

**List of Subjects**

Environmental protection, Pesticides and pests.

Dated: July 15, 2008.

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**ENVIRONMENTAL PROTECTION AGENCY**

[EPA-HQ-OW-2007-0068; FRL-8699-1]

RIN 2040-AE60

**Drinking Water: Regulatory Determinations Regarding Contaminants on the Second Drinking Water Contaminant Candidate List**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice.

**SUMMARY:** The Safe Drinking Water Act (SDWA), as amended in 1996, requires the United States Environmental Protection Agency (EPA) to periodically publish a list of unregulated contaminants (known as the Contaminant Candidate List or CCL) and determine whether to regulate at least five contaminants on each list. Today's action announces the Agency's final determinations on whether to issue national primary drinking water regulations (NPDWRs) for 11 contaminants listed on the second Contaminant Candidate List (CCL 2).

On May 1, 2007, EPA published preliminary regulatory determinations for 11 of the 51 contaminants listed on CCL 2 and requested public comment on the determinations, process, rationale, and supporting technical information for each contaminant. The 11 regulatory determination contaminants are boron; the dacthal mono- and di-acid degradates; 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE); 1,3-dichloropropene; 2,4-dinitrotoluene; 2,6-dinitrotoluene; s-ethyl dipropylthiocarbamate (EPTC); fonofos; terbacil; and 1,1,2,2-tetrachloroethane. In the May 2007 notice, the Agency made a preliminary determination that no regulatory action was appropriate for any of these 11 contaminants.

EPA received comments from nine individuals or organizations on the preliminary regulatory determinations for the 11 contaminants and additional comments for other contaminants on CCL 2: perchlorate, methyl tertiary butyl ether (MTBE), metolachlor, and

cyanotoxins. After careful review and consideration of these comments, the Agency is making a final determination that no regulatory action is appropriate at this time for any of the 11 CCL 2 contaminants for which the Agency made preliminary regulatory determinations in the May 2007 notice.

**DATES:** For purposes of judicial review, the regulatory determinations in this notice are issued as of July 30, 2008, as provided in 40 CFR 23.7.

**ADDRESSES:** EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-2007-0068. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the Water Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-2426.

**FOR FURTHER INFORMATION CONTACT:**

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**Abbreviations and Acronyms**

µg/L—micrograms per liter  
 ATSDR—Agency for Toxic Substances and Disease Registry  
 AwwaRF—American Water Works Association Research Foundation  
 CCL—Contaminant Candidate List  
 CCL 1—EPA's First Contaminant Candidate List  
 CCL 2—EPA's Second Contaminant Candidate List  
 1,3-DCP—1,3-dichloropropene  
 DCPA—dimethyl tetrachloroterephthalate (dacthal)

DDE—1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene  
 DDT—1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane  
 DNT—dinitrotoluene  
 EPA—United States Environmental Protection Agency  
 EPTC—s-ethyl dipropylthiocarbamate  
 ESA—ethane sulfonic acid  
 FR—**Federal Register**  
 HRL—health reference level  
 IRIS—Integrated Risk Information System  
 kg—kilogram  
 L—liter  
 MAC—*Mycobacterium avium*  
 MCL—maximum contaminant level  
 MCLG—maximum contaminant level goal  
 MRL—minimum or method reporting limit (depending on the study or survey cited)  
 MTBE—methyl tertiary butyl ether  
 MTP—monomethyl-2,3,5,6-tetrachloroterephthalate  
 NDWAC—National Drinking Water Advisory Council  
 NIRS—National Inorganic and Radionuclide Survey  
 NRC—National Research Council  
 NPDWR—national primary drinking water regulation  
 OA—oxanilic acid  
 OPP—Office of Pesticide Programs  
 PWS—public water system  
 RSC—relative source contribution  
 SDWA—Safe Drinking Water Act  
 SOT—Society of Toxicology  
 TPA—2,3,5,6-tetrachloroterephthalic acid  
 TRI—Toxics Release Inventory  
 TT—treatment technique  
 UCM—Unregulated Contaminant Monitoring  
 UCMR 1—First Unregulated Contaminant Monitoring Regulation issued after the 1996 SDWA Amendments  
 US—United States of America  
 USGS—United States Geological Survey

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#### SUPPLEMENTARY INFORMATION:

##### I. General Information

###### A. Does This Action Impose Any Requirements on My Public Water System?

None of these regulatory determinations will impose any requirements on anyone. Instead, this action notifies interested parties of EPA's determinations for 11 CCL 2 contaminants and provides a summary of the major comments received on the May 1, 2007, preliminary determinations (72 FR 24016 (USEPA, 2007a)).

##### II. Purpose, Background and Summary of This Action

###### A. What Is the Purpose of This Action?

Today's action briefly describes the statutory requirements for targeting potential drinking water contaminants for regulatory development and the approach EPA used to make regulatory determinations for 11 CCL 2 contaminants. In addition, today's action (1) summarizes the public comments received on EPA's preliminary determinations and the Agency's responses to those comments, (2) presents the Agency's findings and final regulatory determination for 11 CCL 2 contaminants, and (3) provides information regarding the other CCL 2 contaminants.

###### B. What Is the Statutory Requirement for the Contaminant Candidate List (CCL) and Regulatory Determinations?

The specific statutory requirements for the CCL and regulatory determinations can be found in SDWA section 1412(b)(1). The 1996 SDWA Amendments require EPA to publish the CCL every five years. The CCL is a list of contaminants that are not subject to any proposed or promulgated national primary drinking water regulations (NPDWRs), are known or anticipated to occur in public water systems (PWSs), and may require regulation under SDWA. The 1996 SDWA Amendments also direct EPA to determine whether to regulate at least five contaminants from the CCL every five years. SDWA requires EPA to publish a Maximum

Contaminant Level Goal<sup>1</sup> (MCLG) and promulgate an NPDWR<sup>2</sup> for a contaminant if the Administrator determines that:

- (a) The contaminant may have an adverse effect on the health of persons;
- (b) The contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and

(c) In the sole judgment of the Administrator, regulation of such contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.

If EPA determines that all three of these statutory criteria are met, it makes a determination that a national primary drinking water regulation is needed. In that case, the Agency has 24 months to publish a proposed MCLG and NPDWR. After the proposal, the Agency has 18 months to publish a final MCLG and promulgate a final NPDWR (SDWA section 1412(b)(1)(E)).<sup>3</sup>

###### C. What Contaminants Did EPA Consider for Regulation?

On May 1, 2007 (72 FR 24016 (USEPA, 2007a)), EPA published preliminary regulatory determinations for 11 CCL 2 contaminants that have sufficient information to support a regulatory determination. The 11 contaminants are boron; the dacthal mono- and di-acid degradates; 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE); 1,3-dichloropropene; 2,4-dinitrotoluene (DNT); 2,6-dinitrotoluene; s-ethyl dipropylthiocarbamate (EPTC); fonofos; terbacil; and 1,1,2,2-tetrachloroethane.

