	<b>3,000</b>	<b>H</b>
<b>ETHYLP-NITROPHENYL PHENYLPHOSPHOROTHIOATE</b>	<b>002104-64-5</b>	<b>0.37</b>	<b>G</b>	<b>1</b>	<b>G</b>	<b>37</b>	<b>G</b>	<b>100</b>	<b>G</b>	<b>0.37</b>	<b>G</b>	<b>1</b>	<b>G</b>
* * * * *													
<b>FENVALERATE (PYDRIN)</b>	<b>051630-58-1</b>	<b>85</b>	<b>S</b>	<b>85</b>	<b>S</b>	<b>85</b>	<b>S</b>	<b>85</b>	<b>S</b>	<b>85</b>	<b>S</b>	<b>85</b>	<b>S</b>
<b>FLUOMETURON</b>	<b>002164-17-2</b>	<b>90</b>	<b>H</b>	<b>90</b>	<b>H</b>	<b>9,000</b>	<b>H</b>	<b>9,000</b>	<b>H</b>	<b>90</b>	<b>H</b>	<b>90</b>	<b>H</b>
FLUORANTHENE	206440	[270] 260	S	[270] 260	S	[270] 260	S	[270] 260	S	[270] 260	S	[270] 260	S
FLUORENE	86737	[190] 1,500	[S] G	[190] 1,900	S	[190] 1,900	S	[190] 1,900	S	[190] 1,900	S	[190] 1,900	S
* * * * *													
<b>FOSETYL-AL</b>	<b>039148-24-8</b>	<b>110,000</b>	<b>G</b>	<b>310,000</b>	<b>G</b>	<b>11,000,000</b>	<b>G</b>	<b>31,000,000</b>	<b>G</b>	<b>110,000</b>	<b>G</b>	<b>310,000</b>	<b>G</b>
<b>FURAN</b>	<b>000110-00-9</b>	<b>10</b>	<b>N</b>	<b>20</b>	<b>N</b>	<b>970</b>	<b>N</b>	<b>2,000</b>	<b>N</b>	<b>970</b>	<b>N</b>	<b>2,000</b>	<b>N</b>
FURFURAL	98011	[110] 97	[G] N	[290] 200	N	[11,000] 9,700	[G] N	[29,000] 20,000	N	[110] 97	[G] N	[290] 200	N
* * * * *													
HEXACHLOROBENZENE	118741	1	M	1	M	[6.2] 6	S	[6.2] 6	S	[6.2] 6	S	[6.2] 6	S
* * * * *													
HEXACHLOROCYCLOPENTADIENE	77474	50	M	50	M	[3,400] 1,800	S	[3,400] 1,800	S	[3,400] 1,800	S	[3,400] 1,800	S
* * * * *													
<b>HEXYTHIAZOX (SAVEY)</b>	<b>078587-05-0</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>	<b>500</b>	<b>S</b>
<b>HYDRAZINE/HYDRAZINE SULFATE</b>	<b>000302-01-2</b>	<b>0.01</b>	<b>N</b>	<b>0.04</b>	<b>N</b>	<b>1</b>	<b>N</b>	<b>4</b>	<b>N</b>	<b>0.09</b>	<b>N</b>	<b>0.37</b>	<b>N</b>

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		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
<b>HYDROQUINONE</b>	<b>000123-31-9</b>	<b>1,500</b>	<b>G</b>	<b>4,100</b>	<b>G</b>	<b>150,000</b>	<b>G</b>	<b>410,000</b>	<b>G</b>	<b>1,500,000</b>	<b>G</b>	<b>4,100,000</b>	<b>G</b>
* * * * *													
<b>IPRODIONE</b>	<b>036734-19-7</b>	<b>1,500</b>	<b>G</b>	<b>4,100</b>	<b>G</b>	<b>13,000</b>	<b>S</b>	<b>13,000</b>	<b>S</b>	<b>1,500</b>	<b>G</b>	<b>4,100</b>	<b>G</b>
* * * * *													
<b>MANEB</b>	<b>012427-38-2</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>	<b>18,000</b>	<b>G</b>	<b>23,000</b>	<b>S</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>
<b>MERPHOS OXIDE</b>	<b>000078-48-8</b>	<b>1.10</b>	<b>G</b>	<b>3</b>	<b>G</b>	<b>110</b>	<b>G</b>	<b>310</b>	<b>G</b>	<b>1.10</b>	<b>G</b>	<b>3</b>	<b>G</b>
* * * * *													
<b>METHAMIDOPHOS</b>	<b>010265-92-6</b>	<b>2</b>	<b>G</b>	<b>5</b>	<b>G</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>	<b>2</b>	<b>G</b>	<b>5</b>	<b>G</b>
* * * * *													
METHOXYCHLOR	72435	40	M	40	M	[100] 45	S	[100] 45	S	[100] 45	S	[100] 45	S
<b>METHOXYETHANOL, 2-</b>	<b>000109-86-4</b>	<b>37</b>	<b>G</b>	<b>100</b>	<b>G</b>	<b>3,700</b>	<b>G</b>	<b>10,000</b>	<b>G</b>	<b>37</b>	<b>G</b>	<b>100</b>	<b>G</b>
<b>METHYL ACETATE</b>	<b>000079-20-9</b>	<b>37,000</b>	<b>G</b>	<b>100,000</b>	<b>G</b>	<b>3,700,000</b>	<b>G</b>	<b>10,000,000</b>	<b>G</b>	<b>37,000</b>	<b>G</b>	<b>100,000</b>	<b>G</b>
<b>METHYL ACRYLATE</b>	<b>000096-33-3</b>	<b>1,100</b>	<b>G</b>	<b>3,100</b>	<b>G</b>	<b>110,000</b>	<b>G</b>	<b>310,000</b>	<b>G</b>	<b>110,000</b>	<b>G</b>	<b>310,000</b>	<b>G</b>
* * * * *													
METHYL ISOBUTYL KETONE	108101	[220] 190	N	[470] 410	N	[22,000] 19,000	N	[47,000] 41,000	N	[22,000] 19,000	N	[47,000] 41,000	N
METHYL METHACRYLATE	80626	[780] 1,900	N	4,100	N	190,000	N	410,000	N	190,000	N	410,000	N
* * * * *													
<b>METHYL STYRENE (MIXED ISOMERS)</b>	<b>025013-15-4</b>	<b>220</b>	<b>G</b>	<b>610</b>	<b>G</b>	<b>22,000</b>	<b>G</b>	<b>61,000</b>	<b>G</b>	<b>220</b>	<b>G</b>	<b>610</b>	<b>G</b>

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		R	NR	R	NR	R	NR	R	NR	R	NR		
* * * * *													
METHYLENE BIS (2-CHLOROANILINE) 4, 4-	000101-14-4	5	G	20	G	510	G	2,000	G	5	G	20	G
METHYLNAPHTHALENE, 2-	91576	[1,500] 730	G	[4,100] 2,000	G	25,000	S	25,000	S	[1,500] 730	G	[4,100] 2,000	G
METHYLSTYRENE, ALPHA	000098-83-9	680	N	1,400	N	68,000	N	140,000	N	680	N	1,400	N
* * * * *													
NAPROPAMIDE	015299-99-7	3,700	G	10,000	G	70,000	S	70,000	S	3,700	G	10,000	G
* * * * *													
NITROPHENOL, 2-	88755	[2,300] 290	G	[6,300] 820	G	[230,000] 29,000	G	[630,000] 82,000	G	[2,100,000] 290,000	[S] G	[2,100,000] 820,000	[S] G
* * * * *													
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3	0.03	N	0.11	N	3	N	11	N	2.70	N	11	N
* * * * *													
NITROSO-N-ETHYLUREA, N-	000759-73-9	0.005	G	0.019	G	0.47	G	1.9	G	0.47	G	1.9	G
* * * * *													
PCB-1016 (AROCLOR)	12674112	2.6	G	7.2	G	[49] 250	S	[49] 250	S	2.6	G	7.2	G
PCB-1221 (AROCLOR)	11104282	1.3	G	5.2	G	130	G	[200] 520	[S]G	1.3	G	5.2	G
* * * * *													

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		R		NR		R		NR		R		NR	
PCB-1242 (AROCLOR)	53469219	1.3	G	5.2	G	[130] 100	[G] S	[240] 100	S	1.3	G	5.2	G
PCB-1248 (AROCLOR)	12672296	0.37	G	1.4	G	[6] 37	[S]G	[6] 54	S	0.37	G	1.4	G
PCB-1254 (AROCLOR)	11097691	0.37	G	1.4	G	[12] 37	[S] G	[12] 57	S	0.37	G	1.4	G
* * * * *													
<b>PEBULATE</b>	<b>001114-71-2</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>92,000</b>	<b>S</b>	<b>92,000</b>	<b>S</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>
PENTACHLOROBENZENE	608935	29	G	82	G	[240] 740	S	[240] 740	S	[240] 740	S	[240] 740	S
PENTACHLORONITROBENZENE	82688	2.5	G	10	G	250	G	[590] 440	S	[590] 440	S	[590] 440	S
* * * * *													
PHENANTHRENE	85018	[1,200] 1,100	S	[1,200] 1,100	S	[1,200] 1,100	S	[1,200] 1,100	S	[1,200] 1,100	S	[1,200] 1,100	S
* * * * *													
<b>PHENYLPHENOL, 2-</b>	<b>000090-43-7</b>	<b>340</b>	<b>G</b>	<b>1,300</b>	<b>G</b>	<b>34,000</b>	<b>G</b>	<b>130,000</b>	<b>G</b>	<b>340,000</b>	<b>G</b>	<b>700,000</b>	<b>G</b>
* * * * *													
<b>PICLORAM</b>	<b>001918-02-1</b>	<b>500</b>	<b>M</b>	<b>500</b>	<b>M</b>	<b>50,000</b>	<b>M</b>	<b>50,000</b>	<b>M</b>	<b>500</b>	<b>M</b>	<b>500</b>	<b>M</b>
<b>POLYCHLORINATED BIPHENYLS (AROCLORS) (PCBS)</b>	<b>001336-36-3</b>	<b>1</b>	<b>M</b>	<b>1</b>	<b>M</b>	<b>50</b>	<b>M</b>	<b>50</b>	<b>M</b>	<b>1</b>	<b>M</b>	<b>1</b>	<b>M</b>
* * * * *													

All concentrations in µG/L  
R = Residential  
NR = Non-Residential  
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H = Lifetime Health Advisory Level  
G = Ingestion  
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S = Aqueous Solubility Cap

**APPENDIX A**  
**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
<b>PROPANIL</b>	<b>000709-98-8</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>	<b>18,000</b>	<b>G</b>	<b>51,000</b>	<b>G</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>
<b>PROPHAM</b>	<b>000122-42-9</b>	<b>730</b>	<b>G</b>	<b>2,000</b>	<b>G</b>	<b>73,000</b>	<b>G</b>	<b>200,000</b>	<b>G</b>	<b>730</b>	<b>G</b>	<b>2,000</b>	<b>G</b>
<b>PROPYLBENZENE, N-</b>	<b>000103-65-1</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>	<b>37,000</b>	<b>G</b>	<b>52,000</b>	<b>S</b>	<b>370</b>	<b>G</b>	<b>1,000</b>	<b>G</b>
* * * * *													
<b>PYRENE</b>	129000	<b>[13] 130</b>	<b>S</b>	<b>[13] 130</b>	<b>S</b>	<b>[13] 130</b>	<b>S</b>	<b>[13] 130</b>	<b>S</b>	<b>[13] 130</b>	<b>S</b>	<b>[13] 130</b>	<b>S</b>
* * * * *													
<b>QUINOLINE</b>	<b>000091-22-5</b>	<b>0.06</b>	<b>G</b>	<b>0.22</b>	<b>G</b>	<b>6</b>	<b>G</b>	<b>22</b>	<b>G</b>	<b>55</b>	<b>G</b>	<b>220</b>	<b>G</b>
<b>QUIZALOFOP (ASSURE)</b>	<b>076578-14-8</b>	<b>300</b>	<b>S</b>	<b>300</b>	<b>S</b>	<b>300</b>	<b>S</b>	<b>300</b>	<b>S</b>	<b>300</b>	<b>S</b>	<b>300</b>	<b>S</b>
<b>RONNEL</b>	<b>000299-84-3</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>40,000</b>	<b>S</b>	<b>40,000</b>	<b>S</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>
* * * * *													
<b>TEBUTHIURON</b>	<b>034014-18-1</b>	<b>500</b>	<b>H</b>	<b>500</b>	<b>H</b>	<b>50,000</b>	<b>H</b>	<b>50,000</b>	<b>H</b>	<b>500</b>	<b>H</b>	<b>500</b>	<b>H</b>
<b>TERBACIL</b>	<b>005902-51-2</b>	<b>90</b>	<b>H</b>	<b>90</b>	<b>H</b>	<b>9,000</b>	<b>H</b>	<b>9,000</b>	<b>H</b>	<b>90</b>	<b>H</b>	<b>90</b>	<b>H</b>
* * * * *													
<b>TETRACHLOROBENZENE, 1,2,4,5-</b>	<b>000095-94-3</b>	<b>11</b>	<b>G</b>	<b>31</b>	<b>G</b>	<b>580</b>	<b>S</b>	<b>580</b>	<b>S</b>	<b>580</b>	<b>S</b>	<b>580</b>	<b>S</b>
* * * * *													
<b>TETRACHLOROETHANE, 1,1,1,2-</b>	<b>000630-20-6</b>	<b>70</b>	<b>H</b>	<b>70</b>	<b>H</b>	<b>7,000</b>	<b>H</b>	<b>7,000</b>	<b>H</b>	<b>7,000</b>	<b>H</b>	<b>7,000</b>	<b>H</b>
* * * * *													

All concentrations in µG/L  
 R = Residential  
 NR = Non-Residential  
 M = Maximum Contaminant Level  
 H = Lifetime Health Advisory Level  
 G = Ingestion  
 N = Inhalation  
 S = Aqueous Solubility Cap

**APPENDIX A**  
**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
<b>TETRAETHYLDITHIOPYRO-PHOSPHATE</b>	<b>003689-24-5</b>	<b>5</b>	<b>N</b>	<b>10</b>	<b>N</b>	<b>490</b>	<b>N</b>	<b>1,000</b>	<b>N</b>	<b>5</b>	<b>N</b>	<b>10</b>	<b>N</b>
<b>THIOFANOX</b>	<b>039196-18-4</b>	<b>11</b>	<b>G</b>	<b>31</b>	<b>G</b>	<b>1,100</b>	<b>G</b>	<b>3,100</b>	<b>G</b>	<b>11</b>	<b>G</b>	<b>31</b>	<b>G</b>
* * * * *													
TOLUIDINE, O	95534	[3.7] 2.8	G	[14] 11	G	[370] 280	G	[1,400] 1,100	G	[3,700] 2,800	G	[14,000] 11,000	G
* * * * *													
<b>TRIALATE</b>	<b>002303-17-5</b>	<b>470</b>	<b>G</b>	<b>1,300</b>	<b>G</b>	<b>4,000</b>	<b>S</b>	<b>4,000</b>	<b>S</b>	<b>470</b>	<b>G</b>	<b>1,300</b>	<b>G</b>
* * * * *													
<b>TRICHLORO-1, 2, 2-TRIFLUOROETHANE, 1,1,2-</b>	<b>000076-13-1</b>	<b>83,000</b>	<b>N</b>	<b>170,000</b>	<b>S</b>	<b>170,000</b>	<b>S</b>	<b>170,000</b>	<b>S</b>	<b>170,000</b>	<b>N</b>	<b>170,000</b>	<b>S</b>
TRICHLOROBENZENE, 1,2,4-	120821	70	M	70	M	7,000	M	7,000	M	[49,000] 44,000	S	[49,000] 44,000	S
* * * * *													
<b>TRICHLOROPROPANE, 1,1,2-</b>	<b>000598-77-6</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>	<b>18,000</b>	<b>G</b>	<b>51,000</b>	<b>G</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>
* * * * *													
<b>TRICHLOROPROPENE, 1,2,3-</b>	<b>000096-19-5</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>	<b>18,000</b>	<b>G</b>	<b>51,000</b>	<b>G</b>	<b>180</b>	<b>G</b>	<b>510</b>	<b>G</b>
<b>TRIFLURALIN</b>	<b>001582-09-8</b>	<b>5</b>	<b>H</b>	<b>5</b>	<b>H</b>	<b>500</b>	<b>H</b>	<b>500</b>	<b>H</b>	<b>5</b>	<b>H</b>	<b>5</b>	<b>H</b>
<b>TRIMETHYLBENZENE, 1,3,4-(TRIMETHYLBENZENE, 1,2,4)</b>	<b>000095-63-6</b>	<b>16</b>	<b>N</b>	<b>35</b>	<b>N</b>	<b>1,600</b>	<b>N</b>	<b>3,500</b>	<b>N</b>	<b>1,600</b>	<b>N</b>	<b>3,500</b>	<b>N</b>
<b>TRIMETHYLBENZENE, 1,3,5-</b>	<b>000108-67-8</b>	<b>16</b>	<b>N</b>	<b>35</b>	<b>N</b>	<b>1,600</b>	<b>N</b>	<b>3,500</b>	<b>N</b>	<b>16</b>	<b>N</b>	<b>35</b>	<b>N</b>
<b>TRINITROTOLUENE, 2,4,6-</b>	<b>000118-96-7</b>	<b>2</b>	<b>H</b>	<b>2</b>	<b>H</b>	<b>200</b>	<b>H</b>	<b>200</b>	<b>H</b>	<b>2</b>	<b>H</b>	<b>2</b>	<b>H</b>

All concentrations in µG/L  
R = Residential  
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M = Maximum Contaminant Level  
H = Lifetime Health Advisory Level  
G = Ingestion  
N = Inhalation  
S = Aqueous Solubility Cap

