

# **Priority Non-Infectious Drinking Water Issues: CSTE Assessment**

OSTLTS Generic Information Collection Request  
OMB No. 0920-0879

## **Supporting Statement – Section A**

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- **Goal of the study:** To identify priority non-infectious issues impacting drinking water, state and local epidemiologists' technical assistance needs, and how CDC's Health Studies Branch (HSB) can best provide technical assistance and support in addressing these issues.
- **Intended use of the resulting data:** Inform future HSB Clean Water for Health program priorities and activities, including projects and activities to address the priority non-infectious drinking water issues identified through this assessment.
- **Methods to be used to collect:** Online assessment; no sampling
- **The subpopulation to be studied:** 55 state and local epidemiologists or other staff (government employees) identified by the epidemiologists with responsibilities for drinking water issues and private residential wells.
- **How data will be analyzed:** Descriptive statistics; analyses of narrative responses and appropriate findings from those responses

## Section A – Justification

### 1. Circumstances Making the Collection of Information Necessary

#### Background

This information collection is being conducted using the Generic Information Collection mechanism of the OSTLTS OMB Clearance Center (O2C2) – OMB No. 0920-0879 (expiration date 03/31/2018). This information collection request is connected to Emerging Issues for Private Wells: CSTE Assessment (PWCSTE). The PWCSTE IC was approved on 5/6/15. An adjustment within the purpose and a change to the instrument directly linked to that adjustment is the justification for why this new GenIC request has been made. The following content provides information about these changes and the justification for the changes. The respondent universe for this information collection will be identical to the respondent universe in PWCSTE and aligns with that of the O2C2. CSTE will collect data from its members, or their designees, all of whom are employees of state and local health departments and who are acting in their official capacities as government employees. Specifically, the universe of respondents will consist of 50 state and 5 local epidemiologists or other staff (government employees who work with state and local drinking water programs, which could be part of the state/local health department or the state/local environmental agency) identified by the epidemiologists with responsibilities for drinking water issues and private residential wells. The respondents represent 50 states and five (5) city health departments (i.e., Los Angeles, CA; District of Columbia; Chicago, IL; New York City, NY; Houston, TX; and Seattle, WA).

This information collection is authorized by Section 301 of the Public Health Service Act (42 U.S.C. 241). This information collection falls under the following essential public health services: #3) Informing, educating, and empowering people about health issues; #4) Mobilizing community partnerships to identify and solve health problems; and #5) Developing policies and plans that support individual and community health efforts.<sup>1</sup>

- 1. Monitoring health status to identify community health problems
- 2. Diagnosing and investigating health problems and health hazards in the community
- 3. Informing, educating, and empowering people about health issues
- 4. Mobilizing community partnerships to identify and solve health problems
- 5. Development of policies and plans that support individual and community health efforts
- 6. Enforcement of laws and regulations that protect health and ensure safety
- 7. Linking people to needed personal health services and assure the provision of health care when otherwise unavailable
- 8. Assuring a competent public health and personal health care workforce
- 9. Evaluating effectiveness, accessibility, and quality of personal and population-based health services
- 10. Research for new insights and innovative solutions to health problems<sup>1</sup>

Within the Centers for Disease Control (CDC), the National Center for Environmental Health's (NCEH) Health Studies Branch (HSB)'s Clean Water for Health Program goal is to reduce exposures to and disease from non-infectious drinking water contaminants (e.g. chemical contaminants). Approximately 43 million people (about 14 percent of the U.S. population) rely on domestic wells as their source of drinking water.<sup>2</sup> Unlike community water systems, which are regulated by the Safe Drinking Water Act, there is no comprehensive national program to ensure that well water is tested and is safe to drink. A study published in 2009 from the National Water-Quality Assessment Program of the U.S. Geological Survey that assessed water-quality conditions from 2,100 domestic wells within 48 states reported that more than one in five (23 percent) of the sampled wells contained one or more contaminants at a concentration greater than a human-health benchmark.<sup>3</sup> In addition, there are many current circumstances (e.g., industrial activities such as resource extraction, climate change-induced drought, and changes in land use patterns) that could potentially affect the quality of the ground water source for private wells.

In addition to issues affecting drinking water from private wells, exposures and health effects associated with unregulated contaminants (e.g. certain pesticides, perfluorinated compounds (PFCs), brominated flame retardants, pharmaceuticals, etc.) that can impact both private wells and community water systems are also of concern. Although additional studies are needed to better define exposures and health effects of these chemicals, there is evidence that they may represent a health risk. For example, PFCs have been shown to be immunotoxicants and disrupt thyroid function, and brominated flame retardants are neurotoxicants<sup>4</sup>. HSB is interested in getting states' perspectives on particular contaminants of concern and what technical assistance HSB might provide in order to assess the possible public health impacts associated with these contaminants.