Information for the 11 contaminants is available in the regulatory determination support document (USEPA, 2008a), the occurrence technical support documents (USEPA, 2008b-c), and the Health Effects Support Documents or Drinking Water Advisories for each of the contaminants (USEPA, 2008d-l). This information is available at the Water Docket (Docket ID No. EPA-HQ-OW-2007-0068) and is

<sup>1</sup> The MCLG is the "maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. Maximum contaminant level goals are nonenforceable health goals" (40 CFR 141.2).

<sup>2</sup> An NPDWR is a legally enforceable standard that applies to public water systems. An NPDWR sets a legal limit (called a maximum contaminant level or MCL) or specifies a certain treatment technique (TT) for public water systems for a specific contaminant or group of contaminants.

<sup>3</sup> The statute authorizes a nine month extension of this promulgation date.

also available on EPA's Safe Drinking Water Regulatory Determination Web site at [http://www.epa.gov/safewater/ccl/reg\\_determine2.html](http://www.epa.gov/safewater/ccl/reg_determine2.html). Brief descriptions of each of the 11 contaminants considered for regulatory determinations are included in section V of this notice.

##### III. What Approach and Analyses Did EPA Use To Make the Regulatory Determinations?

###### A. Approach

In identifying which CCL 2 contaminants are candidates for regulatory determinations, the Agency considered whether sufficient information and/or data were available to characterize the potential health effects and the known/likely occurrence in and exposure from drinking water. For health effects, the Agency considered whether an Agency-approved health risk assessment<sup>4</sup> was available to identify any potential adverse health effect(s) and derive an estimated level at which no adverse health effect(s) are likely to occur. For occurrence, the Agency considered whether available information/data provided a representative picture of known and/or likely occurrence in public water systems. If sufficient information/data were available to characterize adverse human health effects and known/likely occurrence in public water systems, the Agency identified the contaminant as a potential candidate for regulatory determinations. In addition to information/data for health and occurrence, EPA also considered the availability and adequacy of analytical methods (for monitoring) and treatment.

In cases where EPA chose a contaminant as a candidate for regulatory determination, the Agency considered the following in evaluating each of the three statutory criteria.

(a) First statutory criterion—Is the contaminant likely to cause an adverse effect on the health of persons? The Agency evaluated the best available, peer-reviewed assessments and studies to characterize the human health effects that may result from exposure to the contaminant when found in drinking water. Based on this characterization, the Agency estimated a health reference level (HRL) for each contaminant.

<sup>4</sup> Health information used for the regulatory determinations process includes but is not limited to health assessments available from the Agency's Integrated Risk Information System (IRIS), the Agency's Office of Pesticide Programs (OPP) in a Reregistration Eligibility Decision (RED), the National Academy of Sciences (NAS), and/or the Agency for Toxic Substances and Disease Registry (ATSDR).

(b) Second statutory criterion—Is the contaminant known or likely to occur in public water systems at a frequency and level of public health concern? To evaluate known occurrence in PWSs, the Agency compiled, screened, and analyzed data from several occurrence data sets to develop representative occurrence estimates for public drinking water systems. EPA used the HRL estimate for each contaminant as a benchmark against which to conduct an initial evaluation or screening of the occurrence data. For each contaminant, EPA estimated the number of PWSs (and the population served by these PWSs) with detections greater than one-half the HRL (> ½ HRL) and greater than the HRL (> HRL). To further evaluate the likelihood of a contaminant occurring in drinking water, the Agency considered information on the use and release of the contaminant into the environment and supplemental information on occurrence in water (e.g., ambient water quality data, State ambient or finished water data, and/or special studies performed by other agencies, organizations and/or entities).

(c) Third statutory criterion—In the sole judgment of the Administrator, does regulation of the contaminant present a meaningful opportunity for health risk reduction for persons served by public water systems? EPA evaluated the potential health effects and the results of the occurrence estimates, as well as exposure estimates (i.e., the population exposed and the sources of exposure) at the health level of concern to determine if regulation presents a meaningful opportunity for health risk reduction.

If the answers to all three statutory criteria are affirmative for a particular contaminant, then the Agency makes a determination that regulation is necessary and proceeds to develop an

MCLG and a national primary drinking water regulation for that contaminant. It should be noted that this regulatory determination process is distinct from the more detailed analyses needed to develop a national primary drinking water regulation. Thus, a decision to regulate is the beginning of the Agency's regulatory development process, not the end.

If the answer to any of the three statutory criteria is negative based on the available data, then the Agency makes a determination that a national primary drinking water regulation is not necessary for that contaminant at that time.

**B. Analyses**

EPA has prepared Health Effects Support Documents or Drinking Water Advisories (USEPA, 2008d-1) for each of the 11 contaminants. In these documents, EPA characterized the human health effects that may result from exposure to a contaminant found in drinking water. The support documents address exposure from drinking water and other media, toxicokinetics, hazard identification, dose-response assessment, and an overall characterization of risk from drinking water. Based on this characterization, EPA estimated a health reference level (HRL) or benchmark value for each contaminant.

To analyze occurrence and exposure, the Agency used data from the first Unregulated Contaminant Monitoring Regulation (UCMR 1) for 9 of the contaminants: The dacthal mono- and di-acid degradates, 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene (DDE), 1,3-dichloropropene, 2,4-dinitrotoluene, 2,6-dinitrotoluene, s-ethyl dipropylthiocarbamate (EPTC), fonofos, and terbacil.<sup>5</sup> In addition, the Unregulated Contaminant Monitoring

(UCM<sup>6</sup>) program provided additional data for 1,3-dichloropropene and 1,1,2,2-tetrachloroethane and the National Inorganic and Radionuclide Survey (NIRS<sup>7</sup>) provided data for boron. The Agency used the UCMR 1, UCM, and NIRS data to estimate the number and percentage of PWSs and the population served by these PWSs at concentrations above the HRL benchmark values, and ½ the HRL values. The Agency also used these data to evaluate the geographic distribution of occurrence for these 11 CCL 2 contaminants.

EPA also employed State drinking water data, use and environmental release information (e.g., EPA's Toxic Release Inventory (TRI), academic and private sector publications), as well as ambient water quality data (e.g., data from the U.S. Geological Survey's National Water Quality Assessment program) as secondary sources of information to evaluate the likelihood of contaminant occurrence.

A detailed discussion of the data collected and analyses for each contaminant can be found in the regulatory determination support document (USEPA, 2008a) and the occurrence technical support documents (USEPA, 2008b-c). In addition, a summary of the occurrence and exposure findings are included in Table 1. Table 1 in this notice is similar to Table 3 in the May 2007 notice (72 FR 24016 (USEPA, 2007a)); however, note that EPA updated the occurrence data for the UCMR 1 results to include final results for 17 additional drinking water systems that were not available when the Agency was in the process of making its preliminary regulatory determinations. Updating these numbers did not change the outcome of today's decisions.