**APPENDIX A**  
**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
* * * * *													
<b>VINYL BROMIDE (BROMOETHENE)</b>	<b>000593-60-2</b>	<b>1</b>	<b>N</b>	<b>6</b>	<b>N</b>	<b>140</b>	<b>N</b>	<b>580</b>	<b>N</b>	<b>14</b>	<b>N</b>	<b>58</b>	<b>N</b>
* * * * *													
WARFARIN	81812	[0.00000092] 11	[S] G	[0.00000092] 31	[S] G	[0.00000092] 1,100	[S] G	[0.00000092] 3,100	[S] G	[0.00000092] 11,000	[S] G	[0.00000092] 17,000	S
* * * * *													
<b>ZINEB</b>	<b>012122-67-7</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>	<b>10,000</b>	<b>S</b>	<b>10,000</b>	<b>S</b>	<b>1,800</b>	<b>G</b>	<b>5,100</b>	<b>G</b>

All concentrations in µG/L  
 R = Residential  
 NR = Non-Residential  
 M = Maximum Contaminant Level  
 H = Lifetime Health Advisory Level  
 G = Ingestion  
 N = Inhalation  
 S = Aqueous Solubility Cap

**APPENDIX A**  
**Table 2—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USE AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R	NR		
		R	NR	R	NR	R	NR						
* * * * *													
VANADIUM	7440622	<b>[2.1] 260</b>	G	<b>[5.8] 720</b>	G	<b>[210] 26,000</b>	G	<b>[580] 72,000</b>	G	<b>[2,100] 260,000</b>	G	<b>[5,800] 720,000</b>	G
* * * * *													

All concentrations in µg/L (except asbestos)  
M = Maximum Contaminant Level  
H = Lifetime Health Advisory Level  
SMCL = Secondary Maximum Contaminant Level  
G = Ingestion  
N = Inhalation

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
* * * * *							
<b>ACEPHATE</b>	<b>030560-19-1</b>	<b>880</b>	<b>G</b>	<b>9,100</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
ACETALDEHYDE	75070	140	N	[520] 480	N	[600] 560	N
* * * * *							
ACETONITRILE	75058	[400] 1,100	N	[1,100] 3,200	N	[1,300] 3,600	N
* * * * *							
<b>AMMONIA</b>	<b>007664-41-7</b>	<b>1,900</b>	<b>N</b>	<b>5,300</b>	<b>N</b>	<b>6,100</b>	<b>N</b>
<b>AMMONIUM SULFAMATE</b>	<b>007773-06-0</b>	<b>44,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>BAYGON (PROPOXUR)</b>	<b>000114-26-1</b>	<b>880</b>	<b>G</b>	<b>11,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
<b>BENOMYL</b>	<b>017804-35-2</b>	<b>11,000</b>	<b>G</b>	<b>140,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
<b>BENTAZON</b>	<b>025057-89-0</b>	<b>6,600</b>	<b>G</b>	<b>84,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
BENZENE	71432	[38] 41	N	[200] 210	N	[230] 240	N
<b>BENZIDINE</b>	<b>000092-87-5</b>	<b>0.078</b>	<b>G</b>	<b>0.34</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>BENZOTRICHLORIDE</b>	<b>000098-07-7</b>	<b>1.4</b>	<b>G</b>	<b>6.1</b>	<b>G</b>	<b>10,000</b>	<b>C</b>
* * * * *							
BHC, DELTA-	319868	[66] 130	G	[840] 1,700	G	190,000	C
BHC, GAMMA (LINDANE)	58899	[16] 14	G	[72] 61	G	190,000	C
BIPHENYL, 1,1-	<b>000092-52-4</b>	<b>11,000</b>	<b>G</b>	<b>140,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
BIS(2-CHLORO-ISOPROPYL)ETHER	108601	[2,700] 32	N	[7,400] 160	N	[8,500] 190	N
* * * * *							
<b>BISPHENOL A</b>	<b>00080-05-7</b>	<b>11,000</b>	<b>G</b>	<b>140,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
<b>BROMACIL</b>	<b>000314-40-9</b>	<b>29,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
<b>BROMOCHLOROMETHANE</b>	<b>000074-97-5</b>	<b>2,900</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>BROMOXYNIL</b>	<b>001689-84-5</b>	<b>4,400</b>	<b>G</b>	<b>56,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
<b>BROMOXYNIL OCTANOATE</b>	<b>001689-99-2</b>	<b>4,400</b>	<b>G</b>	<b>56,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>

All concentrations in mg/kg

G = Ingestion

N = Inhalation

C = Cap



**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
<b>BUTADIENE, 1,3-</b>	<b>000106-99-0</b>	<b>5.3</b>	<b>G</b>	<b>23</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>BUTYLATE</b>	<b>002008-41-5</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>BUTYLBENZENE, N-</b>	<b>000104-51-8</b>	<b>2,200</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>BUTYLBENZENE, SEC-</b>	<b>000135-98-8</b>	<b>2,200</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>BUTYLBENZENE, TERT-</b>	<b>000098-06-6</b>	<b>2,200</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>CARBAZOLE</b>	<b>000086-74-8</b>	<b>900</b>	<b>G</b>	<b>4,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>CARBOXIN</b>	<b>005234-68-4</b>	<b>22,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
<b>CHLORAMBEN</b>	<b>000133-90-4</b>	<b>3,300</b>	<b>G</b>	<b>42,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
CHLORDANE	57749	[13] 51	G	[61] 230	G	190,000	C
<b>CHLORO-1, 1-DIFLUOROETHANE, 1-</b>	<b>000075-68-3</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>CHLOROACETOPHENONE, 2-</b>	<b>000532-27-4</b>	<b>1.9</b>	<b>G</b>	<b>24</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>CHLOROBUTANE, 1-</b>	<b>000109-69-3</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>CHLORODIFLUOROMETHANE</b>	<b>000075-45-6</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
CHLOROETHANE	75003	[10,000] 6,200	[C] G	10,000	C	10,000	C
* * * * *							
<b>CHLORONITROBENZENE, P-</b>	<b>000100-00-5</b>	<b>990</b>	<b>G</b>	<b>4,400</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>CHLOROPROPANE, 2-</b>	<b>000075-29-6</b>	<b>1,900</b>	<b>N</b>	<b>5,400</b>	<b>N</b>	<b>6,100</b>	<b>N</b>
<b>CHLOROTHALONIL</b>	<b>001897-45-6</b>	<b>1,600</b>	<b>G</b>	<b>7,200</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
<b>CHLOROTOLUENE, O-</b>	<b>000095-49-8</b>	<b>4,400</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>CHLORSULFURON</b>	<b>064902-72-3</b>	<b>11,000</b>	<b>G</b>	<b>140,000</b>	<b>G</b>	<b>190,000</b>	<b>G</b>

All concentrations in mg/kg  
 G = Ingestion  
 N = Inhalation  
 C = Cap

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
<b>CHLORTHAL-DIMETHYL (DACTHAL) (DCPA)</b>	<b>001861-32-1</b>	<b>2,200</b>	<b>G</b>	<b>28,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>CRESOL, 0- (METHYLPHENOL, 2-)</b>	<b>000095-48-7</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>CRESOL, M (METHYLPHENOL, 3-)</b>	<b>000108-39-4</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>CRESOL, P (METHYLPHENOL, 4-)</b>	<b>000106-44-5</b>	<b>1,100</b>	<b>G</b>	<b>14,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>CROTONALDEHYDE, TRANS-</b>	<b>000123-73-9</b>	<b>9.4</b>	<b>G</b>	<b>42</b>	<b>G</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>CYFLUTHRIN</b>	<b>068359-37-5</b>	<b>5,500</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>CYROMAZINE</b>	<b>066215-27-8</b>	<b>1,700</b>	<b>G</b>	<b>21,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>DI(2-ETHYLHEXYL)ADIPATE</b>	<b>000103-23-1</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>DIAMINOTOLUENE, 2,4-</b>	<b>000095-80-7</b>	<b>5.6</b>	<b>G</b>	<b>25</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>DIBROMOBENZENE, 1,4-</b>	<b>000106-37-6</b>	<b>2,200</b>	<b>G</b>	<b>28,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>DICHLORO-2-BUTENE, 1,4-</b>	<b>000764-41-0</b>	<b>91,000</b>	<b>N</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>DICHLOROBENZENE, 1,3-</b>	541731	<b>[5,900] 60</b>	<b>N</b>	<b>[10,000] 170</b>	<b>[C] N</b>	<b>[10,000] 190</b>	<b>[C] N</b>
* * * * *							
<b>DICHLOROMETHANE (METHYLENE CHLORIDE)</b>	75092	<b>[670] 680</b>	<b>N</b>	3,500	<b>N</b>	4,000	<b>N</b>
* * * * *							
<b>DICHLOROPROPANE, 1,2-</b>	78875	<b>[16] 18</b>	<b>N</b>	<b>[85] 91</b>	<b>N</b>	<b>[97] 100</b>	<b>N</b>
<b>DICHLOROPROPENE, 1,3-</b>	<b>000542-75-6</b>	<b>8.6</b>	<b>N</b>	<b>44</b>	<b>N</b>	<b>51</b>	<b>N</b>
* * * * *							
<b>DICYCLOPENTADIENE</b>	<b>000077-73-6</b>	<b>6,600</b>	<b>G</b>	<b>84,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							

All concentrations in mg/kg

G = Ingestion

N = Inhalation

C = Cap

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
<b>DIFLUBENZURON</b>	<b>035367-38-5</b>	<b>4,400</b>	<b>G</b>	<b>56,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>DIMETHOXYBENZIDINE, 3,3-</b>	<b>000119-90-4</b>	<b>1,300</b>	<b>G</b>	<b>5,700</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>DIMETHYLANILINE, N,N-</b>	<b>000121-69-7</b>	<b>440</b>	<b>G</b>	<b>5,600</b>	<b>G</b>	<b>10,000</b>	<b>C</b>
<b>DIMETHYLBENZIDINE, 3,3-</b>	<b>000119-93-7</b>	<b>1.9</b>	<b>G</b>	<b>8.6</b>	<b>G</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>DIPHENAMID</b>	<b>000957-51-7</b>	<b>6,600</b>	<b>G</b>	<b>84,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>ENDOSULFAN</b>	<b>000115-29-7</b>	<b>1,300</b>	<b>G</b>	<b>17,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>ETHEPHON</b>	<b>016672-87-0</b>	<b>1,100</b>	<b>G</b>	<b>14,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
ETHOXYETHANOL, 2- (EGEE)	110805	<b>[10,000]</b>	<b>3,800</b>	[C] N	10,000	C	10,000
* * * * *							
<b>ETHYL DIPROPYLTHIOCARBAMATE, S- (EPTC)</b>	<b>000759-94-4</b>	<b>5,500</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>ETHYL METHACRYLATE</b>	<b>000097-63-2</b>	<b>20,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>ETHYLENE THIOUREA (ETU)</b>	<b>000096-45-7</b>	<b>18</b>	<b>G</b>	<b>220</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
<b>ETHYLP-NITROPHENYL PHENYLPHOSPHOROTHIOATE</b>	<b>002104-64-5</b>	<b>2.2</b>	<b>G</b>	<b>28</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>FENVALERATE (PYDRIN)</b>	<b>051630-58-1</b>	<b>5,500</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>FLUOMETURON</b>	<b>002164-17-2</b>	<b>2,900</b>	<b>G</b>	<b>36,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>FOSETYL-AL</b>	<b>039148-24-8</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
<b>FURAN</b>	<b>000110-00-9</b>	<b>220</b>	<b>G</b>	<b>2,800</b>	<b>G</b>	<b>10,000</b>	<b>C</b>

All concentrations in mg/kg  
 G = Ingestion  
 N = Inhalation  
 C = Cap

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
* * * * *							
HEXYTHIAZOX (SAVEY)	078587-05-0	5,500	G	70,000	G	190,000	C
HYDRAZINE/HYDRAZINE SULFATE	000302-01-2	0.064	N	0.33	N	0.38	N
HYDROQUINONE	000123-31-9	8,800	G	110,000	G	190,000	C
* * * * *							
IPRODIONE	036734-19-7	8,800	G	110,000	G	190,000	C
* * * * *							
MANEB	012427-38-2	1,100	G	14,000	G	190,000	C
MERPHOS OXIDE	000078-48-8	6.6	G	84	G	10,000	C
* * * * *							
METHAMIDOPHOS	010265-92-6	11	G	140	G	190,000	C
* * * * *							
METHOXYETHANOL, 2-	000109-86-4	220	G	1,100	N	1,200	N
METHYL ACETATE	000079-20-9	10,000	C	10,000	C	10,000	C
METHYL ACRYLATE	000096-33-3	6,600	G	10,000	C	10,000	C
* * * * *							
METHYL STYRENE (MIXED ISOMERS)	025013-15-4	1,300	G	17,000	G	190,000	C
* * * * *							
METHYLENE BIS(2-CHLOROANILINE), 4,4-	000101-14-4	140	G	610	G	190,000	C
METHYLNAPHTHALENE, 2-	91576	[8,800] 4,400	G	10,000	C	10,000	C
METHLYSTYRENE, ALPHA	000098-83-9	15,000	G	190,000	C	190,000	C
NAPHTHALENE	91203	[8,800] 4,400	G	110,000	G	190,000	C
* * * * *							
NAPROPAMIDE	015299-99-7	22,000	G	190,000	C	190,000	C
* * * * *							
NITROPHENOL, 2-	88755	[14,000] 1,800	G	[170,000] 22,000	G	190,000	C

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential			Non-Residential				
		0-15 feet			Surface Soil 0-2 feet		Subsurface Soil 2-15 feet		
NITROPHENOL, 4-	100027	[14,000]	1,800	G	[170,000]	22,000	G	190,000	C
* * * * *									
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3		3.3	G	15	G		10,000	C
* * * * *									
NITROSO-N-ETHYLUREA, N-	000759-73-9		0.13	G	0.57	G		190,000	C
* * * * *									
PEBULATE	001114-71-2		10,000	C	10,000	C		10,000	C
* * * * *									
PHENYLPHENOL, 2-	000090-43-7		9,200	G	41,000	G		190,000	C
* * * * *									
PICLORAM	001918-02-1		15,000	G	190,000	C		190,000	C
POLYCHLORINATED BIPHENYLS (AROCLORS) (PCBS)	001336-36-3		9	G	40	G		190,000	C
* * * * *									
PROPANIL	000709-98-8		1,100	G	14,000	G		190,000	C
PROPHAM	000122-42-9		4,400	G	56,000	G		190,000	C
PROPYLBENZENE, N-	000103-65-1		2,200	G	10,000	C		10,000	C
* * * * *									
QUINOLINE	000091-22-5		1.5	G	6.6	G		10,000	C
QUIZALOFOP (ASSURE)	076578-14-8		2,000	G	25,000	G		190,000	C
RONNEL	000299-84-3		11,000	G	140,000	G		190,000	C
* * * * *									
TEBUTHIURON	034014-18-1		15,000	G	190,000	C		190,000	C
TERBACIL	005902-51-2		2,900	G	36,000	G		190,000	C
* * * * *									
TETRACHLOROBENZENE, 1,2,4,5-	000095-94-3		66	G	840	G		190,000	C
* * * * *									
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6		690	G	3,100	G		190,000	C
* * * * *									

All concentrations in mg/kg  
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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
<b>TETRAETHYLDITHIOPYROPHOSPHATE</b>	<b>003689-24-5</b>	<b>33</b>	<b>N</b>	<b>92</b>	<b>N</b>	<b>110</b>	<b>N</b>
<b>THIOFANOX</b>	<b>039196-18-4</b>	<b>66</b>	<b>G</b>	<b>840</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
TOLUIDINE, O-	95534	[99] 75	G	[440] 330	G	10,000	C
* * * * *							
<b>TRIALATE</b>	<b>002303-17-5</b>	<b>2,900</b>	<b>G</b>	<b>36,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>TRICHLORO- 1,2,2-TRIFLUOROETHANE, 1,1,2-</b>	<b>000076-13-1</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>	<b>190,000</b>	<b>C</b>
* * * * *							
TRICHLOROBENZENE, 1,3,5-	108703	[2,200] 1,300	G	[28,000] 17,000	G	190,000	C
TRICHLOROETHANE, 1,1,1-	71556	[10,000] 4,400	G	10,000	C	10,000	C
* * * * *							
<b>TRICHLOROPROPANE, 1,1,2-</b>	<b>000508-77-6</b>	<b>1,100</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
* * * * *							
<b>TRICHLOROPROPENE, 1,2,3-</b>	<b>000096-19-5</b>	<b>1,100</b>	<b>G</b>	<b>10,000</b>	<b>C</b>	<b>10,000</b>	<b>C</b>
<b>TRIFLURALIN</b>	<b>001582-09-8</b>	<b>1,700</b>	<b>G</b>	<b>10,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
<b>TRIMETHYLBENZENE, 1,3,4-(TRIMETHYLBENZENE, 1,2,4-)</b>	<b>000095-63-6</b>	<b>110</b>	<b>N</b>	<b>320</b>	<b>N</b>	<b>360</b>	<b>N</b>
<b>TRIMETHYLBENZENE, 1,3,5-</b>	<b>000108-67-8</b>	<b>110</b>	<b>N</b>	<b>320</b>	<b>N</b>	<b>360</b>	<b>N</b>
<b>TRINITROTOLUENE, 2,4,6-</b>	<b>000118-96-7</b>	<b>110</b>	<b>G</b>	<b>1,400</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
* * * * *							
<b>VINYL BROMIDE (BROMOETHENE)</b>	<b>000593-60-2</b>	<b>160</b>	<b>G</b>	<b>720</b>	<b>G</b>	<b>190,000</b>	<b>C</b>
VINYL CHLORIDE	75014	[3.8] 1.3	N	[20] 3.7	N	[22] 4.3	N
* * * * *							
XYLENES (TOTAL)	1330207	[10,000] 8,300	[C] N	10,000	C	10,000	C
<b>ZINEB</b>	<b>012122-67-7</b>	<b>11,000</b>	<b>G</b>	<b>140,000</b>	<b>G</b>	<b>190,000</b>	<b>C</b>

