

# **Interventions to Prevent Exposure to Contaminants in Drinking Water**

OSTLTS Generic Information Collection Request

OMB No. 0920-0879

## **Supporting Statement – Section A**

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**Program Official/Project Officer**

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## Section A – JUSTIFICATION

- **Goal of the study:** Identify and describe existing public outreach campaigns that promote well testing and treatment and gather some data from the program managers that are indicative of program success from their perspective (builds upon prior study in 2014)
- **Intended use of the resulting data:** Provide participants case examples of various program approaches and insights and wisdom gleaned from veteran program managers, and inform the development of future well owner interventions
- **Methods to be used to collect:** Telephone and in-person interviews; convenience sampling
- **The subpopulation to be studied:** 30 state and local environmental health staff acting in their official capacities, who have been involved in outreach to private well owners
- **How data will be analyzed:** Descriptive statistics; analyses of narrative responses and appropriate findings from those responses

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

#### Background

This data collection is being conducted using the Generic Information Collection mechanism of the OSTLTS OMB Clearance Center (O2C2)–OMB No. 0920-0879. The respondent universe for this information collection aligns with that of the O2C2. Data will be collected in multiple states from 30 state and local environmental health staff acting in their official capacities, who have been involved in outreach to private well owners.

As a drinking water source, groundwater may be generally safe, but there are many instances where groundwater or a drinking water well have been contaminated from anthropogenic sources<sup>1,2,3,4</sup>, where contaminants exist naturally in groundwater and can cause adverse health effects<sup>5,6</sup>, or where a well has been compromised allowing contaminants to enter the well<sup>7</sup>. Private well owners have historically assumed that their well water is safe to drink<sup>8,9</sup>. This happens for various reasons, including a long history of using the well, the assumption that groundwater is a protected resource, or that being in a rural setting protects their drinking water source, to name a few<sup>8</sup>. Because of these and other reasons that are not well understood, well owners often don't test their well water, even when efforts to promote testing or to provide testing have been undertaken.

There is a great need among environmental health staff at state, local, and tribal environmental health and agricultural departments who conduct outreach to private well owners to 1) better understand private well owners' motivations for testing their wells and 2) what methods might be most effective at encouraging private well owners to test their well water. Well owners may

perceive their well water to be safe, or they lack awareness of the issues associated with private well water quality<sup>8, 10, 11</sup>. In other cases, well owners might not be able to afford to test their well water, or they might procrastinate because of the fear of costs, findings, or a lack of understanding that their water might be contaminated<sup>8, 11, 12</sup>.

There have been many state, local, and tribal outreach programs conducted by environmental health staff to educate the owners of private wells about the risks involved with well water. In most cases, information on the success of these programs is not available. They are often local in scope and the results of their efforts are not published. Because of this, the success of many of these programs is unknown, except to the environmental health staff at state, local, and tribal environmental health and agricultural departments who are government employees and who conduct outreach to private well owners who conducted the program. Therefore, knowledge regarding which public outreach strategies and tactics work best in moving private well owners to action and why is largely unknown.

The University of Illinois, under a contract from CDC, surveyed during 2014 government employees that have conducted outreach and testing programs with private well owners to learn what types of educational campaigns are most effective at getting homeowners to regularly test their wells (*Effective Educational Campaigns for Private Well Owners*, OMB 0920-0879, approved 5/29/14). The preliminary results of the assessment are presented in Attachment A and B (see **Attachment A: University of Illinois' Online Assessment Results Table**, **Attachment B: University of Illinois' Online Assessment Results PowerPoint Presentation**). The response rate for the assessment was excellent at 91%. Results of the survey showed 92% of participants reported their program was successful, very successful or extremely successful. Many of the programs used incentives, most commonly free testing (69.62%), to encourage participation.

For this data collection request, we would like to learn more about what participants believe made their programs so successful. After completion of the previous assessment participants reported they had more information to share regarding successful programs that was not easily captured in the online format. As such, the National Ground Water Association (NGWA) secured a contract from CDC to build upon the previous assessment and gain better understanding of successful educational campaigns for well owners from program managers, using in-person and telephone format to allow for collection of rich, in-depth information. Ultimately, this information collection and analysis is designed to give the CDC and state/local/tribal environmental health staff useful information to consider in future private well owner education programs. These findings will provide:

- o Case examples of various program approaches
- o Insights and wisdom gleaned from veteran program managers
- o Additional information for our evaluation partner
- o Insight on current data gaps regarding what is known about successful programs that, if filled, could inform the development of future well owner interventions.