**TABLE 1—SUMMARY OF THE HEALTH AND OCCURRENCE INFORMATION AND THE FINAL DETERMINATIONS FOR THE 11 CONTAMINANTS CONSIDERED UNDER CCL REGULATORY DETERMINATIONS 2**

#	Contaminant and its chemical abstract registry number (CASRN)	Determination	Health reference level (HRL)	Occurrence findings from primary data sources (UCMR 1, UCM round 1 and 2 cross sections, NIRS)				
				Database	PWSs with at least 1 detection > ½ HRL	Population served by PWSs with at least 1 detection > ½ HRL	PWSs with at least 1 detection > HRL	Population served by PWSs with at least 1 detection > HRL
1	Boron (7440-42-8)	Do not regulate <sup>1</sup> .	1,400 µg/L.	NIRS	4.3% (43 of 989)	2.9% (42.7K of 1.48M).	1.7% or (17 of 989) <sup>1</sup> .	0.4% (6.4K of 1.48M)
2	Dacthal di acid degradate <sup>2</sup> (2136-79-0).	Do not regulate.	70 µg/L <sup>4</sup>	UCMR 1 <sup>5</sup>	0.05% (2 of 3,876)	0.33% (739K of 225M).	0.03% (1 of 3,876)	<0.01% (500 of 225M)

<sup>5</sup> The UCMR 1 monitoring survey began in 2001. As discussed in the May 2007 notice, fonofos was sampled as part of UCMR 1 Screening Monitoring and the remaining 8 contaminants were sampled as part of UCMR 1 Assessment Monitoring.

<sup>6</sup> EPA implemented the UCM program in two phases or rounds. The first round of UCM monitoring generally extended from 1988 to 1992 and is referred to as UCM Round 1 monitoring. The second round of UCM monitoring generally

extended from 1993 to 1997 and is referred to as UCM Round 2 monitoring.

<sup>7</sup> The monitoring for NIRS spanned from 1984 to 1986.

TABLE 1—SUMMARY OF THE HEALTH AND OCCURRENCE INFORMATION AND THE FINAL DETERMINATIONS FOR THE 11 CONTAMINANTS CONSIDERED UNDER CCL REGULATORY DETERMINATIONS 2—Continued

#	Contaminant and its chemical abstract registry number (CASRN)	Determination	Health reference level (HRL)	Occurrence findings from primary data sources (UCMR 1, UCM round 1 and 2 cross sections, NIRS)				
				Database	PWSs with at least 1 detection > 1/2 HRL	Population served by PWSs with at least 1 detection > 1/2 HRL	PWSs with at least 1 detection > HRL	Population served by PWSs with at least 1 detection > HRL
3	Dacthal mono acid degradate <sup>3</sup> (887-54-7).							
4	DDE <sup>6</sup> (72-55-9) .....	Do not regulate.	0.2 µg/L ..	UCMR 1	<sup>7</sup> .....	<sup>7</sup> .....	0.03% <sup>7</sup> (1 of 3,874) <sup>8</sup> .	0.01% (18K of 226M) <sup>8</sup>
5	1,3-Dichloropropene (Telone) (542-75-6).	Do not regulate.	0.4 µg/L ..	UCM Rd1 UCM Rd2 UCMR 1	0.16% (15 of 9,164) <sup>9</sup> . 0.30% (50 of 16,787) <sup>9</sup> .	0.86% (436K of 51M) <sup>9</sup> . 0.42% (193K of 46M) <sup>9</sup> .	0.16% (15 of 9,164) <sup>9</sup> . 0.23% (38 of 16,787) <sup>9</sup> .	0.86% (436K of 51M) <sup>9</sup> . 0.33% (152K of 46M) <sup>9</sup> .
6	2,4-Dinitrotoluene (121-14-2).	Do not regulate.	0.05 µg/L	UCMR 1	<sup>7</sup> .....	<sup>7</sup> .....	0.00% (0 of 796) <sup>8</sup> ...	0.00% (0 of 2.8M) <sup>8</sup>
7	2,6-Dinitrotoluene (606-20-2).	Do not regulate.	0.05 µg/L	UCMR 1	<sup>7</sup> .....	<sup>7</sup> .....	0.03% (1 of 3,873) <sup>8</sup>	0.02% (38K of 226M) <sup>8</sup>
8	EPTC <sup>10</sup> (759-94-4)	Do not regulate.	175 µg/L	UCMR 1	0.00% (0 of 3,873) ..	0.00% (0 of 226M) ..	0.00% (0 of 3,873) ..	0.00% (0 of 226M)
9	Fonofos (944-22-9)	Do not regulate.	10 µg/L ...	UCMR 1	0.00% (0 of 295) .....	0.00% (0 of 41M) ....	0.00% (0 of 295) .....	0.00% (0 of 41M)
10	Terbacil (5902-51-2).	Do not regulate.	90 µg/L ...	UCMR 1	0.00% (0 of 3,873) ..	0.00% (0 of 226M) ..	0.00% (0 of 3,873) ..	0.00% (0 of 226M)
11	1,1,2,2-Tetrachloroethane (79-34-5).	Do not regulate.	0.4 µg/L ..	UCM Rd1 UCM Rd2	0.22% (44 of 20,407) <sup>9</sup> . 0.07% (18 of 24,800) <sup>9</sup> .	1.69% (1.6M of 95M) <sup>9</sup> . 0.51% (362K of 71M) <sup>9</sup> .	0.20% (41 of 20,407) <sup>9</sup> . 0.07% (17 of 24,800) <sup>9</sup> .	1.63% (1.5M of 95M) <sup>9</sup> . 0.08% (56K of 71M) <sup>9</sup> .

<sup>1</sup> EPA also considered the results of an AwwaRF study of PWSs indicating that surface water sources are unlikely to contain boron at levels > the HRL of 1,400 µg/L (Frey et al., 2004).  
<sup>2</sup> 2,3,5,6-tetrachloroterephthalic acid (TPA).  
<sup>3</sup> monomethyl-2,3,5,6-tetrachloroterephthalate (MTP).  
<sup>4</sup> Using the dacthal parent HRL since it includes the toxicity for the degradates.  
<sup>5</sup> Degradates monitored in aggregate and converted to the parent equivalent.  
<sup>6</sup> 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene.  
<sup>7</sup> Not reported since MRL > 1/2 the HRL.  
<sup>8</sup> Shows results > MRL, rather than > HRL, since MRL is greater than the HRL. In all cases the MRL is within the 10<sup>-4</sup> to 10<sup>-6</sup> risk range.  
<sup>9</sup> The MRLs used in UCM varied from below the 1/2 HRL to above the HRL. However, even the highest MRLs used are within the 10<sup>-4</sup> to 10<sup>-6</sup> risk range.  
<sup>10</sup> s-ethyl dipropylthiocarbamate.

**IV. Summary of Public Comments and the Agency's Responses on the CCL Regulatory Determination Process**

EPA received comments from nine organizations or individuals on the May 1, 2007, **Federal Register** notice. These nine organizations/individuals include five water-related associations, one industry group, one State agency, one State-related association, and one anonymous person. A majority of the comments focused on the following four over-arching topic areas:

- The regulatory determinations for the 11 contaminants;
- The regulatory determinations approach;
- The occurrence and exposure evaluation; and
- Comments on specific CCL 2 contaminants: boron, perchlorate, MTBE, metolachlor, and cyanobacteria and its toxins.

A complete copy of the public comments and the Agency's responses are included in the Docket for today's action (USEPA, 2008m). The remainder of this section discusses the four key topic areas identified by commenters in response to the May 2007 preliminary

regulatory determination notice (72 FR 24016, (USEPA, 2007a)).