All concentrations in mg/kg

G = Ingestion

N = Inhalation

C = Cap

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers						Soil Buffer Distance (feet)		
		TDS ≤ 2500					TDS > 2500					Residential			Non-Residential					
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value		E	
ACENAPHTHENE	83329	220	2700	E	[350] 380	[4,300] 4,700	E	[350] 380	[4,300] 4,700	E	[350] 380	[4,300] 4,700	E	[350] 380	[4,300] 4,700	E	[350] 380	[4,300] 4,700	E	15
ACENAPHTHYLENE	208968	220	2,500	E	[390] 610	[4,400] 6,900	E	[390] 1,600	[4,400] 18,000	E	[390] 1,600	[4,400] 18,000	E	[390] 1,600	[4,400] 18,000	E	[390] 1,600	[4,400] 18,000	E	15
ACEPHATE	030560-19-1	7.6	0.84	E	30	3.3	E	760	84	E	3,000	330	E	8	1	E	30	3	E	NA
ACETALDEHYDE	75070	1.9	0.23	E	[5.7] 5.2	[0.69] 0.63	E	190	23	E	[570] 520	[69] 63	E	1.9	0.23	E	[5.7] 5.2	[0.69] 0.63	E	NA
* * * * *																				
ACETONITRILE	75058	[5.8] 170	[0.65] 19	E	[12] 350	[1.3] 39	E	[580] 10,000	[65] 1,900	E	[1,200] 10,000	[130] 3,900	E	[58] 1,700	[6.5] 190	E	[120] 3,500	[13] 390	E	NA
* * * * *																				
AMMONIA	007664-41-7	3,000	330	E	3,000	330	E	10,000	10,000	C	10,000	10,000	C	3,000	330	E	3,000	330	E	NA
AMMONIUM SULFAMATE	007773-06-0	200	22	E	200	22	E	20,000	2,200	E	20,000	2,200	E	200	22	E	200	22	E	NA
* * * * *																				
ANTHRACENE	120127	[4.3] 6.6	[230] 350	E	[4.3] 6.6	[230] 350	E	[4.3] 6.6	[230] 350	E	[4.3] 6.6	[230] 350	E	[4.3] 6.6	[230] 350	E	[4.3] 6.6	[230] 350	E	10
* * * * *																				
BAYGON (PROPOXUR)	000114-26-1	0.3	0.033	E	0.3	0.033	E	30	3	E	30	3	E	300	33	E	300	33	E	NA
BENOMYL	017804-35-2	180	20	E	200	22	E	200	22	E	200	22	E	180	20	E	200	22	E	20
BENTAZON	025057-89-0	110	12	E	310	34	E	11,000	1,200	E	31,000	3,400	E	110	12	E	310	34	E	NA
* * * * *																				
BENZIDINE	000092-87-5	0.00029	0.000032	E	0.0011	0.00012	E	0.029	0.0032	E	0.11	0.012	E	0.29	0.032	E	1.1	0.12	E	5

<sup>1</sup> For other options see Section 250.308  
 All concentrations in mg/kg  
 E = Number calculated by the soil to groundwater equation in Section 250.308  
 C = Cap  
 NA = The soil buffer distance option is not available for this substance

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
BENZO[A]ANTHRACENE	56553	0.09	80	E	0.36	320	E	[1.4] 1.1	[1,200] 980	E	[1.4] 1.1	[1,200] 980	E	[1.4] 1.1	[1,200] 980	E	[1.4] 1.1	[1,200] 980	E	5
* * * * *																				
BENZOIC ACID	65850	15000	2,900	E	41,000	7,900	E	190,000	[65,000] 52,000	E	190,000	[65,000] 52,000	E	15,000	2,900	E	41,000	7,900	E	NA
BENZOTRICHLORIDE	000098-07-7	0.0051	0.00057	E	0.02	0.0022	E	0.51	0.057	E	2	0.22	E	5.1	0.57	E	20	2.2	E	30
* * * * *																				
BHC, BETA-	319857	0.037	0.22	E	0.14	0.82	E	3.7	22	E	[14] 10	[82] 58	E	[37] 10	[220] 58	E	[140] 10	[820] 58	E	15
BHC, DELTA-	319868	[1.1] 2.2	[5.4] 11	E	[3.1] 6.1	[15] 30	E	[110] 220	[540] 1,100	E	[310] 610	[1,500] 3,000	E	[1,100] 800	[5,400] 3,900	E	[2,100] 800	[10,000] 3,900	E	20
* * * * *																				
BIPHENYL, 1,1-	000092-52-4	180	20	E	510	57	E	720	80	E	720	80	E	720	80	E	720	80	E	20
* * * * *																				
BIS[2-ETHYLHEXYL] PHTHALATE	117817	0.6	130	E	0.6	130	E	[34] 29	[7,400] 6,300	E	[34] 29	[7,400] 6,300	E	[34] 29	[7,400] 6,300	E	[34] 29	[7,400] 6,300	E	10
BISPHENOL A	000080-05-7	180	20	E	510	57	E	12,000	1,300	E	12,000	1,300	E	12,000	1,300	E	12,000	1,300	E	20
BROMACIL	000314-40-9	8	0.89	E	8	0.89	E	800	89	E	800	89	E	8	0.89	E	8	0.89	E	NA
BROMOCHLOROMETHANE	000074-97-5	9	1	E	9	1	E	900	100	E	900	100	E	9	1	E	9	1	E	NA
* * * * *																				
BROMOXYNIL	001689-84-5	73	8.1	E	200	22	E	7,300	810	E	13,000	1,400	E	73	8.1	E	200	22	E	NA

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**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers				Soil Buffer Distance (feet)				
		TDS ≤ 2500					TDS > 2500					Residential		Non-Residential						
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E		100 X GW MSC	Generic Value	E	
<b>BROMOXYNIL OCTANOATE</b>	<b>001689-99-2</b>	<b>8</b>	<b>0.89</b>	E	<b>8</b>	<b>0.89</b>	E	<b>8</b>	<b>0.89</b>	E	<b>8</b>	<b>0.89</b>	E	<b>8</b>	<b>0.89</b>	E	<b>8</b>	<b>0.89</b>	E	<b>15</b>
<b>BUTADIENE, 1,3-</b>	<b>000106-99-0</b>	<b>0.015</b>	<b>0.0017</b>	E	<b>0.065</b>	<b>0.0072</b>	E	<b>1.5</b>	<b>0.17</b>	E	<b>6.5</b>	<b>0.72</b>	E	<b>1.5</b>	<b>0.17</b>	E	<b>6.5</b>	<b>0.72</b>	E	<b>NA</b>
* * * * *																				
<b>BUTYLATE</b>	<b>002008-41-5</b>	<b>35</b>	<b>3.9</b>	E	<b>35</b>	<b>3.9</b>	E	<b>3,500</b>	<b>390</b>	E	<b>3,500</b>	<b>390</b>	E	<b>35</b>	<b>3.9</b>	E	<b>35</b>	<b>3.9</b>	E	<b>30</b>
<b>BUTYLBENZENE, N-</b>	<b>000104-51-8</b>	<b>37</b>	<b>4.1</b>	E	<b>100</b>	<b>11</b>	E	<b>1,500</b>	<b>170</b>	E	<b>1,500</b>	<b>170</b>	E	<b>37</b>	<b>4.1</b>	E	<b>100</b>	<b>11</b>	E	<b>15</b>
<b>BUTYLBENZENE, SEC-</b>	<b>000135-98-8</b>	<b>37</b>	<b>4.1</b>	E	<b>100</b>	<b>11</b>	E	<b>1,700</b>	<b>190</b>	E	<b>1,700</b>	<b>190</b>	E	<b>37</b>	<b>4.1</b>	E	<b>100</b>	<b>11</b>	E	<b>30</b>
<b>BUTYLBENZENE, TERT-</b>	<b>000098-06-6</b>	<b>37</b>	<b>4.1</b>	E	<b>100</b>	<b>11</b>	E	<b>3,000</b>	<b>330</b>	E	<b>3,000</b>	<b>330</b>	E	<b>37</b>	<b>4.1</b>	E	<b>100</b>	<b>11</b>	E	<b>30</b>
* * * * *																				
CAPTAN	133062	19	12	E	[74] 50	[45] 30	E	[330] 50	[200] 30	E	[330] 50	[200] 30	E	[330] 50	[200] 30	E	[330] 50	[200] 30	E	NA
CARBARYL	63252	70	42	E	70	42	E	7,000	4,200	E	7,000	4,200	E	[8,300] 12,000	[5,000] 7,200	E	[8,300] 12,000	[5,000] 7,200	E	NA
<b>CARBAZOLE</b>	<b>000086-74-8</b>	<b>3.3</b>	<b>0.37</b>	E	<b>13</b>	<b>1.4</b>	E	<b>120</b>	<b>13</b>	E	<b>120</b>	<b>13</b>	E	<b>120</b>	<b>13</b>	E	<b>120</b>	<b>13</b>	E	<b>15</b>
* * * * *																				
<b>CARBOXIN</b>	<b>005234-68-4</b>	<b>70</b>	<b>7.8</b>	E	<b>70</b>	<b>7.8</b>	E	<b>7,000</b>	<b>780</b>	E	<b>7,000</b>	<b>780</b>	E	<b>70</b>	<b>8</b>	E	<b>70</b>	<b>8</b>	E	<b>NA</b>
<b>CHLORAMBEN</b>	<b>000133-90-4</b>	<b>10</b>	<b>1.1</b>	E	<b>10</b>	<b>1.1</b>	E	<b>1,000</b>	<b>110</b>	E	<b>1,000</b>	<b>110</b>	E	<b>10</b>	<b>1.1</b>	E	<b>10</b>	<b>1.1</b>	E	<b>NA</b>
* * * * *																				
<b>CHLORO-1,1-DIFLUOROETHANE, 1-</b>	<b>000075-68-3</b>	<b>14,000</b>	<b>1,600</b>	E	<b>29,000</b>	<b>3,200</b>	E	<b>140,000</b>	<b>16,000</b>	E	<b>140,000</b>	<b>16,000</b>	E	<b>14,000</b>	<b>1,600</b>	E	<b>29,000</b>	<b>3,200</b>	E	<b>NA</b>
* * * * *																				

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**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
CHLOROACETOPHENONE, 2-	000532-27-4	0.031	0.0034	E	0.088	0.0098	E	3.1	0.34	E	8.8	0.98	E	31	3.4	E	88	9.8	E	NA
CHLOROANILINE, P-	106478	15	19	E	41	51	E	[300] 1,500	[400] 1,900	E	[300] 4,100	[490] 5,100	E	15	19	E	41	51	E	NA
* * * * *																				
CHLOROBUTANE, 1-	000109-69-3	1,500	170	E	4,100	460	E	10,000	7,600	E	10,000	7,600	E	1,500	170	E	4,100	460	E	30
* * * * *																				
CHLORODIFLUOROMETHANE	000075-45-6	10	1.1	E	10	1.1	E	1,000	110	E	1,100	110	E	10	1	E	10	1	E	NA
CHLOROETHANE	75003	[2,800] 23	[600] 5	E	[5,800] 90	[1,200] 19	[G] E	[10,000] 2,300	[10,000] 500	[C] E	[10,000] 9,000	[10,000] 1,900	[C] E	[10,000] 2,300	[10,000] 500	E	[10,000] 9,000	[10,000] 1,900	[C] E	NA
* * * * *																				
CHLORONAPHTHALENE, 2-	91587	290	6,200	E	[670] 820	[14,000] 18,000	E	[670] 1,200	[14,000] 26,000	E	[670] 1,200	[14,000] 26,000	E	290	6,200	E	[670] 820	[14,000] 18,000	E	15
CHLORONITROBENZENE, P-	000100-00-5	3.7	0.41	E	14	1.6	E	370	41	E	1,400	160	E	3.7	0.41	E	14	1.6	E	NA
* * * * *																				
CHLOROPROPANE, 2-	000075-29-6	28	3.1	E	58	6.4	E	2,800	310	E	5,800	640	E	28	3.1	E	58	6.4	E	NA
CHLOROTHALONIL	001897-45-6	6	0.67	E	24	2.7	E	60	6.7	E	60	6.7	E	6	0.67	E	24	2.7	E	30
CHLOROTOLUENE, O-	000095-49-8	10	1.1	E	10	1.1	E	1,000	110	E	1,000	110	E	10	1.1	E	10	1.1	E	30
CHLORPYRIFOS	2921882	2	23	E	2	23	E	[130] 110	[1,500] 1,300	E	[130] 110	[1,500] 1,300	E	2	23	E	2	23	E	15
CHLORSULFURON	064902-72-3	180	20	E	510	57	E	13,000	1,400	E	13,000	1,400	E	180	20	E	510	57	E	N/A

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		TDS ≤ 2500					TDS > 2500					Residential		Non-Residential						
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E		100 X GW MSC	Generic Value	E	
CHLORTHAL-DIMETHYL (DACTHAL) (DCPA)	001861-32-1	40	4.4	E	40	4.4	E	50	5.6	E	50	5.6	E	50	5.6	E	50	5.6	E	15
CHRYSENE	218019	[0.18] 0.19	[220] 230	E	[0.18] 0.19	[220] 230	E	[0.18] 0.19	[220] 230	E	[0.18] 0.19	[220] 230	E	[0.18] 0.19	[220] 230	E	[0.18] 0.19	[220] 230	E	5
* * * * *																				
CRESOL, 0- (METHYLPHENOL, 2-)	000095-48-7	180	20	E	510	57	E	10,000	2,000	E	10,000	5,700	E	10,000	2,000	E	10,000	5,700	E	NA
CRESOL, M (METHYLPHENOL, 3-)	000108-39-4	180	20	E	510	57	E	10,000	2,000	E	10,000	5,700	E	10,000	10,000	C	10,000	10,000	C	NA
CRESOL, P (METHYLPHENOL, 4-)	000106-44-5	18	2	E	51	5.7	E	1,800	200	E	5,100	570	E	18,000	2,000	E	51,000	5,700	E	NA
* * * * *																				
CROTONALDEHYDE, TRANS-	000123-73-9	0.035	0.0039	E	0.14	0.016	E	3.5	0.39	E	14	1.6	E	3.5	0.39	E	14	1.6	E	NA
CUMENE	98828	[2.5] 110	[18] 790	E	[5.2] 230	[37] 1,600	E	[250] 5,000	[1,800] 10,000	[E] C	[520] 5,000	[3,700] 10,000	[E] C	[250] 5,000	[1,800] 10,000	[E] C	[520] 5,000	[3,700] 10,000	C	15
* * * * *																				
CYFLUTHRIN	068359-37-5	0.1	0.011	E	0.1	0.011	E	0.1	0.011	E	0.1	0.011	E	0.1	0.011	E	0.1	0.011	E	10
CYROMAZINE	066215-27-8	27	3	E	77	8.6	E	2,700	300	E	7,700	860	E	27	3	E	77	8.6	E	20
* * * * *																				
DDE, 4,4'-	72559	[0.13] 0.19	[28] 41	E	[0.13] 0.76	[28] 170	E	[0.13] 4	[28] 870	E	[0.13] 4	[28] 870	E	[0.13] 4	[28] 870	E	[0.13] 4	[28] 870	E	10
DDT, 4,4'-	50293	[0.17] 0.19	[100] 110	E	[0.17] 0.55	[100] 330	E	[0.17] 0.55	[100] 330	E	[0.17] 0.55	[100] 330	E	[0.17] 0.55	[100] 330	E	[0.17] 0.55	[100] 330	E	5

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		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
<b>DI(2-ETHYLHEXYL) ADIPATE</b>	<b>000103-23-1</b>	<b>40</b>	<b>4.4</b>	<b>E</b>	<b>40</b>	<b>4.4</b>	<b>E</b>	<b>4,000</b>	<b>440</b>	<b>E</b>	<b>4,000</b>	<b>440</b>	<b>E</b>	<b>10,000</b>	<b>2,200</b>	<b>E</b>	<b>10,000</b>	<b>2,200</b>	<b>E</b>	<b>5</b>
* * * * *																				
<b>DIAMINOTOLUENE, 2,4-</b>	<b>000095-80-7</b>	<b>0.021</b>	<b>0.0023</b>	<b>E</b>	<b>0.081</b>	<b>0.009</b>	<b>E</b>	<b>2.1</b>	<b>0.23</b>	<b>E</b>	<b>8.1</b>	<b>0.9</b>	<b>E</b>	<b>21</b>	<b>2.3</b>	<b>E</b>	<b>81</b>	<b>9</b>	<b>E</b>	<b>NA</b>
* * * * *																				
DIBENZO[A,H]ANTHRACENE	53703	0.009	41	E	0.036	160	E	[0.05] 0.06	[230] 270	E	[0.05] 0.06	[230] 270	E	[0.05] 0.06	[230] 270	E	[0.05] 0.06	[230] 270	E	5
* * * * *																				
<b>DIBROMOBENZENE, 1,4-</b>	<b>000106-37-6</b>	<b>37</b>	<b>4.1</b>	<b>E</b>	<b>100</b>	<b>11</b>	<b>E</b>	<b>2,000</b>	<b>220</b>	<b>E</b>	<b>2,000</b>	<b>220</b>	<b>E</b>	<b>37</b>	<b>4.1</b>	<b>E</b>	<b>100</b>	<b>11</b>	<b>E</b>	<b>20</b>
* * * * *																				
DIBUTYLPHTHALATE, N-	84742	370	1,500	E	1,000	4,100	E	[1,300] 10,000	[5,300] 10,000	[E] C	[1,300] 10,000	[5,300] 10,000	[E] C	[1,300] 10,000	[5,300] 10,000	[E] C	[1,300] 10,000	[5,300] 10,000	[E] C	20
<b>DICHLORO-2-BUTENE, 1,4-</b>	<b>000764-41-0</b>	<b>0.0016</b>	<b>0.00018</b>	<b>E</b>	<b>0.0069</b>	<b>0.00077</b>	<b>E</b>	<b>0.16</b>	<b>0.018</b>	<b>E</b>	<b>0.69</b>	<b>0.077</b>	<b>E</b>	<b>0.0016</b>	<b>0.00018</b>	<b>E</b>	<b>0.0069</b>	<b>0.00077</b>	<b>E</b>	<b>NA</b>
* * * * *																				
DICHLOROBENZIDINE, 3,3'-	91941	0.15	8.4	E	0.58	33	E	15	840	E	58	3,300	E	150	8,400	E	[580] 310	[33,000] 17,000	E	10
* * * * *																				
<b>DICHLOROPROPENE, 1,3-</b>	<b>000542-75-6</b>	<b>0.12</b>	<b>0.013</b>	<b>E</b>	<b>0.49</b>	<b>0.054</b>	<b>E</b>	<b>12</b>	<b>1.3</b>	<b>E</b>	<b>49</b>	<b>5.4</b>	<b>E</b>	<b>12</b>	<b>1.3</b>	<b>E</b>	<b>49</b>	<b>5.4</b>	<b>E</b>	<b>NA</b>
* * * * *																				
<b>DICYCLOPENTADIENE</b>	<b>000077-73-6</b>	<b>0.055</b>	<b>0.0061</b>	<b>E</b>	<b>0.12</b>	<b>0.013</b>	<b>E</b>	<b>5.5</b>	<b>0.61</b>	<b>E</b>	<b>12</b>	<b>1.3</b>	<b>E</b>	<b>0.055</b>	<b>0.0061</b>	<b>E</b>	<b>0.12</b>	<b>0.013</b>	<b>E</b>	<b>30</b>
* * * * *																				