This data collection is authorized by Section 301 of the Public Health Service Act (42 U.S.C. 241). This information collection falls under the essential public health service(s) of evaluating effectiveness, accessibility, and quality of personal and population-based health services.<sup>13</sup>

### **Overview of the Data Collection System**

We will collect data using a paper-based instrument (see **Attachment C: Data Collection Instrument**) to elicit information from environmental health staff at state, local, and tribal environmental health and agricultural departments who are government employees and who conduct outreach to private well owners. The information will be collected through interviews conducted both in-person and by telephone. Whether in-person or by telephone, the data collection instrument will allow for respondents to adequately explain their programs, their target populations, and their results. The instrument includes some close-ended questions, but also includes a number of open-ended questions because close-ended questions may not adequately allow for responses that are novel, innovative, or based on local knowledge and program managers' insights. This type of information tends to come out through dialogue using open-ended questions as a relationship is established between the interviewer and the respondents.

We have chosen in-person interviews for two regional well owner intervention programs involving a total of six program managers. The in-person approach enhances our ability to gather the information we desire from these relatively large and complex programs. Green et. al. has stated "the rapport developed in face-to-face interviews inspires respondents to work harder at providing high quality data."<sup>14</sup> Additionally, in-person interviews have some distinct advantages due to synchronous communication in time and place<sup>13</sup>:

- In-person interviews, like no other interview method, can take advantage of social cues such as voice, intonation, body language etc. that yield significant additional information.
- The interviewee is more spontaneous.
- The interviewer can create a good interview ambience that is productive.

We will use telephone interviews to obtain information from 24 local well owner intervention program managers. These local programs are likely to be less complicated and therefore easier to query using the telephone method. Given the number of local interviews and the assumed geographical distribution of the corresponding 12 programs, telephone interviews have the advantages of allowing for access to program managers from all over the country with minimal cost.<sup>13</sup>

The instrument has been pilot tested using in-person interviews with five people involved in private well public outreach programs (3 government personnel, and 2 nonprofit personnel). The results were used to refine the questions and establish the estimated time required to complete the information collection instrument as 60 minutes.

### Items of Information to be Collected

The interview guide consists of 48 main questions, including 9 multiple choice, 21 Yes/No, 2 short answer, and 16 open-ended questions. These items include:

- a) **Program Manager Information:** These items include information on the program manager's current position and role in the public education program for private well owners.
- b) **Program description:** These items include information about the respondent's program including: program name, location, dates of operation, implementing agency, funding, goals, strategies, tactics, location, website/brochures, participant follow-up, and partners.
- c) **Program Assessments:** These items include the number of well owners reached, feedback from well owners, assessments of activities, and results associated with the campaign.
- d) **Program Manager Expert Opinion:** These items include program managers' thoughts and insights on barriers to the effectiveness of the program, how to overcome those barriers, and lessons from prior experiences.
- e) **Arsenic or Nitrate Specific Programs:** Arsenic and nitrate are priority issues for private well owners due to their potential health risks and prevalence in private wells in certain areas of the United States. These items include reasons why these programs were established, program goals, barriers to the program and how to overcome them.

## **2. Purpose and Use of the Information Collection**

The primary purpose of this data collection is to build upon information gained from the prior University of Illinois online assessment in 2014 by administering a more detailed questionnaire to identify and describe existing public outreach campaigns that promote well testing and treatment and to gather some data from the program managers that are indicative of program success from their perspective. As a result of this data collection, we will have a better understanding of what programs exist nationally, how they work, and some preliminary data from program managers on whether they think they are effective.

Data on the characteristics of successful public outreach campaigns that promote well testing and treatment are currently lacking in the literature. This information collection is necessary for the following reasons:

1. To identify and describe existing public outreach campaigns that promote well testing and treatment by gathering some data from the program managers that are indicative of program success from their perspective.
2. Interviews of key government personnel will provide additional context, depth and nuance to our umbrella project involving a more in-depth evaluation of private well owner-focused public outreach efforts. We plan to conduct in-person interviews and/or telephone interviews.
3. Valuable information can be gained about two major problematic constituents in groundwater in two regions—arsenic, which is prevalent in portions of the northeastern United States, and nitrate, which is prevalent in certain large agricultural areas in southern California. This portion of the information collection will examine strategies and tactics specific to arsenic and nitrate. It also will examine how large-scale public outreach programs approach the task of educating private well owners.
4. From these interviews, we will be able to identify gaps in program approaches and implementation. Information about these gaps will be useful in designing future programs targeted toward private wells and private well owners.

This information collection will contribute to an umbrella project, the findings of which will be presented in a written report to be provided to CDC. The report will include:

- a) **An analysis of the predominant components of private well outreach programs**  
These components will correspond to program strategies and related tactics (i.e. News media initiative (strategy); news events, news releases, editorial board meetings (tactics)).
- b) **A composite profile of a multi-faceted program**  
This “composite” would represent a model program that optimally combines the predominant components of public outreach campaigns to private well owners.
- c) **Case examples of noteworthy private well outreach programs**  
The case examples selected as “noteworthy” will stand out in ways that are particularly helpful in illustrating the program development, implementation and/or assessment.
- d) **Key program considerations**  
The project will develop an outline of common considerations and corresponding strategies and tactics used in private well public outreach.