*A. Regulatory Determinations for the 11 Contaminants*

Comment Summary: Most of the commenters agreed with EPA's decisions not to regulate the 11 contaminants. However, one State agency recommended that EPA reconsider its position of not regulating 2,4- and 2,6-DNT because they found these two contaminants in ground water in numerous locations in and around ammunition and military sites in their State.

*Agency Response:* EPA agrees with the commenters who believe that no regulation is warranted at this time for the 11 contaminants. In response to reconsidering the Agency's decision for 2,4- and 2,6-DNT, EPA respectfully disagrees. Monitoring data collected on 2,4- and 2,6-DNT from UCMR 1 do not indicate that either of these chemicals occurs nationally in public drinking water systems at health levels of concern. EPA found only one detection of 2,4-DNT from among the 3,873 public water systems evaluated and no detections of 2,6-DNT. The information

submitted by the commenter does not lead the Agency to change its decision because the occurrence appears to be highly localized and therefore, does not meet statutory criterion 2 (likely to occur in PWSs with a frequency and at a level of concern). To assist State and local communities that may have localized occurrence of 2,4- and/or 2,6-DNT, the Agency has updated the Health Advisory for both of these compounds as part of the regulatory determination process. If a State finds that it has highly localized levels of 2,4- and/or 2,6-DNT above the HRL of 0.05 µg/L, the Agency encourages States to consider whether State-level guidance (or some other type of action) may be appropriate.

*B. Regulatory Determinations Approach*

Comment Summary: One commenter recommended that EPA expand its discussion of the logic underlying the determinations for these 11 contaminants. The commenter stated that EPA needs to raise the level of transparency in its decision logic so that stakeholders can understand how data and information translate to determinations and to ensure

consistency across the two parallel regulatory efforts (regulatory determinations and six-year reviews). The commenter asked for a discussion about the status of the remaining CCL 2 contaminants. In addition, the commenter recommended that EPA's drinking water research agenda be integrated with the regulatory development process.

Another commenter agreed with the determinations not to regulate the 11 contaminants but recommended that EPA include affordability criteria when evaluating whether regulation will result in a meaningful health benefit in future determinations. The commenter submitted a paper in support of their comment.<sup>8</sup>

*Agency Response:* In response to the first comment, EPA developed a consistent regulatory determination approach for evaluating CCL 2 contaminants that followed the National Drinking Water Advisory Council's (NDWAC, 2000) recommended protocol for both health effects and occurrence analyses. In this notice (section VI), EPA added a narrative and tables that summarize the data gaps for the other 40 CCL 2 contaminants, which kept the Agency from making a regulatory determination at this time. EPA does not believe that it is appropriate to consider a research agenda specifically for those contaminants at this time because the Agency is in the process of developing a new CCL (CCL 3). The new process considers the knowledge and experience gained from evaluating unregulated contaminants on CCL 1 and CCL 2 and the recommendations and advice from the National Academies of Sciences' National Research Council (NRC, 2001) and NDWAC (2004). The Agency anticipates that future CCL research needs will be directed at filling data gaps for contaminants on the new list (i.e., CCL 3), not CCL 2. All CCL 2 contaminants will be examined for inclusion on CCL 3 and those that remain a high priority will be examined for research needs.

In response to the second comment, the SDWA requires that EPA consider the costs and benefits, as well as affordability, as NPDWRs are developed. Specifically, SDWA requires that EPA perform a health risk reduction and cost analysis and an affordability analysis for proposed NPDWRs. EPA respectfully disagrees that an affordability analysis is necessary or required for regulatory determinations. For regulatory determination, SDWA requires that EPA

use the three criteria discussed in section III.A. As a result, EPA will evaluate costs and affordability in more detail, including whether small system variances are appropriate, as part of the regulatory process after the Agency makes a positive regulatory determination.

### C. Occurrence and Exposure Evaluation

*Comment Summary:* One commenter stated that "based on the first round of regulatory determinations, a range of 0.02%–3.2% for national occurrence could be considered as the minimum threshold for development of a new regulation" and "national occurrence estimates for these eleven contaminants are well below this threshold, with boron having the highest prevalence of occurrence, at 1.7% of systems sampled in the National Inorganics and Radionuclides Survey (NIRS)."

Another commenter provided a report by Phillips and Chambless<sup>9</sup> that evaluated compliance data for seven contaminants from five States obtained from a cross section of State regulatory agencies. Based on a preliminary analysis, the authors found that the variability in the means of quarterly samples taken for compliance purposes was consistently large. The commenter expressed the opinion that the variability (standard error of the mean divided by the mean) is significant enough (100 percent or more in many cases) to question the validity of decisions made based on the UCMR data (for unregulated contaminants). Based on that study, the commenter stated that there is no reason to assume that the quality of the occurrence data from the UCMR effort would be any better than the quality of the compliance data. The second commenter urged EPA to resolve this quality issue before trying to make CCL 2 regulatory decisions that are based on rather precise calculations of occurrence levels and the number of persons exposed.

*Agency Response:* In response to the first comment, EPA considers both the extent of national occurrence and the severity of health effects for a contaminant, as well as other factors (e.g., sources of exposure), when deciding whether regulation presents a meaningful opportunity for health risk reduction. As a result, the Agency does not believe it is appropriate to set minimum occurrence thresholds for regulatory determinations.

In response to the second comment regarding variability in occurrence

measures based on the compliance monitoring data for regulated contaminants, the Agency believes the variability issues identified by Phillips and Chambless do not directly reflect the dependability of the UCMR 1 data used to support the Agency's regulatory determinations. Compliance monitoring data is State data resulting from individual public water systems efforts to comply with regulatory monitoring requirements. The UCMR 1 is EPA's program to collect data for contaminants suspected to be present in drinking water based upon a statistically-valid data set for nationwide occurrence estimates. The UCMR 1 program was designed to address this variability issue at the national level by defining a vulnerable period (the season of greatest vulnerability of contaminant occurrence, the season of increased flux of water movement) and requiring at least one UCMR 1 sample during that period. In addition, the monitoring periods for the large and small systems were performed over a three year period. Approximately one-third of all small UCMR 1 systems throughout the country conducted monitoring in each of the three years of UCMR 1 monitoring. Furthermore, the monitoring schedules for these systems were conducted to include monitoring in every month and every season around the country. Large systems could conduct their one year of monitoring anytime during the UCMR 1 period from 2001 to 2003. Like small systems, their monitoring schedules were spread throughout the year and were to include one sample during what was considered the most vulnerable season. In this way, the UCMR 1 monitoring results reflect multiple seasons and multiple years of climatic conditions throughout the country and are not directly affected (or biased) by weather conditions of a single season, year, or geographic region. Whereas some variability might still be expected, EPA believes this is unlikely to be a source of bias for national level occurrence estimates.

In addition, it should be noted that EPA used peak occurrence estimates (the number and percent of systems with at least one observed detection greater than 1/2 the HRL and the HRL) as opposed to mean values in making its final decisions not to regulate the 11 CCL 2 contaminants. Hence, taking variability around the mean into account would not have influenced the outcome of the final determinations for these 11 contaminants. The characterization of national occurrence provided by the UCMR 1 monitoring

<sup>8</sup> This paper can be found in the Docket for this notice at <http://www.regulations.gov> under the Docket ID No. EPA-HQ-OW-2007-0068.