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REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers				Soil Buffer Distance (feet)				
		TDS ≤ 2500					TDS > 2500					Residential		Non-Residential						
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E		100 X GW MSC	Generic Value	E	
<b>DIFLUBENZURON</b>	<b>035367-38-5</b>	<b>20</b>	<b>2.2</b>	E	<b>20</b>	<b>2.2</b>	E	<b>20</b>	<b>2.2</b>	E	<b>20</b>	<b>2.2</b>	E	<b>20</b>	<b>2.2</b>	E	<b>20</b>	<b>2.2</b>	E	<b>20</b>
* * * * *																				
<b>DIMETHOXYBENZIDINE, 3,3-</b>	<b>000119-90-4</b>	<b>4.7</b>	<b>0.52</b>	E	<b>19</b>	<b>2.1</b>	E	<b>470</b>	<b>52</b>	E	<b>1,900</b>	<b>210</b>	E	<b>4,700</b>	<b>520</b>	E	<b>6,000</b>	<b>670</b>	E	<b>20</b>
DIMETHYLAMINOAZO-BENZENE, P-	60117	0.014	0.037	E	0.057	0.15	E	1.4	3.7	E	5.7	15	E	14	37	E	[20] 57	[60] 150	E	20
<b>DIMETHYLANILINE, N,N-</b>	<b>000121-69-7</b>	<b>7.3</b>	<b>0.81</b>	E	<b>20</b>	<b>2.2</b>	E	<b>730</b>	<b>81</b>	E	<b>2,000</b>	<b>220</b>	E	<b>730</b>	<b>81</b>	E	<b>2,000</b>	<b>220</b>	E	<b>NA</b>
<b>DIMETHYLBENZIDINE, 3,3-</b>	<b>000119-93-7</b>	<b>0.0072</b>	<b>0.0008</b>	E	<b>0.028</b>	<b>0.0031</b>	E	<b>0.72</b>	<b>0.08</b>	E	<b>2.8</b>	<b>0.31</b>	E	<b>7.2</b>	<b>0.8</b>	E	<b>28</b>	<b>3.1</b>	E	<b>10</b>
* * * * *																				
<b>DIPHENAMID</b>	<b>000957-51-7</b>	<b>20</b>	<b>2.2</b>	E	<b>20</b>	<b>2.2</b>	E	<b>2,000</b>	<b>220</b>	E	<b>2,000</b>	<b>220</b>	E	<b>20</b>	<b>2.2</b>	E	<b>20</b>	<b>2.2</b>	E	<b>NA</b>
* * * * *																				
DIPHENYLHYDRAZINE, 1,2-	122667	0.083	0.15	E	0.33	0.58	E	8.3	15	E	[33] 25	[58] 44	E	[83] 25	[150] 44	E	[330] 25	[580] 44	E	30
* * * * *																				
<b>ENDOSULFAN</b>	<b>000115-29-7</b>	<b>5.8</b>	<b>0.64</b>	E	<b>12</b>	<b>1.3</b>	E	<b>48</b>	<b>5.3</b>	E	<b>48</b>	<b>5.3</b>	E	<b>48</b>	<b>5.3</b>	E	<b>48</b>	<b>5.3</b>	E	<b>15</b>
ENDOSULFAN I (ALPHA)	959988	22	110	E	[53] 50	[260] 260	E	[53] 50	[280] 260	E	[53] 50	[280] 260	E	22	110	E	[53] 50	[280] 260	E	15
ENDOSULFAN II (BETA)	33213659	22	130	E	[28] 45	[170] 270	E	[28] 45	[170] 270	E	[28] 45	[170] 270	E	22	130	E	[28] 45	[170] 270	E	15
* * * * *																				
<b>ETHEPHON</b>	<b>016672-87-0</b>	<b>18</b>	<b>2</b>	E	<b>51</b>	<b>5.7</b>	E	<b>1,800</b>	<b>200</b>	E	<b>5,100</b>	<b>570</b>	E	<b>18</b>	<b>2</b>	E	<b>51</b>	<b>5.7</b>	E	<b>NA</b>

<sup>1</sup> For other options see Section 250.308

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC		Generic Value	
ETHION	563122	1.8	39	E	5.1	110	E	[60] 85	[1,300] 1,900	E	[60] 85	[1,300] 1,900	E	1.8	39	E	5.1	110	E	15
ETHOXYETHANOL, 2-(EGEE)	110805	[300] 55	[56] 7.8	E	[820] 120	[120] 17	E	[10,000] 5,500	[5,500] 780	E	10,000	[10,000] 1,700	C	[10,000] 5,500	[5,500] 780	E	10,000	[10,000] 1,700	C	NA
* * * * *																				
ETHYL DIPROPYLTHIOCARBAMATE, S- (EPTC)	000759-94-4	91	10	E	260	29	E	9,100	1,000	E	10,000	2,900	E	91	10	E	260	29	E	NA
* * * * *																				
ETHYL METHACRYLATE	000097-63-2	87	9.7	E	180	20	E	8,700	970	E	18,000	2,000	E	87	9.7	E	180	20	E	NA
* * * * *																				
ETHYLENE THIOUREA (ETU)	000096-45-7	0.3	0.033	E	0.3	0.033	E	30	3.3	E	30	3.3	E	300	33	E	300	33	E	NA
* * * * *																				
ETHYLP-NITROPHENYL PHENYLPHOSPHOROTHIOATE	002104-64-5	0.037	0.0041	E	0.1	0.011	E	3.7	0.41	E	10	1.1	E	0.037	0.0041	E	0.1	0.011	E	20
* * * * *																				
FENVALERATE (PYDRIN)	051630-58-1	8.5	0.94	E	8.5	0.94	E	8.5	0.94	E	8.5	0.94	E	8.5	0.94	E	8.5	0.94	E	15
FLUOMETURON	002164-17-2	9	1	E	9	1	E	900	100	E	900	100	E	9	1	E	9	1	E	NA
FLUORANTHENE	206440	[27] 26	[3,300] 3,200	E	[27] 26	[3,300] 3,200	E	[27] 26	[3,300] 3,200	E	[27] 26	[3,300] 3,200	E	[27] 26	[3,300] 3,200	E	[27] 26	[3,300] 3,200	E	10
FLUORENE	86737	[19] 150	[380] 3,000	E	[19] 190	[380] 3,800	E	[19] 190	[380] 3,800	E	[19] 190	[380] 3,800	E	[19] 190	[380] 3,800	E	[19] 190	[380] 3,800	E	15

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 All concentrations in mg/kg  
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REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
* * * * *																				
<b>FOSETYL-AL</b>	<b>039148-24-8</b>	<b>11,000</b>	<b>1,200</b>	E	<b>31,000</b>	<b>3,400</b>	E	<b>190,000</b>	<b>120,000</b>	E	<b>190,000</b>	<b>190,000</b>	C	<b>11,000</b>	<b>1,200</b>	E	<b>31,000</b>	<b>3,400</b>	E	NA
<b>FURAN</b>	<b>000110-00-9</b>	<b>0.97</b>	<b>0.11</b>	E	<b>2</b>	<b>0.22</b>	E	<b>97</b>	<b>11</b>	E	<b>200</b>	<b>22</b>	E	<b>97</b>	<b>11</b>	E	<b>200</b>	<b>22</b>	E	NA
FURFURAL	98011	[11] 9.7	[1.4] 1.2	E	[29] 20	[3.7] 2.5	E	[1,100] 970	[140] 120	E	[2,900] 2,000	[370] 250	E	[11] 9.7	[1.4] 1.2	E	[29] 20	[3.7] 2.5	E	NA
* * * * *																				
HEXACHLOROBENZENE	118741	0.1	0.96	E	0.1	0.96	E	[0.62] 0.6	[6] 5.8	E	[0.62] 0.6	[6] 5.8	E	[0.62] 0.6	[6] 5.8	E	[0.62] 0.6	[6] 5.8	E	15
* * * * *																				
HEXACHLOROCYCLO-PENTADIENE	77474	5	91	E	5	91	E	[340] 180	[6,200] 3,300	E	[340] 180	[6,200] 3,300	E	[340] 180	[6,200] 3,300	E	[340] 180	[6,200] 3,300	E	15
* * * * *																				
<b>HEXYTHIAZOX (SAVEY)</b>	<b>078587-05-0</b>	<b>50</b>	<b>5.6</b>	E	<b>50</b>	<b>5.6</b>	E	<b>50</b>	<b>5.6</b>	E	<b>50</b>	<b>5.6</b>	E	<b>50</b>	<b>5.6</b>	E	<b>50</b>	<b>5.6</b>	E	<b>15</b>
<b>HYDRAZINE/HYDRAZINE SULFATE</b>	<b>000302-01-2</b>	<b>0.00087</b>	<b>0.000097</b>	E	<b>0.0037</b>	<b>0.00041</b>	E	<b>0.087</b>	<b>0.0097</b>	E	<b>0.37</b>	<b>0.041</b>	E	<b>0.0087</b>	<b>0.00097</b>	E	<b>0.037</b>	<b>0.0041</b>	E	NA
<b>HYDROQUINONE</b>	<b>000123-31-9</b>	<b>150</b>	<b>17</b>	E	<b>410</b>	<b>46</b>	E	<b>15,000</b>	<b>1,700</b>	E	<b>41,000</b>	<b>4,600</b>	E	<b>150,000</b>	<b>17,000</b>	E	<b>190,000</b>	<b>46,000</b>	E	NA
* * * * *																				
<b>IPRODIONE</b>	<b>036734-19-7</b>	<b>150</b>	<b>17</b>	E	<b>410</b>	<b>46</b>	E	<b>1,300</b>	<b>140</b>	E	<b>1,300</b>	<b>140</b>	E	<b>150</b>	<b>17</b>	E	<b>410</b>	<b>46</b>	E	<b>20</b>
* * * * *																				
<b>MANEB</b>	<b>012427-38-2</b>	<b>18</b>	<b>2</b>	E	<b>51</b>	<b>5.7</b>	E	<b>1,800</b>	<b>200</b>	E	<b>2,300</b>	<b>260</b>	E	<b>18</b>	<b>2</b>	E	<b>51</b>	<b>5.7</b>	E	NA
<b>MERPHOS OXIDE</b>	<b>000078-48-8</b>	<b>0.11</b>	<b>0.012</b>	E	<b>0.31</b>	<b>0.034</b>	E	<b>11</b>	<b>1.2</b>	E	<b>31</b>	<b>3.4</b>	E	<b>0.11</b>	<b>0.012</b>	E	<b>0.31</b>	<b>0.034</b>	E	<b>10</b>
* * * * *																				

<sup>1</sup> For other options see Section 250.308

All concentrations in mg/kg

E = Number calculated by the soil to groundwater equation in Section 250.308

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REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
METHAMIDOPHOS	010265-92-6	0.18	0.02	E	0.51	0.057	E	18	2	E	51	6	E	0.18	0.02	E	0.51	0.057	E	NA
* * * * *																				
METHOXYCHLOR	72435	4	630	E	4	630	E	[10] 4.5	[1,600] 710	E	[10] 4.5	[1,600] 710	E	[10] 4.5	[1,600] 710	E	[10] 4.5	[1,600] 710	E	10
METHOXYETHANOL, 2-	000109-86-4	3.7	0.41	E	1.1	1	E	370	41	E	1,000	110	E	3.7	0.41	E	10	1.1	E	NA
METHYL ACETATE	000079-20-9	3,700	410	E	10,000	1,100	E	10,000	10,000	C	10,000	10,000	C	3,700	410	E	10,000	1,100	E	NA
METHYL ACRYLATE	000096-33-3	110	12	E	310	34	E	10,000	1,200	E	10,000	3,400	E	10,000	1,200	E	10,000	3,400	E	NA
* * * * *																				
METHYL ISOBUTYL KETONE	108101	[22] 19	[3.4] 2.9	E	[47] 41	[7.3] 6.3	E	[2,200] 1,900	[340] 290	E	[4,700] 4,100	[730] 630	E	[2,200] 1,900	[340] 290	E	[4,700] 4,100	[730] 630	E	NA
METHYL METHACRYLATE	80626	[78] 190	[11] 26	E	[160] 410	[22] 56	E	[7,800] 10,000	[1,100] 2,600	E	10,000	[2,200] 5,600	E	[7,800] 10,000	[1,100] 2,600	E	10,000	[2,200] 5,600	E	NA
* * * * *																				
METHYL STYRENE (MIXED ISOMERS)	025013-15-4	22	2.4	E	61	6.8	E	2,200	240	E	6,100	680	E	22	2.4	E	61	6.8	E	15
* * * * *																				
METHYLENE BIS(2-CHLOROANILINE), 4,4-'	000101-14-4	0.51	0.057	E	2	0.22	E	51	5.7	E	200	22	E	0.51	0.057	E	2	0.22	E	15
METHYLNAPHTHALENE, 2-	91576	[150] 73	[6,000] 2,900	E	[410] 200	[10,000] 7,900	[C] E	2,500	10,000	C	2,500	10,000	C	[150] 73	[6,000] 2,900	E	[410] 200	[10,000] 7,900	[C] E	15
METHYLSTYRENE, ALPHA	000098-83-9	68	7.6	E	140	16	E	6,800	760	E	14,000	1,600	E	68	7.6	E	140	16	E	30
* * * * *																				

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REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
NAPROPAMIDE	015299-99-7	370	41	E	1,000	110	E	7,000	780	E	7,000	780	E	370	41	E	1,000	110	E	30
* * * * *																				
NITROPHENOL, 2-	88755	[230] 29	[47] 5.9	E	[630] 82	[130] 17	E	[23,000] 2,900	[4,700] 590	E	[63,000] 8,200	[13,000] 1,700	E	[190,000] 29,000	[43,000] 5,900	E	[190,000] 82,000	[43,000] 17,000	E	NA
* * * * *																				
NITROSO-DI-N-BUTYLAMINE, N-	000924-16-3	0.0027	0.0003	E	0.011	0.0012	E	0.27	0.03	E	1.1	0.12	E	0.27	0.03	E	1.1	0.12	E	NA
* * * * *																				
NITROSO-N-ETHYLUREA, N-	000759-73-9	0.00047	0.000052	E	0.0019	0.00021	E	0.047	0.0052	E	0.19	0.021	E	0.047	0.0052	E	0.19	0.021	E	NA
* * * * *																				
PCB-1016 (AROCLOR)	12674112	0.26	70	E	0.72	190	E	[4.9] 25	[1,300] 6,700	E	[4.9] 25	[1,300] 6,700	E	0.26	70	E	0.72	190	E	10
PCB-1221 (AROCLOR)	11104282	0.13	0.62	E	0.52	2.5	E	13	62	E	[20] 52	[95] 250	E	0.13	0.62	E	0.52	2.5	E	20
* * * * *																				
PCB-1242 (AROCLOR)	53469219	0.13	16	E	0.52	62	E	[13] 10	[1,600] 1,200	E	[24] 10	[2,900] 1,200	E	0.13	16	E	0.52	62	E	10
PCB-1248 (AROCLOR)	12672296	0.037	18	E	0.14	67	E	[0.6] 3.7	[290] 1,800	E	[0.6] 5.4	[290] 2,600	E	0.037	18	E	0.14	67	E	10
PCB-1254 (AROCLOR)	11097691	0.037	75	E	0.14	280	E	[1.2] 3.7	[2,400] 7,500	E	[1.2] 5.7	[2,400] 7,500	E	0.037	75	E	0.14	280	E	5
* * * * *																				