HSB partners with organizations such as the Council of State and Territorial Epidemiologists (CSTE) to advance its goal. The mission of CSTE is to advance public health policy and epidemiologic capacity. CSTE provides information, education, and developmental support for practicing epidemiologists in a wide range of areas as well as expertise for program and surveillance efforts. CDC has funded CSTE through a cooperative agreement to conduct this assessment because they have the appropriate contacts to allow us to assess every state.

Few data collections so far have focused on asking state and local epidemiologists what they perceive are priority non-infectious drinking water issues and their technical assistance needs in an effort to be proactive, target technical assistance efforts, and identify solutions to fill gaps that exist. Some assessments have been conducted to determine the knowledge, attitudes, and practices of private well owners and their water testing practices.<sup>4-10</sup> Other assessments have focused on analyzing the quality of well water for a risk that has already been identified.<sup>11-14</sup>

The purpose of this information collection request is to identify priority non-infectious issues impacting drinking water, state and local epidemiologists' technical assistance needs, and identify how HSB can best provide technical assistance and support in addressing these needs. This information collection is aligned, but different than the PWCSTE GenIC information collection that was approved in May 2015. The purpose of PWCSTE was to gather feedback on gaps in knowledge or practice, tools and resources needed to address gaps, and identify policy information regarding private wells. Data were never collected for this GenIC. After gaining approval, investigators' reassessed the purpose and need of the PWCSTE data collection and decided not to collect data. Data were not collected, as the scope of the HSB Clean Water for Health Program expanded from a focus on private well issues to a more broad focus on non-infectious drinking water issues. Specifically, the new focus of the HSB Clean Water for Health Program was broadened to addressing non-infectious drinking water issues that could impact all Americans, not just private well owners; these issues include drought and chemicals that contaminate both regulated and unregulated drinking water. HSB Clean Water for Health focuses on non-infectious drinking water issues because there are other programs at CDC that deal with infectious drinking water issues. In addition to the change in scope, HSB's Clean Water for Health Program seeks to work more closely with state and local health departments, and therefore wants to identify specific needs and ways that the program might provide technical assistance to address public health needs. The changes made to the information collection request reflect these programmatic changes.

This current, proposed CSTEDWA assessment builds on the work of studies with private well owners, water quality testing, and discussions with colleagues in the field, about emerging issues, lessons learned, and methodologies used while working with non-infectious drinking water issues. The results of this assessment will provide needed data to inform future activities conducted by CDC, CSTE, and state and local drinking water programs to address drinking water-related public health issues through research, innovative methodologies, more effective resource allocation, and policy change.

### **Overview of the Information Collection System**

The information will be collected via a web-based assessment that will allow respondents to complete and submit their responses electronically (see **Att. A—Instrument: Word version** and **Att. B—Instrument: Web version**). The online instrument will be used to gather information from state and local epidemiologists, or their designated experts, on non-infectious drinking water issues. This method provides the most streamlined way to conduct an assessment and was thus chosen to reduce the overall burden on respondents. CSTE will collect and store the data on a secure server only accessible to CSTE staff. The de-identified summary results will be shared with CDC staff via an Excel file.

The information collection instrument was pilot tested by four state public health professionals. Feedback from this group was used to refine questions as needed, ensure accurate programming and

skip patterns and establish the estimated time required to complete the information collection instrument.

### Items of Information to be Collected

The web-based data collection instrument has 22 questions. The purposes of the instrument are to a). Identify priority non-infectious issues impacting drinking water; b). State and local epidemiologists' technical assistance needs; and c). How the HSB can best provide technical assistance and support. Instrument questions include various types, including dichotomous (yes/no), multiple response, and 4 that are open-ended. An effort was made to limit questions requiring narrative responses from respondents whenever possible. However, it is not always possible to predict the issues and responses that might be identified by government officials with responsibilities to address drinking water-related public health issues. Additional details regarding specific questions are included in the table below.

Information Collected	Number of questions of this type	Purpose
Respondent Information	1	To collect respondent's professional contact information. This information will be removed when the results are analyzed, stored securely, and will not be shared.
Priority non-infectious issues impacting drinking water (e.g., existing and future issues and concerns, contaminants)	17	Questions identify priority, non-infectious issues impacting drinking water including existing and future private well issues and concerns, unregulated contaminants that can impact all drinking water sources, and private well program and policy information.
Technical assistance	2	Identifies specific ways that HSB can provide technical assistance to states to address priority drinking water issues.
Additional information	2	Includes information on any documented clusters of illness associated with drinking water from private wells any other comments regarding emerging private well issues that respondents want to share.