<sup>9</sup> This paper can be found in the Docket for this notice at <http://www.regulations.gov> under the Docket ID No. EPA-HQ-OW-2007-0068.

data is adequate and the best available data to support today's decisions.

*D. Comments on Boron, Perchlorate, MTBE, Metolachlor, and Cyanobacteria and Its Toxins*

1. Boron. One anonymous commenter agreed with our determination for boron but commented on the fact that the health reference level does not incorporate the results of the preliminary chemical-specific Health Advisory Level (HAL) derived recently by EPA and presented at the 2007 Society of Toxicology (SOT) meeting.

*Agency Response:* The HRL used in making regulatory determinations is not equivalent to a lifetime health advisory value. As stated in the *Health Effects Support Document for Boron* (USEPA, 2008d) and the May 1, 2007, notice (72 FR 24016 (USEPA, 2007a)), an HRL is a benchmark against which to measure the occurrence data; it is not a Health Advisory guideline. For noncarcinogens such as boron, the HRL is calculated by multiplying the Agency Reference Dose by a 70 kg body weight and a 20 percent default Relative Source Contribution (RSC) and dividing the product by a drinking water intake of 2 L/day.

As described in the May 2007 notice (72 FR 24016 (USEPA, 2007a)) and in evaluating contaminants for regulatory determinations, the Agency initially uses a default 20 percent RSC to estimate the HRLs for non-carcinogens because this approach derives the lowest and most conservative HRL value to use in screening the occurrence data. EPA used this approach to calculate the HRL benchmark for boron and to determine if boron might be occurring nationally at a level of potential health concern. In developing the health advisory for boron, the Agency performed a more refined assessment of the risk for those PWSs that occasionally find levels of boron that exceed the lifetime or shorter term health advisory values. While the Agency derived a more refined RSC for the determination of the lifetime Health Advisory for boron, this value is still limited by the RSC ceiling of 80 percent as a matter of policy. The derivation of health advisory values also incorporates the use of appropriate body weights for the target population. The 2007 SOT poster presentation used a body weight of 67 kg for a pregnant woman, consistent with the Human Health Methodology (USEPA, 2000) guidelines. There may be changes to that policy based on more recent data on pregnancy weights, and if so, the draft Health Advisory will be revised to reflect the new policy.

2. Perchlorate. EPA received comment letters on perchlorate from eight commenters. The major areas of concern raised in the comments related to (1) the Agency's decision not to make a regulatory determination for perchlorate at the same time as for the 11 contaminants for which a regulatory determination is being finalized today, and (2) the Agency's discussion of potential analyses to more fully characterize total perchlorate exposure in order to assess the opportunity for public health protection through a drinking water regulation.

*Agency Response:* EPA will soon publish a preliminary determination for perchlorate. EPA will request public comment as part of that notice. EPA will consider the comments received on the May 2007 notice (72 FR 24016 (USEPA, 2007a)) with respect to perchlorate as a part of that regulatory determination and will respond to such public comments at the time the Agency issues a regulatory determination for perchlorate. EPA intends to finalize a regulatory determination for perchlorate by December 2008.

3. MTBE. Most commenters supported EPA's decision not to make a regulatory determination for methyl tertiary-butyl ether (MTBE) at this time because the IRIS assessment is currently being revised. Also, one commenter felt that UCMR 1 would provide valuable occurrence data for MTBE when the risk assessment becomes available.

*Agency Response:* EPA agrees that UCMR 1 data provides important occurrence information on MTBE and will be useful in making a regulatory determination once the final risk assessment is available.

4. Metolachlor. Some commenters noted that additional research for the health effects and occurrence of metolachlor and its degradates is needed. One commenter felt that UCMR 2 would provide valuable occurrence information for metolachlor and its degradates. One commenter did not have additional data but believes more information is needed on the occurrence and health effects of many herbicides and pesticides and their degradates. The results of this research should be appropriately included in regulatory decisions by the Office of Pesticide Programs (OPP) and the Office of Ground Water and Drinking Water. The commenter stated that EPA should promote further research to definitively determine whether metolachlor, a very widely used pesticide, is carcinogenic, as acetochlor, alachlor and metolachlor have very similar chemical structures.

*Agency Response:* The Agency agrees that more information on the occurrence

of metolachlor and its degradates is needed in order to determine if the combined parent compound and its degradates are occurring at levels of health concern. The available metolachlor data from earlier unregulated contaminant monitoring surveys indicate that metolachlor is found in finished water in many locations but at levels below the HRL. The occurrence data on the parent metolachlor, combined with the knowledge that it decomposes to several degradates that are more persistent than the parent, supported the inclusion of both metolachlor and its degradates in UCMR 2. Once available, the UCMR 2 data will be useful in evaluating the occurrence of metolachlor and its degradates in public water systems and will assist the Agency in deciding whether to regulate these compounds.

5. Cyanobacteria and its toxins. In the May 2007 notice (72 FR 24016 (USEPA, 2007a)), EPA asked for comment on the usefulness of providing an information summary about cyanobacteria and its toxins. One commenter responded and recommended that EPA provide an information summary describing the state of the knowledge on the prevention, treatment, and health effects of cyanobacteria and its toxins. The commenter felt that a document would be useful for utilities and State agencies. The commenter recommended that the summary include information on occurrence, conditions that might favor growth of algae and production of toxins, and a strategy for communicating this information to utility customers. In addition, the commenter suggested that the summary include information on research funded by other organizations, particularly the AWWA Research Foundation (AwwaRF).

*Agency Response:* EPA is developing an information sheet that will include the information suggested by the commenter and links to organizations performing research on the cyanobacteria and its toxins. The Agency anticipates making this information sheet available on its Safewater Web site (<http://www.epa.gov/safewater>) shortly after the publication of this notice.

**V. Summary of the Agency's Findings on the 11 CCL 2 Contaminants**

*A. Boron*

1. Description. Boron, a metalloid, tends to occur in nature in the form of borates (e.g., boric acid, borax, boron oxide). Man-made releases are typically in the form of borates or boron halides (e.g., boron trichloride, boron

trifluoride). Boron compounds are used in the production of glass, ceramics, cleaning agents, fire retardants, pesticides, cosmetics, photographic materials, and high energy fuels (USGS, 2004; ATSDR, 1992).

2. Agency Findings. The Agency is making a determination not to regulate boron with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), EPA used data from NIRS and an AwwaRF study (Frey *et al.*, 2004) to evaluate occurrence and exposure at the HRL of 1,400 µg/L (as well as ½ the HRL). The NIRS data indicate that approximately 4.3 percent (or 43) of the 989 ground water PWSs sampled had at least one detection of boron at levels greater than 700 µg/L, affecting approximately 2.9 percent of the population served (or 42,700 people from 1.48 million). Approximately 1.7 percent (or 17) of 989 ground water PWSs sampled had at least one detection of boron at levels greater than 1,400 µg/L, affecting approximately 0.4 percent of the population served (6,400 people from 1.48 million) (USEPA, 2008c and 2008d).