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REGULATED SUBSTANCE	CASRN	Used Aquifers											Non-Use Aquifers				Soil Buffer Distance (feet)			
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential		Residential		Non-Residential					
		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value				
PEBULATE	001114-71-2	180	20	E	510	57	E	9,200	1,000	E	9,200	1,000	E	180	20	E	510	57	E	30
PENTACHLOROBENZENE	608935	2.9	230	E	8.2	660	E	[24] 74	[1,900] 6,000	E	[24] 74	[1,900] 6,000	E	[24] 74	[1,900]	E	[24] 74	[1,900]	E	10
* * * * *																				
PHENANTHRENE	85018	[120] 110	[11,000] 10,000	E	[120] 110	[11,000] 10,000	E	[120] 110	[11,000] 10,000	E	[120] 110	[11,000] 10,000	E	[120] 110	[11,000] 10,000	E	[120] 110	[11,000] 10,000	E	10
* * * * *																				
PHENYLPHENOL, 2-	000090-43-7	34	3.8	E	130	14	E	3,400	380	E	13,000	1,400	E	34,000	3,800	E	70,000	7,800	E	15
* * * * *																				
PICLORAM	1918-02-1	50	5.6	E	50	5.6	E	5,000	560	E	5,000	560	E	50	5.6	E	50	5.6	E	NA
POLYCHLORINATED BIPHENYLS (AROCLORS) (PCBS)	001336-36-3	0.05	0.0056	E	0.05	0.0056	E	5	0.56	E	5	0.56	E	0.05	0.0056	E	0.05	0.0056	E	NA
* * * * *																				
PROPANIL	000709-98-8	18	2	E	51	5.7	E	1,800	200	E	5,100	570	E	18	2	E	51	6	E	NA
PROPHAM	000122-42-9	73	8.1	E	200	22	E	7,300	810	E	20,000	2,200	E	73	8	E	200	22	E	NA
PROPYLBENZENE, N-	000103-65-1	37	4.1	E	100	11	E	3,700	410	E	5,200	580	E	37	4.1	E	100	11	E	30
* * * * *																				
PYRENE	129000	[1.3] 13	[220] 2,200	E	[1.3] 13	[220] 2,200	E	[1.3] 13	[220] 2,200	E	[1.3] 13	[220] 2,200	E	[1.3] 13	[220] 2,200	E	[1.3] 13	[220] 2,200	E	10
* * * * *																				
QUINOLINE	000091-22-5	0.0055	0.00061	E	0.022	0.0024	E	0.55	0.061	E	2.2	0.24	E	5.5	0.61	E	22	2.4	E	20

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REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers				Soil Buffer Distance (feet)				
		TDS ≤ 2500					TDS > 2500					Residential		Non-Residential						
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E		100 X GW MSC	Generic Value	E	
QUIZALOFOP (ASSURE)	076578-14-8	30	3.3	E	30	3.3	E	30	3.3	E	30	3.3	E	30	3.3	E	30			
RONNEL	000299-84-3	180	20	E	510	57	E	4,000	440	E	4,000	440	E	180	20	E	510	57	E	30
* * * * *																				
TEBUTHIURON	034014-18-1	50	5.6	E	50	5.6	E	5,000	560	E	5,000	560	E	50	6	E	50	6	E	30
TEBRACIL	005902-51-2	9	1	E	9	1	E	900	100	E	900	100	E	9	1	E	9	1	E	NA
* * * * *																				
TETRACHLOROENZENE 1,2,4,5-	000095-94-3	1.1	0.12	E	3.1	0.34	E	58	6.4	E	58	6.4	E	58	6.4	E	58	6.4	E	20
* * * * *																				
TETRACHLOROETHANE, 1,1,1,2-	000630-20-6	7	0.78	E	7	0.78	E	700	78	E	700	78	E	700	78	E	700	78	E	30
* * * * *																				
TETRAETHYLDITHIO- PYROPHOSPHATE	003689-24-5	0.49	0.054	E	1	0.11	E	49	5.4	E	100	11	E	0.49	0.054	E	1	0.11	E	30
THIOFANOX	039196-18-4	1.1	0.12	E	3.1	0.34	E	110	12	E	310	34	E	1.1	0.12	E	3.1	0.34	E	NA
* * * * *																				
TOLUIDINE, O-	95534	[0.37] 0.28	[0.42] 0.32	E	[1.4] 1.1	[1.6] 1.2	E	[37] 28	[42] 32	E	[140] 110	[160] 120	E	[370] 280	[420] 320	E	[1,400] 1,100	[1,600] 1,200	E	NA
* * * * *																				
TRIALATE	002303-17-5	47	5.2	E	130	14	E	400	44	E	400	44	E	47	5.2	E	130	14	E	15
* * * * *																				

<sup>1</sup> For other options see Section 250.308  
All concentrations in mg/kg  
E = Number calculated by the soil to groundwater equation in Section 250.308  
C = Cap  
NA = The soil buffer distance option is not available for this substance

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers				Soil Buffer Distance (feet)				
		TDS ≤ 2500					TDS > 2500													
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E		100 X GW MSC	Generic Value	E	
TRICHLORO-1,2,2-TRIFLUOROETHANE, 1,1,2-	000076-13-1	8,300	920	E	17,000	1,900	E	17,000	1,900	E	17,000	1,900	E	17,000	1,900	E	17,000	1,900	E	20
TRICHLOROBENZENE, 1,2,4-	120821	7	28	E	7	28	E	700	2,800	E	700	2,800	E	[4,900] 4,400	10,000	C	[4,900] 4,400	10,000	C	20
* * * * *																				
TRICHLOROPROPANE, 1,1,2-	000598-77-6	18	2	E	51	5.7	E	1,800	200	E	5,100	570	E	18	2	E	51	5.7	E	NA
* * * * *																				
TRICHLOROPROPENE, 1,2,3-	000096-19-5	18	2	E	51	5.7	E	1,800	200	E	5,100	570	E	18	2	E	51	6	E	NA
TRIFLURALIN	001582-09-8	0.5	0.056	E	0.5	0.056	E	50	5.6	E	50	5.6	E	0.5	0.056	E	0.5	0.056	E	30
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	000095-63-6	1.6	0.18	E	3.5	0.39	E	160	18	E	350	39	E	160	18	E	350	39	E	15
TRIMETHYLBENZENE, 1,3,5-	000108-67-8	1.6	0.18	E	3.5	0.39	E	160	18	E	350	39	E	1.6	0.18	E	3.5	0.39	E	30
TRINITROTOLUENE, 2,4,6-	000118-96-7	0.2	0.022	E	0.2	0.022	E	20	2.2	E	20	2.2	E	0.2	0.022	E	0.2	0.022	E	NA
* * * * *																				
VINYL BROMIDE (BROMOETHENE)	000593-60-2	0.14	0.016	E	0.58	0.064	E	14	1.6	E	58	6.4	E	1.4	0.16	E	5.8	0.64	E	NA
* * * * *																				
WARFARIN	81812	[9.2E-08] 1.1	[2.2E-07] 2.6	E	[9.2E-08] 3.1	[2.2E-07] 7.4	E	[9.2E-08] 110	[2.2E-07] 260	E	[9.2E-08] 310	[2.2E-07] 740	E	[9.2E-08] 1,100	[2.2E-07] 2,600	E	[9.2E-08] 1,700	[2.2E-07] 4,100	E	30
ZINEB	012122-67-7	180	20	E	510	57	E	1,000	110	E	1,000	110	E	180	20	E	510	57	E	NA

<sup>1</sup> For other options see Section 250.308  
 All concentrations in mg/kg  
 E = Number calculated by the soil to groundwater equation in Section 250.308  
 C = Cap  
 NA = The soil buffer distance option is not available for this substance

**APPENDIX A**  
**Table 4—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential MSC		Non-Residential MSCs			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
		*	*	*	*	*	*
<b>[ASBESTOS]</b>	<b>[12001295]</b>	<b>[1,100]</b>	[N]	<b>[5,500]</b>	[N]	<b>[190,000]</b>	[C]
		*	*	*	*	*	*
BERYLLIUM	7440417	<b>[4.2] 440</b>	G	<b>[18] 5,600</b>	G	190,000	C
		*	*	*	*	*	*
CHROMIUM VI	18540299	<b>[1,100] 660</b>	G	<b>[14,000] 8,400</b>	G	190,000	C
		*	*	*	*	*	*
COPPER	7440508	<b>[190,000] 8,100</b>	[C] G	<b>[190,000] 100,000</b>	[C] G	190,000	C
		*	*	*	*	*	*
MERCURY	7439976	<b>[19] 66</b>	G	<b>[240] 840</b>	G	190,000	C
		*	*	*	*	*	*
THALLIUM	7440280	<b>[18] 15</b>	G	<b>[220] 200</b>	G	190,000	C
		*	*	*	*	*	*
VANADIUM	7440622	<b>[13] 1,500</b>	G	<b>[160] 20,000</b>	G	190,000	C
		*	*	*	*	*	*

All concentrations in mg/kg  
 R—Residential  
 NR—Non-Residential  
 G—Ingestion  
 N—Inhalation  
 C—Cap  
 U—UBK Model  
 S—SEGH Model  
 NA—Not Applicable

**APPENDIX A**  
**Table 4—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

RELATED SUBSTANCE	CASRN	Used Aquifers								Non-use Aquifers				Soil Buffer Distance (feet)
		TDS ≤ 2500				TDS > 2500				R		NR		
		R		NR		R		NR		R		NR		
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	
[ASBESTOS]	[1.2E+07]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]	[NA]
BORON AND COMPOUNDS	7440428	[6.0] 60	6.7	60	6.7	6,000	670	6,000	670	60,000	6,700	60,000	6,700	NA
CHROMIUM VI	1.9E+07	[18] 10	[340] 190	[51] 10	[970] 190	[1,800] 1,000	[34,000] 19,000	[5,100] 1,000	[97,000] 19,000	[18,000] 10,000	190,000	[51,000] 10,000	190,000	15
VANADIUM	7440622	[0.21] 26	[210] 26,000	[0.58] 72	[580] 72,000	[21] 2,600	[21,000] 190,000	[58] 7,200	[58,000] 190,000	[210] 26,000	190,000	[580] 72,000	190,000	5

<sup>1</sup> For other options see Section 250.308  
 All concentrations in mg/kg  
 R=Residential  
 NR=Non-Residential  
 G=Ingestion  
 N=Inhalation  
 E=Soil to groundwater equation  
 C=Cap  
 NA=Not Applicable

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
ACENAPHTHENE	83329	0.06		0.06		4900		[3.47] 3.8	1,5,6				279	1.24
ACENAPHTHYLENE	208968	0.06		0.06		4500		[3.93] 16.1	5,6,7				280	2.11
ACETALDEHYDE	75070	[0.0022] 0.0026	0.0077	[0.0028] 0.0026	0.0077	4.1	X	1000000	[11] 1	13100	15100	X	20.4	
ACETONE	67641	0.1		8.86		0.31	X	1000000	[11] 1	13100	15000	X	56	18.07
ACEPHATE	30560-19-1	0.004	0.0087			3		818000	6					
ACETONITRILE	75058	[0.006]		[0.006] 0.017		0.5	X	[74000] 1000000	[11] 1	13100	15000	X	81.6	4.50
ACETOPHENONE	98862	0.1		0.1		170		5500	[12] 1			X	202.6	
ACETYLAMINOFLUORENE, 2-(2AAF)	53963		3.8		[4.55] 3.8	1600		[5.29] 10.13	[11] 7				303	0.69
ACROLEIN	107028	0.02		5.71429E-06		0.56	X	[212500] 208000	[11] 1,2,4	13100	15100	X	52.69	4.50
ACRYLAMIDE	79061	0.0002	4.5	0.0002	4.55	25		[640000] 2151000	[11] 4				[125] 193	
ACRYLIC ACID	79107	0.5		0.0002857		29	X	1000000	[11] 2	13000	14900	X	141.2	1.39
ACRYLONITRILE	107131	0.001	0.54	0.0005714	0.238	11	X	[74500] 73500	[11] 1	13100	15100	X	77.3	5.50
ALACHLOR	15972608	0.01	0.08	0.01	0.08	110		140	[4] 2				100	
ALDICARB	116063	0.001		0.001		22		6000	[9] 2				287	0.40
ALDRIN	309002	0.00003	17	0.00003	17.15	48000		[0.18] 0.02	[11] 4,5,6				145	0.22
ALLYL ALCOHOL	107186	0.005		0.005		3.2	X	[320000] 1000000	[15] 2	13100	15000	X	97	18.07
AMINOBIIPHENYL, 4-	92671		21		21	110		[311] 1200	[11] 5				302	18.07
AMITROLE	61825		0.94		0.945	120		280000	[7] 4				200	0.69

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at § 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	CAS	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>-1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
<b>AMMONIA</b>	<b>7664-41-7</b>	<b>0.97</b>		<b>0.028571429</b>		<b>3</b>	<b>X</b>	<b>310000</b>	<b>2,5,7</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>-33.3</b>	
<b>AMMONIUM SULFAMATE</b>	<b>7773-06-0</b>	<b>0.2</b>		<b>0.2</b>		<b>3</b>		<b>216,000</b>	<b>10</b>				<b>200</b>	
ANILINE	62533	<b>[0.0016]</b> <b>0.00029</b>	0.0057	0.0002857	0.0056	190	X	<b>[36000]</b> <b>33800</b>	<b>[11] 1</b>	13000	14900	X	184.4	
ANTHRACENE	120127	0.3		0.3		21000		<b>[0.0434]</b> <b>0.066</b>	<b>[11]</b> <b>1,5,6,7,8,9</b>				340	0.28
ATRAZINE	1912249	0.035	0.222	0.035	0.222	130		70	<b>[8]</b> <b>2,4,5</b>				200	
<b>BAYGON (PROPOXUR)</b>	<b>114-26-1</b>	<b>0.004</b>		<b>0.004</b>		<b>31</b>		<b>2000</b>	<b>2,4,5</b>				<b>decomp.</b>	<b>4.50</b>
<b>BENOMYL</b>	<b>17804-35-2</b>	<b>0.005</b>				<b>1900</b>		<b>2</b>	<b>5</b>					
<b>BENTAZON</b>	<b>25057-89-0</b>	<b>0.03</b>				<b>13</b>		<b>500</b>	<b>2</b>					
BENZENE	71432	<b>0.003</b>	0.029	<b>0.0017</b>	<b>[0.02905]</b> <b>0.027</b>	58	X	<b>[1790]</b> <b>1780.5</b>	<b>[11]</b> <b>1,2,3,4</b>	13100	15000	X	80.9	0.35
<b>BENZIDINE</b>	<b>92-87-5</b>	<b>0.003</b>	<b>230</b>	<b>0.003</b>	<b>234.5</b>	<b>530000</b>		<b>520</b>	<b>1,2,4</b>				<b>400</b>	<b>15.81</b>
BENZO[A]ANTHRACENE	56553		0.73		0.385	350000		<b>[0.014]</b>	<b>1,5,6</b>				437.6	0.19
BENZO[A]PYRENE	50328		7.3		3.85	910000		0.0038	<b>1,5,6</b>				495	0.24
BENZO[B]HFLUORANTHENE	205992		0.73		0.385	550000		0.0012	<b>5,6,7</b>				357	0.21
BENZO[GHI]PERYLENE	191242	0.06		0.06		2800000		0.00026	<b>1,5,6</b>				500	0.19
BENZO[K]FLUORANTHENE	207089		0.073		0.0385	4400000		0.00055	<b>5,6,7</b>				480	0.06
BENZOIC ACID	65850	4		4		32		<b>[3400]</b> <b>2700</b>	<b>2,3,4,5</b>				249.2	
<b>BENZOTRICHLORIDE</b>	<b>98-07-7</b>		<b>13</b>			<b>920</b>		<b>53</b>	<b>1,5,13</b>			<b>X</b>	<b>220.8</b>	<b>121413.60</b>
BENZYL ALCOHOL	100516	0.3		0.3		100		<b>[42900]</b> <b>40000</b>	<b>1,2,3</b>			X	205.3	
BENZYL CHLORIDE	100447		0.17		0.1715	190	X	<b>[525]</b> <b>493</b>	<b>[11] 1</b>	13000	15000	X	179.4	20.90

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)



**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
BHC, ALPHA	319846	<b>[0.0003]</b> <b>0.0006</b>	6.3	<b>[0.0003]</b> <b>0.0006</b>	6.3	1800		<b>[2] 1.7</b>	<b>[5]</b> <b>4,5,6,7</b>				288	0.94
BHC, BETA-	319857	<b>[0.0003]</b> <b>0.0006</b>	1.8	<b>[0.0003]</b> <b>0.0006</b>	1.855	2300		<b>[5] 0.1</b>	<b>[5] 6</b>				60	1.02
BHC, DELTA-	319868	<b>[0.0003]</b> <b>0.0006</b>		<b>[0.0003]</b> <b>0.0006</b>		1900		<b>[21.3]</b> <b>8</b>	<b>[12] 6</b>				60	1.26
BHC, GAMMA (LINDANE)	58899	0.0003	<b>[1.1] 1.3</b>	0.0003	1.085	1400		7.3	<b>[11]</b> <b>4,5,6</b>				323.4	1.05
<b>BIPHENYL, 1,1-</b>	<b>92-52-4</b>	<b>0.05</b>		<b>0.05</b>		<b>1700</b>		7.2	<b>1</b>				<b>255</b>	<b>18.07</b>
BIS(2-CHLORO-ISOPROPYL)ETHER	108601	0.04	<b>0.07</b>	0.04	<b>0.035</b>	62	X	1700	<b>[12] 5</b>	13000	14900	X	189	0.69
BIS(2-CHLOROETHYL)ETHER	111444		1.1		1.155	76	X	<b>[17200]</b> <b>10200</b>	<b>[11]</b> <b>1,4,5</b>	13000	14900	X	178.75	0.69
BIS(CHLOROMETHYL)ETHER	542881		220		217	16	X	22000	<b>[2] 6</b>	13100	15100	X	105	57270.57
BIS[2-ETHYLHEXYL] PHTHALATE	117817	0.02	0.014	0.02	<b>[0.0084]</b> <b>0.014</b>	87000		<b>[0.34]</b> <b>0.285</b>	<b>[11]</b> <b>4,5,6</b>			X	384	0.65
<b>BISPHENOL A</b>	<b>80-05-7</b>	<b>0.05</b>				<b>1500</b>		<b>120</b>	<b>4</b>				<b>220</b>	<b>0.69</b>
<b>BROMACIL</b>	<b>314-40-90</b>	<b>0.13</b>				<b>58</b>		<b>815</b>	<b>2</b>					
<b>BROMOCHLOROMETHANE</b>	<b>74-97-5</b>	<b>0.013</b>				<b>27</b>	<b>X</b>	<b>16700</b>	<b>4</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>68</b>	
BROMODICHLOROMETHANE	75274	0.02	0.062	0.02	0.1295	93	X	<b>[6735]</b> <b>4500</b>	<b>[11] 6</b>	13100	15000	X	87	
BROMOMETHANE	74839	0.0014		0.0014285		170	X	<b>[15220]</b> <b>17,500</b>	<b>[11] 2</b>	13100	15000	X	3.55	6.66
<b>BROMOXYNIL</b>	<b>1689-84-5</b>	<b>0.02</b>				<b>300</b>		<b>130</b>	<b>2</b>					
<b>BROMOXYNIL OCTANOATE</b>	<b>1689-99-2</b>	<b>0.02</b>				<b>18000</b>		<b>0.08</b>	<b>12</b>					5.75
<b>BUTADIENE, 1,3-</b>	<b>106-99-0</b>		<b>3.4</b>		<b>0.98</b>	<b>120</b>		<b>735</b>	<b>1</b>				<b>-4.5</b>	<b>4.50</b>
BUTYL ALCOHOL, N-	71363	0.1		0.1		3.2	X	<b>[63200]</b> <b>74000</b>	<b>[11] 1</b>	13000	14900	X	117.73	4.68
<b>BUTYLATE</b>	<b>2008-41-5</b>	<b>0.05</b>				<b>540</b>	<b>X</b>	<b>45</b>	<b>2</b>	<b>13200</b>	<b>15200</b>	<b>X</b>	<b>138</b>	