Although similar, this instrument is different than the instrument approved within the PWCSTE information collection. The purpose has been adapted to better meet HSB's Clean Water for Health Program needs and as a result, the number of and type of questions have been adjusted.

## 2. Purpose and Use of the Information Collection

The purpose of this information collection request is to identify priority non-infectious issues impacting drinking water, state and local epidemiologists' technical assistance needs, and identify how HSB can best provide technical assistance and support in addressing these needs. This information collection is aligned to the PWCSTE GenIC information collection that was approved in May 2015. The purpose of PWCSTE was to gather feedback on gaps in knowledge or practice, tools and resources needed to address gaps, and identify policy information regarding private wells. Data were never collected for this GenIC. Although similar to, this collection is different from the PWCSTE GenIC that was approved in May 2015. After gaining approval, investigators' reassessed the purpose and need of the PWCSTE data collection

and decided not to collect data. Data were not collected, as the scope of the HSB Clean Water for Health Program expanded from a focus on private well issues to a more broad focus on non-infectious drinking water issues. Specifically, the new focus of the HSB Clean Water for Health Program was broadened to addressing non-infectious drinking water issues that could impact all Americans, not just private well owners; these issues include drought and chemicals that contaminate both regulated and unregulated drinking water. HSB Clean Water for Health focuses on non-infectious drinking water issues because there are other programs at CDC that deal with infectious drinking water issues. In addition to the change in scope, HSB's Clean Water for Health Program seeks to work more closely with state and local health departments, and therefore wants to identify specific needs and ways that the program might provide technical assistance to address public health needs. The changes made to the information collection request reflect these programmatic changes.

This assessment builds on the work of studies with private well owners, water quality testing, and discussions with colleagues in the field, about emerging issues, lessons learned, and methodologies used while working with non-infectious drinking water issues. The results of this assessment will provide needed data to inform future activities conducted by CDC, CSTE, and state and local drinking water programs to address drinking water-related public health issues through research, innovative methodologies, more effective resource allocation, and policy change.

### **3. Use of Improved Information Technology and Burden Reduction**

Data will be collected via a web-based questionnaire allowing respondents to complete and submit their responses electronically. This method was chosen to reduce the overall burden on respondents. The information collection instrument was designed to collect the minimum information necessary for the purposes of this project (i.e., limited to 22 questions).

### **4. Efforts to Identify Duplication and Use of Similar Information**

Prior to conducting any data collection, CDC/NCEH reviewed existing published and unpublished literature, which determined that the planned data collection efforts do not duplicate any other current or previous data collection efforts. Some assessments have been conducted to determine the knowledge, attitudes, and practices associated with private well owners and testing.<sup>4-9</sup> Other assessments have focused on analyzing the quality of well water for a risk that has already been identified.<sup>10-13</sup> Other recent data collections conducted through NCEH focused on culling best practices from educational campaigns for private well owners (*Effective Educational Campaigns for Private Well Owners*, OMB 0920-0879, approved 5/29/14 and *Interventions to Prevent Exposure to Contaminants in Drinking Water*, OMB 0920-0879, currently undergoing OMB approval).

This is a new data collection effort, for which data do not exist elsewhere. Few have been in the strategic position to easily ask a group of state and local epidemiologists what they perceive are priority issues in an effort to be proactive and develop a program to best address state and local needs. The membership of CSTE (state and local epidemiologists) provides a forum where information regarding health professionals' perceptions about priority non-infectious drinking water issues and needs can be collected easily.

## **5. Impact on Small Businesses or Other Small Entities**

No small businesses will be involved in this information collection.

## **6. Consequences of Collecting the Information Less Frequently**

This request is for a one time information collection. There are no legal obstacles to reduce the burden. If no data are collected, CDC, Health Studies Branch, will be unable to:

- Collect information from public health professionals regarding priority non-infectious drinking water issues
- Gain an understanding of private well policies and programs that are being undertaken by public health professionals to protect private well owners
- Collect information on state and local technical assistance needs and how CDC can provide technical assistance to meet those needs
- Share this information with public health partners to foster collaboration and increased awareness of priority non-infectious drinking water issues

## **7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5**

There are no special circumstances with this information collection package. This request fully complies with the regulation 5 CFR 1320.5 and will be voluntary.

## **8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency**

This information collection is being conducted using the Generic Information Collection mechanism of the OSTLTS OMB Clearance Center (O2C2) – OMB No. 0920-0879. A 60-day Federal Register Notice was published in the Federal Register on October 31, 2013, Vol. 78, No. 211; pp. 653 25-26. No comments were received.