Because NIRS did not contain data for surface water systems, the Agency evaluated the results of the AwwaRF study (Frey *et al.*, 2004) to gain a better understanding of the potential occurrence of boron in surface water systems. The AwwaRF study recruited 189 PWSs representing 407 source waters that covered 41 States. Of these 407 PWS source water samples, 342 were returned and 341 were analyzed for boron. Of these 341 samples, approximately 67 percent (or 228) represented ground water sources and 33 percent (or 113) represented surface water sources. None of the 113 surface water sources exceeded the boron HRL of 1,400 µg/L and the maximum concentration observed in surface water was 345 µg/L. Extrapolation of the data indicates that 95 percent of the ground water detections had boron levels less than 1,054 µg/L; the maximum observed concentration in ground water was approximately 3,300 µg/L. Seven of the 228 ground water sources (from 5 systems) had at least one sample with a boron concentration greater than 1,400 µg/L (Seidel, 2006).

While boron was found at levels greater than the HRL of 1,400 µg/L (and ½ the HRL) in several of the ground water systems surveyed by NIRS, it was not found at levels greater than the HRL (or ½ the HRL) in the surface water sources evaluated in the AwwaRF study. Taking this surface water information into account, the Agency believes the overall occurrence and

exposure from both surface and ground water systems together is likely to be lower than the values observed for the NIRS ground water data. Because boron is not likely to occur at health levels of concern when considering both surface and ground water systems, the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction.

The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for boron in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), the final regulatory support document (USEPA, 2008a), and the health effects support document for boron (USEPA, 2008d). The Agency also plans to update the Health Advisory for boron to provide more recent health information. The updated Health Advisory will provide information to any States with public water systems that may have boron above the HRL. If a State finds highly localized occurrence of boron at concentrations above the HRL, the Agency encourages States to consider whether State-level guidance (or some other type of action) may be appropriate.

#### *B. Dacthal Mono- and Di-Acid Degradates*

1. Description. Dimethyl tetrachloroterephthalate (DCPA), a synthetic organic compound (SOC) marketed under the trade name "Dacthal," is a pre-emergent herbicide historically used to control weeds in ornamental turf and plants, strawberries, seeded and transplanted vegetables, cotton, and field beans. DCPA is not especially mobile or persistent in the environment. Biodegradation and volatilization are the primary dissipation routes. Degradation of DCPA forms two breakdown products, the mono-acid degradate (monomethyl tetrachloroterephthalate or MTP) and the di-acid degradate (tetrachloroterephthalic acid or TPA). The di-acid, which is the major degradate, is unusually mobile and persistent in the field, with a potential to leach into water (USEPA, 1998a).

2. Agency Findings. The Agency is making a determination not to regulate the DCPA mono-acid degradate and/or the DCPA di-acid degradate with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), these degradates appear to occur infrequently at health levels of concern in PWSs, and the Agency believes that a national primary drinking water

regulation does not present a meaningful opportunity for health risk reduction. While the Agency recognizes that these degradates have been detected in the PWSs monitored under the UCMR 1, only one PWS detected these degradates at a concentration above the HRL of 70 µg/L.

The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for dacthal mono- and di-acid degradates in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), the final regulatory support document (USEPA, 2008a), and the health effects support document (USEPA, 2008e). The Agency also plans to update the Health Advisory for the DCPA parent to include the mono- and di-acid degradates, as well as any recent health information related to these compounds. The updated Health Advisory will provide information to any States with public water systems that may have DCPA degradates at levels above the HRL. If a State finds highly localized occurrence of DCPA degradates at concentrations above the HRL, the Agency encourages States to consider whether State-level guidance (or some other type of action) may be appropriate.

#### *C. 1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene*

1. Description. DDE is a primary metabolite of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane (DDT), a pesticide used to protect crops and eliminate disease-carrying insects in the U.S. until it was banned in 1973. DDE itself has no commercial use and is only found in the environment as a result of prior contamination with DDT. While DDE tends to adsorb strongly to surface soil and is fairly insoluble in water, it may enter surface waters from runoff that contains DDE bound to soil particles. In both soil and water, DDE is subject to photodegradation, biodegradation, and volatilization (ATSDR, 2002).

2. Agency Findings. The Agency is making a determination not to regulate DDE with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), DDE appears to occur infrequently at health levels of concern in PWSs, and the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction. DDE was detected in only one of the PWSs monitored under the UCMR 1 at a level greater than the MRL (0.8 µg/L). The MRL is greater than the HRL of 0.2 µg/L but represents a concentration that is within the 10<sup>-4</sup> to the 10<sup>-6</sup> cancer risk range targeted by

the Agency. In addition, ambient water data from the USGS (Martin et al., 2003; Kolpin and Martin, 2003) indicate that the maximum concentrations detected in surface and ground water were less than the HRL.

The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for DDE in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), the final regulatory support document (USEPA, 2008a), and the health effects support document (USEPA, 2008f). If a State finds highly localized occurrence of DDE at concentrations above the HRL, the Agency encourages States to consider whether State-level guidance (or some other type of action) may be appropriate.

#### D. 1,3-Dichloropropene

1. Description. 1,3-Dichloropropene (1,3-DCP), a synthetic volatile organic compound, is used as a pre-plant soil fumigant to control nematodes and other pests in soils planted with all types of food and feed crops. 1,3-DCP is typically injected 12 inches to 18 inches beneath the soil surface and can only be used by certified handlers (USEPA, 1998b).

2. Agency Findings. The Agency is making a determination not to regulate 1,3-DCP with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), 1,3-DCP appears to occur infrequently at health levels of concern in PWSs, and the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction. While 1,3-DCP was detected in the UCM Round 1 (late 1980s) and the UCM Round 2 (mid 1990s) surveys, it was not detected in a subsequent evaluation of 796 small systems from the UCMR 1 survey. In addition, the USGS did not detect 1,3-DCP in two occurrence studies performed between 1999 and 2001 using monitoring levels that were lower than the HRL. EPA believes the 1999 pesticide application requirements, which are intended to mitigate risks to drinking water, may be one reason for the lack of occurrence of 1,3-DCP at health levels of concern in subsequent monitoring surveys.

The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for 1,3-DCP in the May 2007 notice (72 FR 24016 (USEPA, 2007a)) and in the health effects support document (USEPA, 2008j). The Agency also plans to update the Health Advisory document for 1,3-DCP with more recent

health information. The updated Health Advisory will provide information to any States with public water systems that may have 1,3-DCP above the HRL. If a State finds a highly localized occurrence of 1,3-DCP at concentrations above the HRL, the Agency encourages States to consider whether State-level guidance (or some other type of action) may be appropriate.

#### E. 2,4-Dinitrotoluene and 2,6-Dinitrotoluene

1. Description. 2,4- and 2,6-dinitrotoluene (DNT), semi-volatile organic compounds, are two of the six isomers of dinitrotoluene. Dinitrotoluenes are used in the production of polyurethane foams, automobile air bags, dyes, ammunition, and explosives, including trinitrotoluene or TNT (HSDB, 2004a and 2004b; ATSDR, 1998). Neither 2,4-DNT nor 2,6-DNT occurs naturally. They are generally produced as individual isomers or as a mixture called technical grade DNT. Technical grade DNT primarily contains a mixture of 2,4-DNT and 2,6-DNT, with the remainder consisting of the other isomers and minor contaminants such as TNT and mononitrotoluenes (HSDB, 2004c).