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
<b>BUTYLBENZENE, N-</b>	<b>104-51-8</b>	<b>0.01</b>				<b>2500</b>	<b>X</b>	<b>15</b>	<b>1,6,7</b>	<b>13100</b>	<b>15100</b>	<b>X</b>	<b>183.1</b>	
<b>BUTYLBENZENE, SEC-</b>	<b>135-98-8</b>	<b>0.01</b>				<b>890</b>	<b>X</b>	<b>17</b>	<b>1,6,7</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>173.5</b>	
<b>BUTYLBENZENE, TERT-</b>	<b>98-06-6</b>	<b>0.01</b>				<b>680</b>	<b>X</b>	<b>30</b>	<b>1,6,7</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>169</b>	
BUTYLBENZYL PHTHALATE	85687	0.2		0.2		34000		2.69	[11] 4,5,6			X	370	1.39
CAPTAN	133062	0.13	0.0035	0.13	0.00231	200		[3.3] 0.5	[11] 4				259	589.39
CARBARYL	63252	0.1		0.1		190		[82.6] 120	[11] 2,4,5				315	4.22
<b>CARBAZOLE</b>	<b>86-74-8</b>		<b>0.02</b>			<b>2500</b>		<b>1.2</b>	<b>1,5,6</b>				<b>355</b>	
CARBOFURAN	1563662	0.005		0.005		43		<b>700</b>	[13] 2				200	
CARBON DISULFIDE	75150	0.1		0.19999		300	X	[1185] 2100	[11] 1,2,3	13100	15100	X	46.2	
CARBON TETRACHLORIDE	56235	0.0007	0.13	0.00057	0.0525	160	X	[804.8] 795	[11] 1,2,3	13100	15000	X	76.7	0.07
<b>CARBOXIN</b>	<b>5234-68-4</b>	<b>0.1</b>				<b>260</b>		<b>170</b>	<b>5,6,8</b>					
<b>CHLORAMBEN</b>	<b>133-90-4</b>	<b>0.015</b>		<b>0.015</b>		<b>20</b>		<b>700</b>	<b>2</b>				<b>210</b>	
CHLORDANE	57749	[0.00006] 0.0005	[1.3] 0.35	[0.00006] 0.0002	[1.3] 0.35	98000		0.056	[11] 4,5,7				175	0.09
<b>CHLORO-1,1-DIFLUOROETHANE,1-</b>	<b>75-68-3</b>			<b>14.28571492</b>		<b>22</b>		<b>1400</b>	<b>4</b>				<b>-9.2</b>	
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107051	0.000286	<b>0.021</b>	0.0002857	<b>0.021</b>	48	X	[3370] 3300	[11] 1,3,5,7,10	13100	15000	X	45.1	18.07
<b>CHLOROACETOPHENONE,2-</b>	<b>532-27-4</b>	<b>0.00000857</b>		<b>8.57143E-06</b>		<b>76</b>		<b>1100</b>	<b>3</b>				<b>247</b>	<b>4.50</b>
CHLOROANILINE, P-	106478	0.004		0.004		460		[3.9] 3900	[2] 1				232	
CHLOROBENZENE	108907	0.02		0.005714		200	X	[497] 490	[11] 3			X	131.69	0.84
CHLOROBENZILATE	510156	0.02	0.27	0.02	0.273	2600		13	[11] 4			X	415	3.60
<b>CHLOROBUTANE, 1-</b>	<b>109-69-3</b>	<b>0.4</b>				<b>580</b>	<b>X</b>	<b>680</b>	<b>1,2,3,4</b>	<b>13200</b>	<b>15000</b>	<b>X</b>	<b>78.5</b>	

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<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF</i> <i>Vol from Surface Soil</i>	<i>TF</i> <i>Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
CHLORODIBROMOMETHANE	124481	0.02	0.084	0.02	0.0945	83	X	[4000] 4200	[2] 4,6,7,9	13100	15100	X	116	1.39
<b>CHLORODIFLUOROMETHANE</b>	<b>75-45-6</b>			<b>14.28571429</b>		<b>59</b>	<b>X</b>	<b>2899</b>	<b>4</b>	<b>13200</b>	<b>15000</b>		<b>-40.8</b>	
CHLOROETHANE	75003	2.86	<b>0.0029</b>	2.857		42	X	[5678] 5700	[11] 1	13100	15000	X	12.27	4.50
CHLOROETHYL VINYL ETHER, 2-	110758	0.025		0.025		6.6	X	15000	[2] 4,6,7	13100	15100	X	108	
CHLOROFORM	67663	0.01	0.0061	0.01	0.0805	56	X	[7950] 8000	[11] 1,2,3	13100	15000	X	61.18	0.01
CHLORONAPHTHALENE, 2-	91587	0.08		0.08		8500		[6.74] 11.7	[5] 1				256	
<b>CHLORONITROBENZENE, P-</b>	<b>100-00-5</b>		<b>0.018</b>			<b>480</b>		<b>220</b>	<b>1</b>				<b>242</b>	
CHLOROPHENOL, 2-	95578	0.005		0.005		400	X	[28500] 24000	[5] 1,3,4	12900	14900	X	174.9	
CHLOROPRENE	126998	0.02		0.0019999		50	X	[2115] 1736	[11] 9	13100	15000	X	59.4	0.69
<b>CHLOROPROPANE, 2-</b>	<b>75-29-6</b>		<b>0.028571492</b>			<b>260</b>	<b>X</b>	<b>3100</b>	<b>1,3,5</b>	<b>13200</b>	<b>15000</b>	<b>X</b>	<b>47.2</b>	
<b>CHLOROTHALONIL</b>	<b>1897-45-6</b>	<b>0.015</b>	<b>0.011</b>		<b>0.0031</b>	<b>980</b>		<b>0.6</b>	<b>2</b>				<b>350</b>	
<b>CHLOROTOLUENE, O-</b>	<b>95-45-8</b>	<b>0.02</b>				<b>760</b>	<b>X</b>	<b>422</b>	<b>14,15</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>158.97</b>	
CHLORPYRIFOS	2921882	0.003		0.003		4600		[1.3] 1.12	[3] 2,4,6,7				200	
<b>CHLORSULFURON</b>	<b>64902-72-3</b>	<b>0.05</b>				<b>11</b>		<b>192</b>	<b>2,5,6,8,9</b>				<b>152</b>	
* * * * *														
<b>CHLORTHAL-DIMETHYL (DACTHAL) (DCPA)</b>	<b>1861-32-1</b>	<b>0.01</b>				<b>6500</b>		<b>0.5</b>	<b>2,5,7</b>				<b>360</b>	<b>1.37</b>
CHRYSENE	218019		0.0073		0.00385	490000		[0.0018] 0.0019	[5] 1				448	0.13
<b>CRESOL,O- (METHYLPHENOL, 2-)</b>	<b>95-48-7</b>	<b>0.05</b>				<b>97</b>	<b>X</b>	<b>2500</b>	<b>3,5,6</b>	<b>12900</b>	<b>14800</b>	<b>X</b>	<b>191</b>	<b>18.07</b>
<b>CRESOL,M (METHYLPHENOL, 3-)</b>	<b>109-39-4</b>	<b>0.05</b>				<b>35</b>		<b>2500</b>	<b>2</b>			<b>X</b>	<b>202</b>	<b>5.16</b>

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<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol</i> <i>Reference</i>	<i>TF</i> <i>Vol from</i> <i>Surface</i> <i>Soil</i>	<i>TF</i> <i>Vol from</i> <i>Sub-</i> <i>Surface</i> <i>Soil</i>	<i>Or-</i> <i>ganic</i> <i>Liquid</i>	<i>Boiling</i> <i>Point</i> <i>(degrees)</i>	<i>Attenua-</i> <i>tion</i> <i>lambda</i>
<b>CRESOL,P (METHYLPHENOL, 4-)</b>	<b>106-44-5</b>	<b>0.005</b>				<b>49</b>		<b>22000</b>	<b>6</b>				<b>202</b>	<b>9.03</b>
CRESOL(S)	1319773	0.005		0.005		25	X	[19320] 20000	[14] 2	13000	14900	X	138.5	5.16
CRESOL, P-CHLORO-M-	59507	0.005		0.005		780		[3850] 3846	[5] 2				235	
CROTONALDEHYDE	4170303		1.9		1.9	5.6	X	[181000] 180000	[18] 3			X	104	18.07
<b>CROTONALDEHYDE, TRANS-</b>	<b>123-73-9</b>		<b>1.9</b>			<b>6</b>	<b>X</b>	<b>156000</b>	<b>1</b>	<b>13100</b>	<b>15100</b>	<b>X</b>	<b>104</b>	<b>18.07</b>
CUMENE	98828	[0.04] 0.01		[0.0025713] 0.11		2800	X	[49.9] 50	[11] 1,5,6	13100	15100	X	152.4	15.81
CYCLOHEXANONE	108941	5		5		66	X	[5000] 36500	[15] 1,2,4,5	13000	14900	X	157	
<b>CYFLUTHRIN</b>	<b>68359-37-5</b>	<b>0.025</b>				<b>130000</b>	<b>X</b>	<b>0.001</b>	<b>2</b>	<b>13000</b>	<b>15000</b>	<b>X</b>		
<b>CYROMAZINE</b>	<b>66215-27-8</b>	<b>0.0075</b>				<b>1200</b>		<b>11000</b>	<b>12</b>				<b>222</b>	
DDD, 4,4'-	72548		0.24		0.2415	44000		0.16	5,6,7				193	0.02
DDE, 4,4'-	72559		0.34		0.34	87000		[0.0013] 0.04	5				348.1	0.02
DDT, 4,4'-	50293	0.0005	0.34	0.0005	0.34	240000		[0.0017] 0.005	5,6,7				260	0.02
<b>DI(2-ETHYLHEXYL)ADIPATE</b>	<b>103-23-1</b>	<b>0.6</b>	<b>0.0012</b>			<b>47000000</b>		<b>200</b>	<b>5</b>	<b>13000</b>	<b>14900</b>	<b>X</b>	<b>214</b>	<b>4.50</b>
DIALATE	2303164		0.061		0.061	190	X	[14] 40	[11] 2,4,6,8	12900	14900	X	150	1.39
<b>DIAMINOTOLUENE, 2,4-</b>	<b>95-80-7</b>		<b>3.2</b>		<b>4</b>	<b>36</b>		<b>7470</b>	<b>4</b>				<b>292</b>	<b>0.69</b>
DIAZINON	333415	0.0009		0.0009		500		[40] 50	[15] 2,4,6,8				306.1	
DIBENZO[A,H]ANTHRACENE	53703		7.3		4.2	1800000		[0.0005] 0.0006	1,5,6				524	0.13
DIBROMO-3-CHLOROPROPANE, 1,2-	96128	0.0000571	1.4	0.0000571	0.00242	140	X	[1230] 1000	[11] 4	13000	15000	X	196	0.69

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<b>DIBROMOBENZENE, 1,4-</b>	<b>106-37-6</b>	<b>0.01</b>				<b>1600</b>		<b>20</b>	<b>1</b>				<b>220.4</b>	
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106934	0.0000571	85	0.0000571	0.77	54	X	[4152] 4150	[11] 1,2,3,5	13100	15100	X	131.36	2.11
DIBROMOMETHANE	74953	0.01		0.01		110	X	[11930] 11400	[11] 1	13100	15100	X	96.25	4.50
DIBUTYL PHTHALATE, N-	84742	0.1		0.1		1600		[13] 400	[11] 1,2,3			X	340	11.00
<b>DICHLORO-2-BUTENE, 1,4-</b>	<b>764-41-0</b>				<b>9.3</b>	<b>180</b>		<b>850</b>	<b>9</b>				<b>156</b>	
DICHLOROBENZENE, 1,2-	95501	0.09		0.0571		350	X	[83.96] 147	[11] 1,4,5,6,7	13100	15100	X	180.48	0.69
DICHLOROBENZENE, 1,3-	541731	[0.089] 0.0009		[0.089] 0.0009		360	X	[125] 106	[11] 1	13100	15100	X	173	0.69
DICHLOROBENZENE, P-	106467	0.229	0.024	0.229	[0.0385] 0.04	510		[81.3] 82.9	[11] 1				174.12	0.69
DICHLOROBENZIDINE, 3,3'-	91941		0.45		1.19	22000		[12.3] 3.11	[11] 4,5,6				368	0.69
DICHLORODIFLUOROMETHANE (FREON 12)	75718	0.2		0.0571		360	X	280	[5] 1	13200	15000	X	-29.8	0.69
DICHLOROETHANE, 1,1-	75343	0.1	0.0057	0.143	0.0056	52	X	[5060] 5000	[5] 2	13100	15000	X	57.3	0.16
DICHLOROETHANE, 1,2-	107062	<b>0.03</b>	0.091	<b>0.23</b>	0.091	38	X	[8608] 8412	[11] 1,2,3,4	13100	15000	X	83.48	[0.07] 0.69
DICHLOROETHYLENE, 1,1-	75354	0.009	0.6	0.009	0.175	65	X	[2250] 2500	[11] 1,4,5	13100	15000	X	31.56	0.19
DICHLOROETHYLENE, CIS-1,2-	156592	0.01		0.01		49	X	[800] 3500	[17] 1	13100	15000	X	60	0.01
DICHLOROETHYLENE, TRANS-1,2-	156605	0.02		0.02		47	X	6300	[5] 1	13100	15000	X	47.5	0.01
DICHLOROMETHANE (METHYLENE CHLORIDE)	75092	0.06	0.0075	0.857	0.00165	16	X	[13030] 20000	[11] 1,2,3	13100	15000	X	39.64	4.50
DICHLOROPHENOL, 2,4-	120832	0.003		0.003		160		4500	[11] 1				209.5	5.88

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DICHLOROPHOENOXYACETIC ACID, 2,4- (2,4-D)	94757	0.01		0.01		59		677	[11] 4,5,6,7,10				[160] 215	1.39
DICHLOROPROPANE, 1,2-	78875	[0.00123] 0.09	0.068	[0.00123] 0.0011	[0.068] 0.063	47	X	2700	[11] 1,3,4	13100	15000	X	96	0.10
<b>DICHLOROPROPENE, 1,3-</b>	<b>542-75-6</b>	<b>0.0003</b>	<b>0.18</b>	<b>0.005714286</b>	<b>0.13</b>	<b>27</b>	<b>X</b>	<b>2700</b>	<b>6</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>108</b>	<b>22.38</b>
DICHLOROPROPIONIC ACID (DALAPON), 2,2-	75990	0.03		0.03		62	X	[502000] 500000	[16] 5	13000	14900	X	190	2.11
DICHLORVOS	62737	0.0005	0.29	0.0001429	0.291	50		10000	[11] 2,4,5				140	
<b>DICYCLOPENTADIENE</b>	<b>77-73-6</b>	<b>0.03</b>		<b>5.71429E-05</b>		<b>810</b>	<b>X</b>	<b>40</b>	<b>5</b>			<b>X</b>	<b>167</b>	
DIELDRIN	60571	0.00005	16	0.00005	16.1	11000		[0.2] 0.17	4,5,6			X	385	0.12
DIETHYL PHTHALATE	84662	0.8		0.8		81		[896] 1080	[11] 4,5,6			X	298	2.25
<b>DIFLUBENZURON</b>	<b>36367-38-5</b>	<b>0.02</b>				<b>1000</b>		<b>0.2</b>	<b>2</b>				<b>201</b>	
DIMETHOATE	60515	0.0002		0.0002		110		25000	[13] 4				200	2.26
<b>DIMETHOXYBENZIDINE, 3,3-</b>	<b>119-90-4</b>		<b>0.014</b>			<b>1300</b>		<b>60</b>	<b>9</b>				<b>331</b>	<b>0.69</b>
DIMETHYLAMINOAZOBENZENE, P-	60117		4.6		4.55	1000		[0.23] 13.6	[11] 7				200	4.50
<b>DIMETHYLANILINE, N,N-</b>	<b>121-69-7</b>	<b>0.002</b>				<b>180</b>	<b>X</b>	<b>1200</b>	<b>5,6,7,9</b>	<b>13000</b>	<b>14900</b>	<b>X</b>	<b>192</b>	<b>0.69</b>
<b>DIMETHYLBENZIDINE, 3,3-</b>	<b>119-93-7</b>		<b>9.2</b>		<b>9.2</b>	<b>22000</b>		<b>1300</b>	<b>10</b>			<b>X</b>	<b>300</b>	<b>18.07</b>
DIMETHYLHYDRAZINE, 1,1-	57147		1.72		1.72	0.2	X	1000000	[11] 2	13000	15000	X	63	5.75
DIMETHYLPHENOL, 2,4-	105679	0.02		0.02		130		[7870] 7869	[11] 1,4,6,7			X	210.9	18.07
DINITROBENZENE, 1,3-	99650	0.0001		0.0001		150		[469] 523	3,5,6,7				300	0.69
DINITROPHENOL, 2,4-	51285	0.002		0.002		0.79		[2787] 5600	[11] 2,4,5,6,7				113	0.48