CDC partners with professional STLT organizations, such as the Association of State and Territorial Health Officials (ASTHO), the National Association of County and City Health Officials (NACCHO), and the National Association of Local Boards of Health (NALBOH) along with the National Center for Health Statistics (NCHS) to ensure that the collection requests under individual ICs are not in conflict with collections they have or will have in the field within the same timeframe.

## **9. Explanation of Any Payment or Gift to Respondents**

CDC will not provide payments or gifts to respondents.

## **10. Protection of the Privacy and Confidentiality of Information Provided by Respondents**

The Privacy Act does not apply to this information collection. STLT governmental staff and / or delegates will be speaking from their official roles. Data will be collected from STLT government staff speaking in their official roles. Data will be collected using a password protected Survey Monkey instrument; individually identifiable information will be kept secure in an Excel database within the CSTE organization. CSTE officials will be responsible for ensuring all data is analyzed and all results will be presented in the aggregate.

This information collection is not research involving human subjects.

### 11. Institutional Review Board (IRB) and Justification for Sensitive Questions

No information will be collected that are of sensitive nature.

### 12. Estimates of Annualized Burden Hours and Costs

The estimate for burden hours is based on a pilot test of the information collection instrument by 4 state public health professionals. In the pilot test, the average time to complete the instrument including time for reviewing instructions, gathering needed information and completing the instrument, was 35 minutes. Based on these results, the estimated time range for actual respondents to complete the instrument is 25 to 40 minutes. For the purposes of estimating burden hours, the upper limit of 40 minutes for completion (i.e., 40 minutes) is used.

Estimates for the average hourly wage for respondents are based on the Department of Labor (DOL) National Compensation Survey estimate for environmental scientists and specialists, including health (<http://www.bls.gov/ncs/ocs/sp/nctb1349.pdf>). Based on DOL data, an average hourly wage of \$32.62 is estimated for all 55 respondents. Table A-12 shows estimated burden and cost information.

**Table A-12:** Estimated Annualized Burden Hours and Costs to Respondents

Information collection Instrument: Form Name	Type of Respondent	No. of Respondents	No. of Responses per Respondent	Average Burden per Response (in hours)	Total Burden Hours	Hourly Wage Rate	Total Respondent Costs
CSTEDWA Instrument	State epidemiologist or their designees	50	1	40/60	33	\$32.62	\$1076
CSTEDWA Instrument	Local epidemiologists or their designees	5	1	40/60	3	\$32.62	\$98
	<b>TOTALS</b>	<b>55</b>			<b>36</b>		<b>\$1174</b>

### 13. Estimates of Other Total Annual Cost Burden to Respondents or Record Keepers

There will be no direct costs to the respondents other than their time to participate in the information collection.

#### 14. Annualized Cost to the Government

There are no equipment or overhead costs. The only cost to the federal government would be the salary of one CDC staff member during the data collection and analysis activities, as well as the cost of the contract with CSTE to conduct the information collection and analysis of the data. The total estimated cost to the federal government is \$29,355. Table A-14 describes how this cost estimate was calculated.

**Table A-14:** Estimated Annualized Cost to the Federal Government

Staff (FTE)	Average Hours per Collection	Average Hourly Rate	Average Cost
GS-14 Team Lead	60	\$55.60	\$3,336
CSTE Contract	NA	NA	\$26,019
<b>Estimated Total Cost of Information Collection</b>			<b>\$29,355</b>

#### 15. Explanation for Program Changes or Adjustments

This is a new information collection.

#### 16. Plans for Tabulation and Publication and Project Time Schedule

CSTE will collect and store the data for the online assessment. Upon completion of data collection and analysis, CSTE will share the de-identified summary data in a Microsoft Excel file with CDC. Additionally, CSTE will share a report with CDC and members of CSTE that summarizes the results.

##### Project Time Schedule

Task	Timeline
Obtain OMB Clearance for Information Collection	In Process
Conduct assessment	Assessment open within 1 week of OMB approval
Complete assessment	Within 4 weeks of OMB approval
Prepare reports	Within 2 weeks of completing assessment
Disseminate results/reports	Within 6 weeks of completing assessment

#### 17. Reason(s) Display of OMB Expiration Date is Inappropriate

We are requesting no exemption.

#### 18. Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the certification. These activities comply with the requirements in 5 CFR 1320.9.

## LIST OF ATTACHMENTS – Section A

- A. CSTEDWA Instrument: Word Version
- B. CSTEDWA Instrument: Web Version

### REFERENCE LIST

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