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

For this information collection, the personal interview format—whether in-person or by telephone—is used to gather the richest and most nuanced information needed. This will build upon the basic information gained from the previously utilized online assessment tool. The questions seek impressions, reflections, and experiences relevant to public education programs designed to motivate private well owners to test and treat their water. Interviewers are highly skilled in using the interview instrument to facilitate a concise and focused conversation between the interviewer and respondent.

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

A preliminary external literature review and environmental scan did not identify any systematic assessments of public education programs effective in motivating private well owners to test and treat their water. At the request of CDC, NGWA contacted Steve Wilson of the University of Illinois about its information collection under a 2013 contract to identify and assess effective educational campaigns for private well owners (*Effective Educational Campaigns for Private Well Owners*, OMB 0920-0879, approved 5/29/14) to ensure that the NGWA-led data collection built upon University of Illinois’ work, rather than duplicated their previously conducted data collection. After completion of the previous assessment, participants reported they had more information to share regarding successful programs that was not easily captured in the on-line survey format. As such, the current NGWA contract will gather qualitative data (in-person and telephone format) to allow for collection of rich, in-depth information to obtain a better understanding of successful educational campaigns for well owners from program managers.

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

No small businesses will be involved in this data collection.

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

This request is for a one time data collection. There are no legal obstacles to reduce the burden.

## **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 data 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. Assurance of Confidentiality Provided to Respondents**

The Privacy Act does not apply to this data collection. Employees of state and local public health agencies will be speaking from their official roles and will not be asked, nor will they provide individually identifiable information. This data collection is not research involving human subjects.

### **10.1 Privacy Impact Assessment Information**

No individually identifiable information (IIF) will be collected.

## **11. Justification for Sensitive Questions**

No information will be collected that are of personal or sensitive nature.

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

The estimate for burden hours is based on a pilot test of the data collection instrument by 5 public health professionals. In the pilot test, the average time to complete the questions, including time for reviewing instructions, gathering needed information and completing the data collection, was approximately 50 minutes. Based on these results, the estimated time range for actual respondents to complete the instrument is 40-65 minutes. For the purposes of estimating burden hours, 60 minutes is used.

Estimates for the average hourly wage for respondents are based on the Department of Labor (DOL) National Compensation Survey estimate for management occupations – medical and health services managers in state government (<http://www.bls.gov/ncs/ocs/sp/nctb1480.pdf>). Based on

DOL data, an average hourly wage of \$32.87 is estimated for all 30 respondents. Table A-12 shows estimated burden and cost information.

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

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
Environmental health staff at state, local, and tribal environmental health and agricultural departments	30	1	1	30	\$32.87	\$986
<b>TOTALS</b>	<b>30</b>	<b>1</b>	<b>1</b>	<b>30</b>	<b>\$32.87</b>	<b>\$986</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 data 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 the CDC staff and external contractors during the preparation of the interview guide, information collection, and analysis activities. The estimated cost to the federal government is \$92,038. 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
Technical Monitor-CDC GS-14	120	\$62.00	\$7,440.00
Project Officer-CDC GS-13	120	\$52.00	\$6,240.00
NGWA Contract			\$78,358.00
<b>Estimated Total Cost of Information Collection</b>			<b>\$92,038</b>

### 15. Explanation for Program Changes or Adjustments

This is a new data collection.



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

NGWA will produce a final report of these deliverables with the goal of informing environmental health staff at state, local, and tribal environmental health and agricultural departments who are government employees and who conduct outreach to private well owners as they consider future outreach. The report will describe the reasons for conducting the program, background on the development of the data collection tool, the data collection process, how the responses were analyzed, the narrative responses and appropriate findings from those responses, an analysis of the data, how the findings inform the discussion on outreach to well owners, and suggested approaches for outreach to well owners. The narrative responses will provide details of the respondents' past experiences in their outreach programs, including lessons learned and what they would do differently if they were starting a new program.

The report may be summarized in a paper to be submitted to a relevant peer reviewed journal.

### Project Time Schedule

<b>Task</b>	<b>Timeline</b>
Obtain OMB Clearance for Information Collection (8 weeks)	In Process
Develop List of Programs to Contact	Within 3 weeks after receiving OMB approval
Call or Visit Program Managers to Gather Information	Within 6 weeks after program list developed
Input Information into Project Database	Within 1 week after information gathering is completed
Progress Reports to Sponsor	1 and 3 weeks into information gathering
Provide Information Collection to OSU Evaluators for Assessment	Within 1 week after information gathering is completed
Write Report Deliverables	Final quarter of contract period

## **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. University of Illinois' Online Assessment Results Table
- B. University of Illinois' Online Assessment Results PowerPoint Presentation
- C. Data Collection Instrument

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