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**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol</i> <i>Reference</i>	<i>TF</i> <i>Vol from</i> <i>Surface</i> <i>Soil</i>	<i>TF</i> <i>Vol from</i> <i>Sub-</i> <i>Surface</i> <i>Soil</i>	<i>Or-</i> <i>ganic</i> <i>Liquid</i>	<i>Boiling</i> <i>Point</i> <i>(degrees)</i>	<i>Attenu-</i> <i>ation</i> <i>lambda</i>
DINITROTOLUENE, 2,4-	121142	0.002	0.31	0.002	0.31	51		270	[11] 4,5,6				300	0.69
DINITROTOLUENE, 2,6- (2,6-DNT)	606202	0.001		0.001		74		[182] 200	[11] 6				300	0.69
DINOSEB	88857	0.001		0.001		120		[52] 50	[1] 5				[42] 223	1.03
DIOXANE, 1,4-	123911		0.011		0.027	7.8	X	1000000	[11] 5	13000	14900	X	101.32	0.69
<b>DIPHENAMID</b>	<b>957-51-7</b>	<b>0.03</b>				<b>200</b>		<b>260</b>	<b>5</b>				<b>210</b>	
DIPHENYLAMINE	122394	0.025		0.025		190		300	[12] 3				302	4.50
DIPHENYLHYDRAZINE, 1,2-	122667		0.8		0.77	660		[68] 0.252	[11] 6				309	0.69
DIQUAT	85007	0.0022		0.0022		2.6		700000	[7] 5				355	
DISULFOTON	298044	0.00004		0.00004		1000	X	25	[9] 4,5,6	13400	15400	X	133	6.02
DIURON	330541	0.002		0.002		300		42	[3] 2,4,5				155	
<b>ENDOSULFAN</b>	<b>115-29-7</b>	<b>0.006</b>		<b>0.006</b>		<b>2000</b>		<b>0.48</b>	<b>4</b>				<b>106</b>	<b>2.78</b>
ENDOSULFAN I (ALPHA)	959988	0.006		0.006		2000		[0.53] 0.5	[5] 6				200	
ENDOSULFAN II (BETA)	33213659	0.006		0.006		2300		[0.28] 0.45	[5] 6				390	
ENDOSULFAN SULFATE	1031078	0.006		0.006		2300		0.117	[5] 7,9				200	
ENDOTHALL	145733	0.02		0.02		120		100000	[1] 2				200	
ENDRIN	72208	0.0003		0.0003		11000		[0.26] 0.23	[5] 4,6,7,9				245	
EPICHLOROHYDRIN	106898	0.002	0.0099	0.0002857	0.0042	35	X	[65900] 65800	[11] 1,3,4	13000	14900	X	116.11	4.50
<b>ETHEPHON</b>	<b>16672-87-0</b>	<b>0.005</b>				<b>2</b>		<b>1240000</b>	<b>12</b>				<b>201</b>	
ETHION	563122	0.0005		0.0005		8700		[0.6] 0.85	[15] 4,6,9,10			X	200	

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<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol</i> <i>Reference</i>	<i>TF</i> <i>Vol from</i> <i>Surface</i> <i>Soil</i>	<i>TF</i> <i>Vol from</i> <i>Sub-</i> <i>Surface</i> <i>Soil</i>	<i>Or-</i> <i>ganic</i> <i>Liquid</i>	<i>Boiling</i> <i>Point</i> <i>(degrees)</i>	<i>Attenua-</i> <i>tion</i> <i>lambda</i>
ETHOXYETHANOL, 2- (EGEE)	110805	0.4		<b>[0.4] 0.057</b>		12	X	1000000	<b>[15] 2</b>	13200	15000	X	135.5	4.50
ETHYL ACETATE	141786	0.9		0.9		59	X	<b>[80000]</b> <b>80800</b>	<b>1,2,3,4,5,6</b>	13100	15000	X	77.06	18.07
ETHYL ACRYLATE	140885		0.048		0.048	110	X	15000	<b>[11] 1,2,6</b>	13100	15100	X	100	18.07
ETHYL BENZENE	100414	0.1		0.286		220	X	<b>[206] 161</b>	<b>[11] 1,3,4</b>	13100	15000	X	136.19	1.11
<b>ETHYLDIPROPYLTHIOCARBAMATE, S- (EPTC)</b>	<b>759-94-4</b>	<b>0.025</b>				<b>240</b>	<b>X</b>	<b>365</b>	<b>2</b>	<b>12900</b>	<b>14900</b>	<b>X</b>	<b>127</b>	
ETHYL ETHER	60297	0.2		0.2		68	X	<b>[69000]</b> <b>60400</b>	<b>[3] 1</b>	13100	15100	X	34.5	
<b>ETHYLMETHACRYLATE</b>	<b>97-63-2</b>	<b>0.09</b>		<b>0.09</b>		<b>22</b>		<b>4635.5</b>	<b>9,10</b>				<b>117</b>	
ETHYLENE GLYCOL	107211	2		2		4.4	X	1000000	<b>[11] 2</b>	13100	15100	X	197.5	10.54
ETHYLENE THIOUREA (ETU)	96-45-7	<b>0.00008</b>	<b>0.11</b>	<b>0.00008</b>	<b>0.045</b>	<b>0.23</b>		<b>20000</b>	<b>2</b>					<b>4.50</b>
<b>ETHYLP-NITROPHENYL-PHENYLPHOSPHOROTHIOATE</b>	<b>2104-64-5</b>	<b>0.00001</b>				<b>1200</b>		<b>3.1</b>	<b>4</b>				<b>215</b>	
FENAMIPHOS	22224926	0.00025		0.00025		300		<b>[700] 329</b>	<b>[9] 2</b>				200	
<b>FENVALERATE (PYDRIN)</b>	<b>51630-58-1</b>	<b>0.025</b>				<b>4400</b>		<b>0.085</b>	<b>5</b>	<b>20500</b>	<b>25800</b>	<b>X</b>	<b>300</b>	
<b>FLUOMETURON</b>	<b>2164-17-2</b>	<b>0.013</b>				<b>68</b>		<b>97.5</b>	<b>2,5,6,8</b>					
FLUORANTHENE	206440	0.04		0.04		49000		<b>[0.265]</b> <b>0.26</b>	<b>1,5,6</b>				375	0.29
FLUORENE	86737	0.04		0.04		7900		<b>[0.19] 1.9</b>	<b>[5] 1</b>				298	2.11
FLUOROTRICHLOROMETHANE (FREON 11)	75694	0.3		0.2		130	X	<b>[1240]</b> <b>1090</b>	<b>1,4,5,6</b>	13100	15000	X	23.63	0.35
FONOFOS	944229	0.002		0.002		1100	X	13	<b>[9] 5,6,8</b>	13400	15500	X	130	
FORMALDEHYDE	50000	0.2	0.0455	<b>[0.2] 0.0011</b>	0.0455	3.6	X	<b>[50000]</b> <b>55000</b>	<b>[11] 1</b>	13100	15100	X	-21	18.07

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<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol</i> <i>Reference</i>	<i>TF</i> <i>Vol from</i> <i>Surface Soil</i>	<i>TF</i> <i>Vol from</i> <i>Sub-Surface Soil</i>	<i>Or-</i> <i>ganic</i> <i>Liquid</i>	<i>Boiling</i> <i>Point</i> <i>(degrees)</i>	<i>Attenua-</i> <i>tion</i> <i>lambda</i>
FORMIC ACID	64186	2		2		0.54	X	1000000	[15] 2	13000	14900	X	100.7	18.07
FOSETYL-AL	39148-24-8	3				310		120000	2					
FURAN	110-00-9	0.001				130	X	10000	1	13100	15000	X	31.36	2.25
FURFURAL	98011	0.003		0.0143		6.3	X	[83000] 91000	1,2,3	13000	14900	X	161.7	
GLYPHOSATE	1071836	0.1		0.1		3500		12000	[4] 1,5,6				186	
HEPTACHLOR	76448	0.0005	4.5	0.0005	4.55	6800		0.18	[11] 4,6,7				310	46.84
HEPTACHLOR EPOXIDE	1024573	0.000013	9.1	0.000013	9.1	21000		[0.275] 0.311	[5] 4,6,7,9				200	0.23
HEXACHLOROBENZENE	118741	0.0008	1.6	0.0008	1.61	3800		[0.0062] 0.006	[11] 1,4,5				319.3	0.06
HEXACHLOROBUTADIENE	87683	0.0002	0.078	0.0002	0.077	4700		[3.2] 2.89	[11] 4,5,6,7		X	215	0.69	
HEXACHLOROCYCLOPENTADIENE	77474	0.007		0.00002		7200		[3.4] 1.8	[11] 5,6,7		X	239	4.50	
HEXACHLOROETHANE	67721	0.001	0.014	0.001	0.014	2200		50	[11] 1				[186.8] 187	0.69
HEXANE	110543	0.06		0.0571		3600	X	[9.47] 9.5	[3] 1,5,6	13100	15000	X	69	
HEXYTHIAZOX (SAVEY)	78587-05-0	0.025				6500		0.5	2					
HYDRAZINE/HYDRAZINE SUFLATE	302-01-2		3		17.15	0.0053	X	1000000	2	13000	15000	X	113.5	18.07
HYDROQUINONE	123-31-9	0.04		0.04		10		70000	2,3,5				285	18.07
* * * * *														
IPRODIONE	36734-19-7	0.04				1100		13	2					

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<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol</i> <i>Reference</i>	<i>TF</i> <i>Vol from</i> <i>Surface</i> <i>Soil</i>	<i>TF</i> <i>Vol from</i> <i>Sub-</i> <i>Surface</i> <i>Soil</i>	<i>Or-</i> <i>ganic</i> <i>Liquid</i>	<i>Boiling</i> <i>Point</i> <i>(degrees)</i>	<i>Attenua-</i> <i>tion</i> <i>lambda</i>
ISOBUTYL ALCOHOL	78831	0.3		0.3		60	X	[95000] 81000	1,2,3,4,5	13000	14900	X	108.1	17.57
ISOPHORONE	78591	0.2	0.00095	0.2	0.00095	31		12000	2,4,5			X	215.2	4.50
KEPONE	143500	0.0005	16		16.1	55000		7.6	[3] 4				350	0.17
MALATHION	121755	0.02	[0.00095]	0.02	[0.00095]	1300	X	[145] 143	[3] 4	14000	16300	X	156.5	2.46
MALEIC HYDRAZIDE	123331	0.5		0.5		2.8		6000	[15] 4				260	
MANEB	12427- 38-2	0.005				1		23	9,13					
MERPHOS OXIDE	78-48-8	0.00003				53000	X	2.3	8,10,12	13100	15100	X	150	
METHACRYLONITRILE	126987	0.0001		0.0002		21	X	[25000] 25700	[12] 1	13100	15100	X	90.3	
METHAMIDOPHOS	10265- 92-6	0.00005				5		2000000	5					
METHANOL	67561	0.5		0.5		2.8	X	1000000	[11] 2	13100	15100	X	64.55	36.14
METHOMYL	16752775	0.025		0.025		20		58000	[9] 2				144	
METHOXYCHLOR	72435	0.005	[0.00095]	0.005	[0.00095]	63000		[0.1] 0.045	[11] 4,5,6				346	0.69
METHOXYETHANOL, 2-	109-86-4	0.001		0.005714286			X	1000000	2	13100	15000	X	124.3	4.50
METHYL ACETATE	79-20-9	1				30	X	243500	4,5,6	13100	15100	X	56.9	
METHYL ACRYLATE	96-33-3	0.03				55	X	52000	1,2,5	13100	15100	X	70	18.07
METHYL CHLORIDE	74873	0.004	0.013	0.029	0.0063	6	X	[5325] 6180	[11] 1,2,3,4	13200	15000	X	-24.2	4.50
METHYL ETHYL KETONE	78933	0.6		0.286		32	X	[223000] 275000	[11] 1,2,3,4,5	13100	15100	X	79.6	2.57
METHYL ISOBUTYL KETONE	108101	0.08		[0.0229] 0.023		17	X	[19000] 19550	[11] 1,2,4,5	13100	15100	X	117.4	18.07

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<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF</i> <i>Vol from Surface Soil</i>	<i>TF</i> <i>Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
METHYL METHACRYLATE	80626	<b>[0.08] 1.4</b>		<b>[0.08] 0.2</b>		10	X	<b>[15000] 15600</b>	<b>[11] 1</b>	13100	15100	X	100.3	4.50
METHYL METHANESULFONATE	66273		0.099		0.098	5.2		200000	<b>[12] 2</b>				203	
METHYL PARATHION	298000	0.00025		0.00025		790	X	<b>[50] 25</b>	<b>[9] 4,5,6</b>	13500	15600	X	133	3.61
<b>METHYLSTYRENE (MIXED ISOMERS)</b>	<b>25013-15-4</b>	<b>0.006</b>		<b>0.011428571</b>		<b>2.200</b>		<b>89</b>	<b>9</b>					
METHYL TERT-BUTYL ETHER (MTBE)	1634044	0.857		0.857		12	X	<b>[51000] 45000</b>	<b>[11] 1,2,4,6</b>	13100	15100	X	55.2	
<b>METHYLENE BIS(2-CHLOROANILINE),4,4'</b>	<b>101-14-4</b>	<b>0.0007</b>	<b>0.13</b>	<b>0.0007</b>	<b>0.13</b>	<b>3.000</b>		<b>13.9</b>	<b>10</b>					
METHYLNAPHTHALENE, 2-	91576	<b>[0.04] 0.02</b>		<b>[0.00286] 0.00086</b>		16000		<b>[24.6] 25</b>	<b>[5] 1</b>			X	<b>[241.05] 241</b>	
<b>METHYLSTYRENE, ALPHA</b>	<b>98-83-9</b>	<b>0.07</b>				<b>660</b>	X	<b>560</b>	<b>9</b>			X	<b>165.4</b>	
NAPHTHALENE	91203	<b>[0.04] 0.02</b>		<b>[0.00286] 0.00086</b>		950		<b>[31] 30</b>	<b>[11] 3</b>				<b>[217.9] 218</b>	0.98
NAPHTHYLAMINE, 1-	134327		1.8		1.8	3200		<b>[1698] 1690</b>	<b>[11] 2</b>				301	0.69
NAPHTHYLAMINE, 2-	91598		1.8		1.8	87		<b>[263] 6,4</b>	<b>[11] 6</b>				306	0.69
<b>NAPROPAMIDE</b>	<b>15299-99-7</b>	<b>0.1</b>				<b>880</b>		<b>70</b>	<b>2</b>					
NITROANILINE, M-	99092	0.00005714		0.00005714		18		<b>[890] 100</b>	<b>[5] 3</b>				<b>[306.4] 306</b>	
NITROANILINE, O-	88744	0.00005714		0.00005714		27		<b>[1260] 1200</b>	<b>[5] 6</b>				<b>[284.1] 284</b>	
NITROANILINE, P-	100016	0.00005714		0.00005714		15		800	<b>[5] 2</b>				<b>[331.7] 332</b>	
NITROBENZENE	98953	0.0005		<b>[0.0005714] 0.0006</b>		130		<b>[1900] 2000</b>	<b>[11] 2</b>			X	<b>[210.8] 211</b>	0.64
NITROPHENOL, 2-	88755	<b>[0.062] 0.008</b>		<b>[0.062] 0.008</b>		37		2100	<b>[13] 1,2,3,4,5,6</b>				215	9.01
NITROPHENOL, 4-	100027	<b>[0.062] 0.008</b>		<b>[0.062] 0.008</b>		230		16000	<b>[11] 2</b>				279	25.81