2. Agency Findings. The Agency is making a determination not to regulate 2,4- or 2,6-DNT with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), 2,4- and 2,6-DNT appear to occur infrequently at health levels of concern in PWSs, and the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction. 2,4-DNT was detected only once at a minimum reporting level (MRL) of 2 µg/L and 2,6-DNT was not detected at this same level in any of the PWSs monitored under the UCMR 1. While the MRL is slightly greater than the HRL of 0.05 µg/L, this concentration is within the acceptable  $10^{-4}$  to the  $10^{-6}$  cancer risk range targeted by the Agency.

The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for 2,4- and 2,6-DNT in the May 2007 notice (72 FR 24016 (USEPA, 2007a)) and in the health effects support document (USEPA, 2008l). The Agency's original Health Advisories for 2,4- and 2,6-DNT were developed for military installations. Because the Agency recognizes that 2,4 and 2,6-DNT may still be found at some military sites, the Agency has updated the Health Advisories to reflect recent health effects publications. EPA published a

draft of the updated Health Advisory document for both 2,4 and 2,6-DNT as part of the regulatory determinations for these two isomers. The updated document is available on the Web at: [http://www.epa.gov/safewater/ccl/reg\\_determine2.html](http://www.epa.gov/safewater/ccl/reg_determine2.html). The final Health Advisory document will be published in 2008 and will provide information to States with public water systems that may have either 2,4- or 2,6-DNT at concentrations above health levels of concern. If a State finds highly localized occurrence of 2,4- and/or 2,6-DNT at concentrations above the HRL, the Agency encourages States to consider whether State-level guidance (or some other type of action) may be appropriate.

#### F. *s*-Ethyl dipropylthiocarbamate

1. Description. EPTC, a synthetic organic compound, is a thiocarbamate herbicide used to control weed growth during the pre-emergence and early post-emergence stages of weed germination. First registered for use in 1958, EPTC is used across the U.S. in the agricultural production of a number of crops, most notably corn, potatoes, dried beans, alfalfa, and snap beans. EPTC is also used residentially on shade trees, annual and perennial ornamentals, and evergreens (USEPA, 1999c).

2. Agency Findings. The Agency is making a determination not to regulate EPTC with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), EPTC does not appear to occur at health levels of concern in PWSs, and the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction. While EPTC has been found in ambient waters at levels less than the HRL of 175 µg/L (as well as ½ the HRL), it was not found in the UCMR 1 survey of public water supplies. The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for EPTC in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), the final regulatory support document (USEPA, 2008a), and in the health effects support document (USEPA, 2008g).

#### G. Fonofos

1. Description. Fonofos, an organophosphate, is a soil insecticide used to control pests such as corn rootworms, cutworms, symphylans (i.e., garden centipedes), and wireworms. Primarily used on corn crops, fonofos was also used on other crops such as asparagus, beans, beets, onions, peppers, tomatoes, cole crops, sweet

potatoes, peanuts, peas, peppermint, plantains, sorghum, soybeans, spearmint, strawberries, sugarcane, sugar beets, white (Irish) potatoes, and tobacco (USEPA, 1999d).

Fonofos was scheduled for a reregistration decision in 1999. However, before the review was completed, the registrant requested voluntary cancellation. The cancellation was announced in the **Federal Register** on May 6, 1998 (63 FR 25033 (USEPA, 1998d)), with an effective date of November 2, 1998, plus a one-year grace period to permit the exhaustion of existing stocks (USEPA, 1999d).

2. Agency Findings. The Agency is making a determination not to regulate fonofos with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), fonofos does not appear to occur at health levels of concern in PWSs and the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction. While fonofos has been found in ambient waters at levels less than the HRL of 10 µg/L (as well as ½ the HRL), it was not found in the UCMR 1 Screening Survey of public water supplies. Fonofos was voluntarily cancelled in 1998 and the Agency expects any remaining stocks and releases into the environment to decline. In addition, since fonofos tends to bind strongly to soil, any releases to the environment are not likely to contaminate source waters. The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for fonofos in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), the final regulatory support document (USEPA, 2008a), and in the health effects support document (USEPA, 2008h).

#### H. Terbacil

1. Description. Terbacil, a synthetic organic compound, is a selective herbicide used to control broadleaf weeds and grasses on terrestrial food/feed crops (e.g., apples, mint, peppermint, spearmint, and sugarcane), terrestrial food (e.g., asparagus, blackberry, boysenberry, dewberry, loganberry, peach, raspberry, youngberry, and strawberry), terrestrial feed (e.g., alfalfa, forage, and hay) and forest trees (e.g., cottonwood) (USEPA, 1998c).

2. Agency Findings. The Agency is making a determination not to regulate terbacil with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), terbacil does not

appear to occur at health levels of concern in PWSs. Accordingly, the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction. While terbacil has been found in ambient waters at the levels less than the HRL of 90 µg/L (as well as ½ the HRL), it was not found in the UCMR 1 survey of public water supplies. The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for terbacil in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), the final regulatory support document (USEPA, 2008a), and in the health effects support document (USEPA, 2008i).

#### I. 1,1,2,2-Tetrachloroethane

1. Description. 1,1,2,2-Tetrachloroethane, a volatile organic compound, is not known to occur naturally in the environment (IARC, 1979). Prior to the 1980s, 1,1,2,2-tetrachloroethane was synthesized for use in the production of other chemicals, primarily chlorinated ethylenes. 1,1,2,2-Tetrachloroethane was also once used as a solvent to clean and degrease metals, in paint removers, varnishes, lacquers, and photographic films, and for oil/fat extraction (Hawley, 1981). Commercial production of 1,1,2,2-tetrachloroethane in the U.S. ceased in the 1980s, when other processes to generate chlorinated ethylenes were discovered (ATSDR, 1996).

2. Agency Findings. The Agency is making a determination not to regulate 1,1,2,2-tetrachloroethane with a national primary drinking water regulation. As noted in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), 1,1,2,2-tetrachloroethane appears to occur infrequently at health levels of concern in PWSs. Accordingly, the Agency believes that a national primary drinking water regulation does not present a meaningful opportunity for health risk reduction. While 1,1,2,2-tetrachloroethane was detected in both the UCM Round 1 and the UCM Round 2 surveys, the percentage of detections had decreased by the time the UCM Round 2 survey was performed in the mid-1990's.<sup>10</sup> In addition, the USGS did not detect 1,1,2,2-tetrachloroethane in two subsequent monitoring surveys of source waters that supply community water systems, using a reporting limit that is less than the 1,1,2,2-tetrachloroethane HRL of 0.4 µg/L. The

Agency believes that this decrease in detections occurred because commercial production of 1,1,2,2-tetrachloroethane ceased in the mid-1980's. Hence, the Agency does not expect 1,1,2,2-tetrachloroethane to occur in many public water systems today.

