Request for Approval under the "Generic Clearance for Citizen Science and Crowdsourcing Projects" (OMB Control Number: 2080-0083)

TITLE OF INFORMATION COLLECTION:
High School STEM Education - Assessing Drinking Water Quality and Contaminant Sources

PURPOSE:
This project is working with high school STEM classes to assist students in assessing water quality in homes. EPA will provide education modules for the classes that include: importance of water quality to their health; how to sample; how to assess potential sources impairing water quality; learn low-cost techniques to assess water quality; conduct testing; data management; and how to present results. These efforts will provide students with an improved understanding of drinking water quality and provide homeowners with information on their drinking water quality. Lastly, with this data, local, state, or federal organizations may be able to assist homeowners in maintaining or improving their drinking water quality.

NEED AND AUTHORITY FOR COLLECTION:
This project is being conducted under the auspices of the Safe Drinking Water Act. This project provides an approach for high school students to understand and address problems with their drinking water.

USES OF RESULTING DATA:
The data collected will be used to assist people in understanding their water supply and providing useful temporal and spatial data on localized impacts to their drinking water source. As needed, local and/or State organizations can use the data to assist homeowners.

DATA COLLECTION METHODS:
Written surveys will be collected and samples analyzed in high school STEM classes. Data from the water analysis will be anonymized. Additionally, students will have the option to opt in to provide information beyond their own use.

PARTICIPANT UNIVERSE:

Category of Respondent	No. of Respondents	Number of responses per respondent	Participation Time per response	Burden Hours
High School STEM classes	1000	1	10 hours	10,000 hours
Totals	1000			10,000 hours

AGENCY COST: The estimated annual cost to the Federal government is $10,500, based on $70/h, based on averaged personnel costs, for 150 hours. These hours include development of training materials and conduct of class sessions. Equipment costs are less than $1000. Class sessions will be conducted over two academic years.

STATISTICAL ANALYSIS:

The survey will include every participant. Statistical analysis will include the use of statistical software that would already be available to the students. This would include reviewing the range of concentrations for particular parameters and to assess sample replicates.

DATA QUALITY ASSESSMENT PROCEDURES:

Data will be reviewed for completeness and accuracy by the students and EPA staff. A QAPP has been developed for this project, Quality Assurance Project Plan for Monitoring Private Domestic Wells, Version 1, April 2018.

ADMINISTRATION OF THE INSTRUMENT: (Check all that apply)

[ ] Web-based or Social Media
[ ] Mail
[ ] Telephone
[X] Other, Explain: Training via Skype
[X] In-person

INSTRUMENT: Instrument script is attached below. Final online product will include mandatory OMB control number, expiration date, and burden statement.

CONTACT NAME: Fran Kremer **EMAIL:** Kremer.fran@epa.gov

1. **Form Number**:

2. **OMB Control Number**: OMB Control Number: 2080-0083)

3. **Expiration Date**:

4. **Burden Statement**. The public reporting and recordkeeping burden for this collection of information is estimated to average 10 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, included through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed survey to this address.

Sample Identifier		
Well/Spring/Sample Location Lat/Long (mynasadata.larc.nasa.gov)		
Water use: Human or animal consumption, crops	(H, A, and/or C)	
Well Type (hand dug, bored, drilled, driven, don't know)	(HD, B, Dr, Drv, DK)	
Well Depth	(ft)	
Screen Length	(ft)	
Depth to Screen	(ft)	

Well Casing Material (steel, galvanized, steel and plastic, PVC, don't know	(S, G, S/P, PVC, DK)	
Well Grouted	(Y, N)	
Plumbing Material (lead, copper, galvanized, PVC/PEX, other)	Pb, Cu, G, PVC/PEX, O)	
Septic System	Y/N	
Distance between well and septic tank/drainfield	(ft)	
Identify other potential sources of contamination nearby		
Distance between well and other potential source of contamination	(ft)	
Last time water tested (# of years, never, don't know)	(Y, N, DK)	
Is water disinfected?	(Y/N)	