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NITROPROPANE, 2-	79469	<b>[0.00571]</b> <b>0.005714286</b>	<b>[9.45] 9.4</b>	<b>[0.00571]</b> <b>0.005714</b>	<b>[9.45]</b> <b>9.4</b>	20	X	<b>[17000]</b> <b>16700</b>	<b>[11]</b> <b>1,3,4,5</b>	13000	14900	X	<b>[120.25]</b> <b>120</b>	0.69
* * * * *														
NITROSODIETHYLAMINE, N-	55185		150		<b>[151]</b> <b>150.5</b>	26	X	93000	<b>[11] 10</b>	13000	14900	X	176	0.69
NITROSODIMETHYLAMINE, N-	62759		51		49	8.5	X	1000000	<b>[11] 2</b>	13000	14900	X	154	0.69
<b>NITROSO-DI-N-BUTYLAMINE,N-</b>	<b>924-16-3</b>		<b>5.4</b>		<b>5.6</b>	<b>450</b>		<b>1200</b>	<b>9,10,13</b>			<b>X</b>	<b>235</b>	<b>0.69</b>
NITROSO-DI-N-PROPYLAMINE, N-	621647	0.095	7	0.095	7	11		<b>[9894]</b> <b>9900</b>	<b>[11] 6</b>			X	206	0.69
NITROSODIPHENYLAMINE, N-	86306		0.0049		0.0091	580		35	<b>[11] 1</b>				<b>[268.7]</b> <b>269</b>	3.72
<b>NITROSO-N-ETHYLUREA, N</b>	<b>759-73-9</b>		<b>140</b>		<b>27</b>	<b>2</b>		<b>13000</b>	<b>9</b>				<b>125</b>	<b>1734.48</b>
OCTYL PHTHALATE, DI-N-	117840	0.02		0.02		980000000		3	<b>[11] 5</b>			X	234	0.69
OXAMYL (VYDATE)	23135220	0.025		0.025		7.1		280000	<b>[9] 2</b>				101	
PARATHION	56382	0.006		0.006		2300		<b>[6.54] 20</b>	<b>[11]</b> <b>2,4,5,6,7</b>			X	375	
PCB-1016 (AROCLOR)	12674112	0.00007	0.09	0.00007	0.09	110000		<b>[0.049]</b> <b>0.25</b>	5			X	340	
PCB-1221 (AROCLOR)	11104282		0.5		0.5	1900		<b>[0.2]</b> <b>0.59</b>	5			X	340	
PCB-1232 (AROCLOR)	11141165		0.5		0.5	1500		1.45	<b>[5] 7</b>			X	340	
PCB-1242 (AROCLOR)	53469219		0.5		0.05	48000		<b>[0.24]</b> <b>0.1</b>	5			X	340	
PCB-1248 (AROCLOR)	12672296		1.8		1.8	190000		<b>[0.006]</b> <b>0.054</b>	<b>[5]</b> <b>7,9,11</b>			X	340	
PCB-1254 (AROCLOR)	11097691	0.00002	1.8	0.00002	1.8	810000		<b>[0.012]</b> <b>0.057</b>	5			X	340	
PCB-1260 (AROCLOR)	11096825		0.6		0.6	1800000		0.08	5				<b>[31] 385</b>	
<b>PEBULATE</b>	<b>1114-71-2</b>	<b>0.05</b>				<b>630</b>	<b>X</b>	<b>92</b>	<b>5</b>	<b>13000</b>	<b>14900</b>	<b>X</b>	<b>142</b>	
PENTACHLOROBENZENE	608935	0.0008		0.0008		32000		<b>[0.24]</b> <b>0.74</b>	<b>[3]</b> <b>1,5,6,7</b>				277	0.37

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol</i> <i>Reference</i>	<i>TF</i> <i>Vol from</i> <i>Surface</i> <i>Soil</i>	<i>TF</i> <i>Vol from</i> <i>Sub-</i> <i>Surface</i> <i>Soil</i>	<i>Or-</i> <i>ganic</i> <i>Liquid</i>	<i>Boiling</i> <i>Point</i> <i>(degrees)</i>	<i>Attenua-</i> <i>tion</i> <i>lambda</i>
PENTACHLORONITROBENZENE	82688	0.003	0.26	0.003	0.26	7900		[0.59] 0.44	[11] 4,6,8				328	0.36
PENTACHLOROPHENOL	87865	0.03	0.12	0.03	[0.12] 0.018	20000		14	[11] 1,2,4,5				[309.5] 310	0.17
PHENACETIN	62442		0.0022		[0.0022] 0.002205	110		[760] 763	[12] 2,3,9				200	4.50
PHENANTHRENE	85018	0.3		0.3		38000		[1.18] 1.1	1,4,5				341.2	0.63
PHENOL	108952	0.6		0.6		22		[82800] 84300	[11] 1,2,3,4			X	[181.84] 182	36.14
PHENYLENEDIAMINE, M-	108452	0.006		0.006		12		[447974] 351000	3				286	4.50
PHENYLPHENOL,2-	90-43-7		0.00194			5700		700	5				280	19.07
PHORATE	298022	0.0002		0.0002		810	X	50	[12] 2	13100	15100	X	118	
PHTHALIC ANHYDRIDE	85449	2		[0.0343] 0.034284		79		[6200] 6170	[11] 2				[284.5] 285	13490.40
PICLORAM	6-60-7	0.07				15		430	2					
POLYCHLORINATED BIPHENYLS (AROCLORS) (PCBS)	1336-36-3		2		2			0.505	10,13					
PRONAMIDE	23950585	0.075		0.075		200		15	[12] 2				321	
PROPANIL	709-98-8	0.005				160		225	2					
PROPHAM	122-42-9	0.02				51		250	5					
PROPYLBENZENE, N-	103-65-1	0.01				720	X	52	6	13100	15100	X	159.2	
PROPYLENE OXIDE	75569	[0.00857] 0.008571429	0.24	0.008571	[0.0132] 0.013	25	X	[590000] 405000	[11] 1	13100	15000	X	[34.23] 34	
PYRENE	129000	0.03		0.03		68000		[0.013] 0.132	[5] 1				393	0.07
PYRIDINE	110861	0.001		0.001		0.0066	X	1000000	[11] 2	13100	15000	X	[115.25] 115	18.07
QUINOLINE	91-22-5		12		1300		60000	1,3,5		13000	14900	X	237.7	12.65
QUIZALOFOP (ASSURE)	76578-14-8	0.009				580		0.3	2				220	
RONNEL	299-84-3	0.05					580		40	2				151
SIMAZINE	122349	0.005	0.12	0.005	0.12	110		5	[4] 5				225	
STRYCHNINE	57249	0.0003		0.0003		280		[300] 143	[13] 5				270	4.50

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol</i> <i>Reference</i>	<i>TF</i> <i>Vol from</i> <i>Surface</i> <i>Soil</i>	<i>TF</i> <i>Vol from</i> <i>Sub-</i> <i>Surface</i> <i>Soil</i>	<i>Or-</i> <i>ganic</i> <i>Liquid</i>	<i>Boiling</i> <i>Point</i> <i>(degrees</i>	<i>Attenua-</i> <i>tion</i> <i>lambda</i>
STYRENE	100425	0.2		<b>[0.286]</b> <b>0.2857</b>		910	X	<b>[320]</b> <b>300</b>	<b>[11] 5</b>	13100	15100	X	<b>[145.14]</b> <b>145</b>	1.20
<b>TEBUTHIURON</b>	<b>34014-18-1</b>	<b>0.07</b>				<b>620</b>		<b>2500</b>	<b>2</b>					
<b>TERBACIL</b>	<b>5902-51-2</b>	<b>0.013</b>				<b>53</b>		<b>710</b>	<b>2</b>					
TERBUFOS	13071799	0.000025		0.000025		510	X	<b>[4.5] 5</b>	<b>[7] 6</b>	13000	15000	X	69	
<b>TETRACHLOROENZENE,1,2,4,5-</b>	<b>95-94-3</b>	<b>0.0003</b>		<b>0.0003</b>		<b>1800</b>		<b>0.583</b>	<b>1,5,6,7</b>				<b>245</b>	<b>0.69</b>
TETRACHLORODIBENZO-P-DIOXIN, 2,3,7,8- (TCDD)	1746016		150000		<b>[116000]</b>	4300000		0.0000193	<b>[12] 6</b>				<b>[412.2]</b> <b>412</b>	0.21
<b>TETRACHLOROETHANE,1,1,1,2-</b>	<b>630-20-6</b>	<b>0.03</b>	<b>0.026</b>	<b>0.03</b>	<b>0.0259</b>	<b>980</b>	X	<b>1100</b>	<b>1</b>			X	<b>130.5</b>	<b>3.79</b>
TETRACHLOROETHANE, 1,1,2,2-	79345		<b>[0.27] 0.2</b>	<b>[0.04]</b>	0.203	79	X	<b>[2962]</b> <b>2860</b>	<b>[11] 2</b>	13100	15100	X	<b>[146.5]</b> <b>147</b>	0.56
TETRACHLOROETHYLENE (PCE)	127184	0.01	0.052	<b>[0.0857]</b> <b>0.077</b>	0.00203	300	X	<b>[200]</b> <b>162</b>	<b>[11]</b> <b>1,2,3,4,5</b>	13100	15000	X	<b>[121.07]</b> <b>121</b>	0.03
TETRACHLOROPHENOL, 2,3,4,6-	58902	0.03		0.03		6200		<b>[1000]</b> <b>183</b>	<b>[15] 6</b>				150	0.69
TETRAETHYL LEAD	78002	0.0000001		0.0000001		4900		<b>[0.21]</b> <b>0.8</b>	<b>[15] 5</b>			X	200	4.50
<b>TETRAETHYLDITHIOPYRO-</b> <b>PHOSPHATE</b>	<b>3689-24-5</b>	<b>0.0005</b>		<b>0.0005</b>		<b>550</b>	X	<b>25</b>	<b>2</b>	<b>13000</b>	<b>14900</b>	X	<b>136</b>	
<b>THIOFANOX</b>	<b>39196-18-4</b>	<b>0.0003</b>			<b>0.022</b>				<b>5200</b>	<b>9</b>				
THIRAM	137268	0.005		0.005		1000		30	<b>[3] 4</b>				200	
TOLUENE	108883	0.2		<b>[0.114]</b> <b>0.11428</b>		130	X	<b>[526]</b> <b>532.4</b>	<b>[11]</b> <b>1,2,3,4</b>	13100	15000	X	110.63	9.01
TOLUIDINE, M-	108441		0.24		0.24	140		<b>[15114]</b> <b>15030</b>	<b>[18] 6</b>			X	203.3	
TOLUIDINE, O-	95534		<b>[0.18] 0.24</b>		0.1785	410		<b>[16600]</b> <b>15000</b>	<b>[11]</b> <b>1,3,5</b>			X	<b>[200.4]</b> <b>200</b>	18.07
TOLUIDINE, P-	106490		0.19		0.19	320		<b>[6640]</b> <b>7410</b>	<b>[6] 1,2,3</b>				<b>[200.4]</b> <b>200</b>	
TOXAPHENE	8001352	0.001	1.1	0.001	1.12	1500		<b>[0.55] 3</b>	<b>[11]</b> <b>2,4,5</b>				<b>[431.8]</b> <b>432</b>	

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m3)	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
<b>TRIALATE</b>	<b>2303-17-5</b>	<b>0.013</b>				<b>2000</b>		<b>4</b>	<b>5</b>				<b>117</b>	
TRIBROMOMETHANE (BROMOFORM)	75252	0.02	0.0079	0.02	0.00385	130	X	[3010] 3050	[11] 1,2,3,4	13100	15100	X	149.2	0.69
<b>TRICHLORO-1,2,2-TRIFLUORO-ETHANE,1,1,2</b>	<b>76-13-1</b>	<b>30</b>		<b>8.571428571</b>		<b>1200</b>	<b>X</b>	<b>170</b>	<b>1</b>			<b>X</b>	<b>47.7</b>	<b>0.35</b>
TRICHLOROBENZENE, 1,2,4-	120821	0.01		[0.0571] 0.05714		1500		[49] 44.4	[11] 1,4,6,7			X	213	0.69
TRICHLOROBENZENE, 1,3,5-	108703	0.01		[0.0571] 0.05714		3100		[6.01] 5.8	[3] 5				208	
TRICHLOROETHANE, 1,1,1-	71556	[0.571] 0.02		[0.571] 0.29		100	X	1495	[11] 1,4,5,6	13100	15000	X	[74.08] 74	0.05
TRICHLOROETHANE, 1,1,2-	79005	0.004	0.057	0.004	0.056	76	X	4420	[11] 1	13100	15100	X	[113.5] 114	0.03
TRICHLOROETHYLENE (TCE)	79016	[0.002]	0.011	[0.143]	0.00595	93	X	1100	[11] 1	13100	15000	X	86.7	0.02
TRICHLOROPHENOL, 2,4,5-	95954	0.1		0.1		2400		[1200] 1000	[11] 1,2,4				[245.5] 146	0.14
TRICHLOROPHENOL, 2,4,6-	88062	[0.042]	0.011	[0.042]	0.01085	1100		[800] 850	[11] 1,2,4,5				246	0.14
TRICHLOROPHENOXYACETIC ACID, 2,4,5- (2,4,5-T)	93765	0.01		0.01		43		[240] 278	[3] 2,4,5				[278.8] 279	1.39
TRICHLOROPHENOXYPROPIONIC ACID, 2,4,5- (2,4,5-TP)(SILVEX)	93721	0.008		0.008		1700		140	[1] 2				200	
<b>TRICHLOROPROPANE,1,1,2-</b>	<b>598-77-6</b>	<b>0.005</b>				<b>24</b>	<b>X</b>	<b>2700</b>	<b>14</b>	<b>13100</b>	<b>1500</b>	<b>X</b>	<b>117</b>	
TRICHLOROPROPANE, 1,2,3-	96184	0.006	7	0.0005714	7	280	X	[1800] 1896	[15] 1,4,6	13100	15100	X	156.8	0.35
<b>TRICHLOROPROPENE,1,2,3-</b>	<b>96-19-5</b>	<b>0.005</b>				<b>190</b>	<b>X</b>	<b>2700</b>	<b>14</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>142</b>	
<b>TRIFLURALIN</b>	<b>1582-09-8</b>	<b>0.0075</b>	<b>0.0077</b>	<b>0.0075</b>	<b>0.0077</b>	<b>720</b>		<b>4</b>	<b>2,5,6,7</b>				<b>139</b>	
<b>TRIMETHYLBENZENE,1,3,4-(TRIMETHYLBENZENE,1,2,4-)</b>	<b>95-63-6</b>	<b>0.05</b>		<b>0.0017</b>		<b>2200</b>	<b>X</b>	<b>56</b>	<b>1</b>	<b>13100</b>	<b>15000</b>	<b>X</b>	<b>169</b>	
<b>TRIMETHYLBENZENE,1,3,5-</b>	<b>108-67-8</b>	<b>0.05</b>		<b>0.0017</b>		<b>660</b>	<b>X</b>	<b>48.9</b>	<b>1</b>	<b>13100</b>	<b>15100</b>	<b>X</b>	<b>164.7</b>	
<b>TRINITROTOLUENE,2,4,6-</b>	<b>118-96-7</b>	<b>0.0005</b>	<b>0.03</b>			<b>1</b>		<b>100</b>	<b>2</b>				<b>240</b>	
VINYL ACETATE	108054	1		[0.0571] 0.05714		2.8	X	20000	[11] 1	13200	15000	X	[72.5] 73	
<b>VINYL BROMIDE (BROMOETHENE)</b>	<b>593-60-2</b>	<b>0.000857</b>	<b>0.11</b>	<b>0.000857143</b>	<b>0.11</b>	<b>150</b>		<b>4180</b>	<b>12</b>				<b>15.8</b>	<b>0.09</b>
VINYL CHLORIDE	75014	<b>0.00002</b>	1.9	<b>0.00002</b>	0.294	10	X	[8800] 2700	[11] 1	13200	15000	X	[-13.37] -13	0.09

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
WARFARIN	81812	0.0003		0.0003		910		<b>[9.17E-09]</b> <b>17</b>	<b>[9] 4</b>				356	4.50
XYLENES (TOTAL)	1330207	2		<b>[2] 0.12</b>		350	X	175	<b>[10] 13</b>	13100	15000	X	140	0.69
<b>ZINEB</b>	<b>12122-67-7</b>	<b>0.05</b>				<b>19</b>		<b>10</b>	<b>4</b>					

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)



**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**B. Inorganic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m3)</i>	<i>CSFi</i>	<i>Kd</i>
<b>ALUMINUM</b>	<b>7429905</b>	<b>1</b>		<b>0.001</b>		
* * * * *						
<b>[ASBESTOS]</b>	<b>[12001295]</b>				<b>[805]</b>	
BARIUM AND COMPOUNDS	7440393	0.07		<b>[0.000143]</b> <b>0.0001</b>		41
BERYLLIUM	7440417	<b>[0.005] 0.002</b>	4.3	<b>[0.005]</b> <b>0.00000571</b>	8.4	790
* * * * *						
CHROMIUM III	16065831	<b>[1] 1.5</b>		<b>[0.00000571]</b>		1,800,000
CHROMIUM VI	18540299	<b>[0.005] 0.003</b>		<b>[0.005]</b> <b>0.0000286</b>	42	19
* * * * *						
COPPER	7440508	<b>[2,600]</b> <b>0.0371</b>				360
* * * * *						
<b>IRON</b>	<b>7439896</b>	<b>0.3</b>		<b>0.3</b>		
* * * * *						
<b>MANGANESE</b>	<b>7439965</b>	<b>0.14</b>		<b>0.0000143</b>		
MERCURY	7439976	<b>[8.57E-05]</b> <b>0.0003</b>		8.57E-05		52
NICKEL	7440020	0.02		<b>[0.02]</b> <b>0.0000571</b>	<b>0.84</b>	65
* * * * *						
THALLIUM	7440280	<b>[0.00008]</b> <b>0.00007</b>		<b>[0.00008]</b> <b>0.00007</b>		71
* * * * *						
VANADIUM	7440622	<b>[5.71E-05]</b> <b>0.007</b>		5.71E-05		1000
* * * * *						

**APPENDIX A**  
**Table 6—Threshold of Regulation Compounds**

REGULATED SUBSTANCE	CASRN	ALL AQUIFER GROUNDWATER MSC (vg/L)	Residential Soil MSC (mg/kg) 0-15 feet	Non-Residential Soil MSCs		Soil to Groundwater <sup>1</sup> (mg/kg)
				Surface Soil (mg/kg) 0-2 feet	Subsurface Soil (mg/kg) 2-15 feet	
		* * * * *				
<b>[BIS(2-CHLORO-1-METHYL-ETHYL)ETHER]</b>	<b>[108601]</b>	<b>[5]</b>	<b>[100]</b>	<b>[100]</b>	<b>[100]</b>	<b>[0.5]</b>
		* * * * *				

<sup>1</sup> The value in the table is 100 times the groundwater MSC.  
The option to use the SPLP is also available to calculate the soil to groundwater numeric value.  
(See Section 250.308)

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