The Agency presented a complete review of our analysis of the health effects, occurrence, and exposure for 1,1,2,2-tetrachloroethane in the May 2007 notice (72 FR 24016 (USEPA, 2007a)), the final regulatory support document (USEPA, 2008a), and in the health effects support document (USEPA, 2008k). The Agency also plans to update the Health Advisory document for 1,1,2,2-tetrachloroethane to provide more recent health information. The updated Health Advisory will provide information to any States with public water systems that may have 1,1,2,2-tetrachloroethane at levels above the HRL. If a State finds highly localized occurrence of 1,1,2,2-tetrachloroethane at concentrations above the HRL, the Agency encourages States to consider whether State-level guidance (or some other type of action) may be appropriate.

#### VI. How Will EPA Address the Data Needs of the Remaining CCL 2 Contaminants?

To support decisions on CCL contaminants, the Agency evaluates when and where these contaminants occur, the extent of exposure, and their risk to public health. EPA must also determine if regulating the contaminant presents a meaningful opportunity for reducing public health risk. Contaminants deemed ready for regulatory determination are those that have sufficient health and occurrence data to evaluate both exposure and risk to public health and support a decision as to whether a regulation is appropriate. The remaining CCL 2 contaminants for which decisions are not being made today do not have sufficient data to support regulatory decisions at this time, except for perchlorate, which is the subject of a separate regulatory determination effort (see section IV.D.2 in this notice). Tables 2 and 3 list each contaminant and the type of data lacking for each contaminant.

In addition, the Agency is evaluating the contaminants on CCL 2 as part of the new CCL 3 classification process. The new process is an expanded comprehensive system that evaluates a wider range of existing information, including data published after the CCL 2 preliminary regulatory determinations. The new process also applies revised screening criteria to

<sup>10</sup> The UCM Round 1 and 2 surveys were performed in the late 1980's and the mid 1990's. These surveys should not be confused with the UCMR 1 Screening and Assessment Monitoring that began in 2001.

generate the CCL 3 based upon recommendations from NRC (2001) and NDWAC (2004). EPA anticipates determining future research needs once the CCL 3 is finalized.

TABLE 2—INFORMATION GAPS FOR THE CCL 2 CHEMICAL CONTAMINANTS (AS OF MAY 2007)\*

Health effects	Occurrence	Health effects and occurrence
Acetochlor <sup>3</sup>	Diazinon <sup>6</sup>	Alachlor ESA <sup>4,7</sup>
Aluminum <sup>4,5</sup>	2,4-Dichloropheno <sup>6</sup>	Metolachlor <sup>7,8</sup>
Bromobenzene <sup>3</sup>	2,4-Dinitrophenol <sup>6</sup>	Organotins <sup>1,3,5,7</sup>
1,1-Dichloroethane <sup>4</sup>	1,2-Diphenylhydrazine <sup>6</sup>	Prometon <sup>3,6</sup>
1,3-Dichloropropane <sup>4</sup>	Disulfoton <sup>6</sup>	RDX <sup>3,7</sup>
2,2-Dichloropropane <sup>4</sup>	Diuron <sup>6</sup>	
1,1-Dichloropropene <sup>4</sup>	Linuron <sup>6</sup>	
p-Isopropyltoluane <sup>4</sup>	2-Methylphenol <sup>6</sup>	
Methyl Bromide <sup>4</sup>	Terbufos <sup>6</sup>	
Methyl Tertiary-Butyl Ether (MTBE) <sup>3</sup>	Triazines <sup>2,5,7</sup>	
Molinate <sup>3</sup>	2,4,6-Trichlorophenol <sup>6</sup>	
Nitrobenzene <sup>3</sup>		
1,2,4-Trimethylbenzene <sup>4</sup>		
Vanadium <sup>4</sup>		

\* Perchlorate is not included in this table (see section IV.D.2).

<sup>1</sup> Organotins include dimethyl tin, dibutyl tin, monomethyl tin, monobutyl tin from PVC stabilizers and triphenyl tin pesticide.

<sup>2</sup> Triazines include the chlorodegradates (DEA, DIA, and DACT) of regulated contaminants—atrazine and simazine.

<sup>3</sup> IRIS or OPP assessment in progress or needs an updated risk assessment.

<sup>4</sup> Insufficient data to do a quantitative risk assessment, health assessment incomplete, or no risk assessment available.

<sup>5</sup> These chemicals also have analytical methods (i.e., organotins) and/or treatment (i.e. triazines, aluminum) gaps.

<sup>6</sup> Insufficient occurrence (sampling) data for a national estimate.

<sup>7</sup> Lack of finished water occurrence (monitoring) data.

<sup>8</sup> Lack of occurrence data for metolachlor's degradates (ESA & OA). Metolachlor and its degradates are on UCMR 2.

TABLE 3—INFORMATION GAPS FOR THE MICROBIAL CONTAMINANTS (AS OF MAY 2007)

Health effects	Occurrence	Treatment	Analytical methods
Microsporidia	Microsporidia	Microsporidia	Microsporidia
Some Cyanotoxins	Some Cyanotoxins	Some Cyanotoxins	Some Cyanotoxins
	Aeromonas	Aeromonas	Aeromonas
	Helicobacter	Helicobacter	Helicobacter
	MAC	MAC	MAC
	Adenoviruses	Adenoviruses	
	Caliciviruses	Caliciviruses	
	Coxsackieviruses	Coxsackieviruses	
	Echoviruses	Echoviruses	

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Dated: July 24, 2008.

**Stephen L. Johnson,**  
Administrator.

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**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OPP-2003-0397; FRL-8374-6]

### Molinate; Product Cancellation Order and Amendment to Terminate Uses

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice.

**SUMMARY:** This notice announces EPA's amendment to the order for the termination of uses, voluntarily requested by the registrant and accepted

by the Agency, of products containing the pesticide molinate, pursuant to section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. This amendment follows an April 7, 2004 **Federal Register** Notice of Order to Amend Registrations to Terminate Uses of molinate to control water grass in rice grown in California and the south central/south eastern states of Arkansas, Louisiana, Missouri, Tennessee, and Texas. Nothing in today's action changes the previous stop production date of June 30, 2008, nor does it change the stop use date of August 31, 2009. Today's action only clarifies the deadline for persons other than the registrant to sell and distribute molinate until July 1, 2009.

**DATES:** The cancellation amendment is effective July 30, 2008.

**FOR FURTHER INFORMATION CONTACT:** Wilhelmena Livingston, Special Review and Reregistration Division (7508P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; telephone number: (703) 308-8025; fax number: (703) 308-8005; e-mail address: [livingston.wilhelmena@epa.gov](mailto:livingston.wilhelmena@epa.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. General Information

###### A. Does this Action Apply to Me?

This action is directed to the public in general, and may be of interest to a wide range of stakeholders including environmental, human health, and agricultural advocates; the chemical industry; pesticide users; and members of the public interested in the sale, distribution, or use of pesticides. Since others also may be interested, the Agency has not attempted to describe all the specific entities that may be affected by this action. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

###### B. How Can I Get Copies of this Document and Other Related Information?

1. *Docket.* EPA has established a docket for this action under docket identification (ID) number EPA-HQ-OPP-2003-0397. Publicly available docket materials are available either in the electronic docket at <http://www.regulations.gov>, or, if only available in hard copy, at the Office of Pesticide Programs (OPP) Regulatory Public Docket in Rm. S-4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. The hours of