**SUPPORTING STATEMENT FOR RadNet ICR# 0877.13**

**Section I: Part A**

**1. Identification of the Information Collection**

**1.(a) Title of the Information Collection**

RadNet (Renewal)

EPA ICR Number 0877.13, OMB Control Number 2060-0015

**1.(b) Short Characterization**

RadNet in this ICR refers to EPA’s national environmental radiation monitoring network. The objectives of RadNet (formerly, Environmental Radiation Ambient Monitoring System [ERAMS] and renamed in 2005 to RadNet) are to provide a means of estimating ambient levels of radioactive pollutants in our environment, to follow trends in environmental radioactivity levels, and to detect and assess the impact of fallout and other intrusions of radioactive materials. Data generated from EPA's RadNet have been and are being used to provide the information base for making decisions necessary to ensure the protection of public health. The system enables EPA to determine if additional sampling or other actions are required in particular cases of radioactive releases to the environment, and, where necessary, RadNet can provide ancillary information on population exposure, radiation trends, and other aspects of such releases.

The RadNet network is used to collect air particulate, precipitation, and drinking water samples. RadNet air particulate monitors are capable of measuring radiation from the filter in real-time, sending the data hourly to EPA. The data from analysis of these samples constitute the nation's single major source of environmental radiation data. The responsibility for operating RadNet is assigned by the EPA’s Office of Radiation and Indoor Air to the Director, National Analytical Radiation Environmental Laboratory (NAREL), in Montgomery, Alabama. The component sampling locations are distributed throughout the United States and cover each geographical region, individual states, and most major population centers. The respondents, primarily state and some local officials, voluntarily collect the samples and complete the information forms. The forms request descriptive information related to sample collections (e.g., sample type, sample location, length of sampling, and volume represented). Requested sampling frequencies are as follows:

* Air particulate samples are requested twice weekly. \*
* Precipitation samples are collected after each measurable rainfall and composited into monthly samples.
* Drinking water samples are collected quarterly.

\* Many variable, site-specific conditions may preclude predicting a specific number of filters changed by a respondent weekly. For example, operator safety may be compromised by construction or severe weather, which may preclude routine air sample collection. Reduced operator availability may cause reduced filter change frequency if an operator’s non-volunteer job duties increase, or if frequency of visits to a monitor site decreases, such as may occur with sites at remote locations generally visited in conjunction with non-volunteer job duties. The RadNet Quality Assurance Project Plan contains a detailed discussion of these conditions. It is important to recognize that these variations do not affect the quality of the results of the analyses.

As of April 2014, the U.S. Environmental Protection Agency is no longer sampling milk as part of the RadNet radiological monitoring network. EPA stopped milk sampling because it is redundant of U.S. Food and Drug Administration (FDA) programs, and FDA has the authority and responsibility for food safety, including monitoring radiation in milk.

Beginning in July 2016, EPA began adding exposure rate measurement to the real-time RadNet air monitors. Exposure rate data provide more useful information to the public and general scientists concerning the radiation in the environment. To date, twelve RadNet air monitors have this capability. By the end of 2016, EPA expects to have more than twenty stations equipped with this capability, which is being added when a monitor’s gamma radiation components require servicing. Additionally, the ten most populous U.S. cities are also to receive exposure rate measurement capability in 2016. Completion of the addition of exposure rate measurement capability will continue as the gamma radiation components require servicing, which is expected to take up to eight years. Additional funding for this measurement capability will reduce the time to complete the addition to all monitors.

The samples are sent to NAREL for radiochemical analyses. To ensure that the data generated at NAREL are of known quality, a quality assurance plan (available upon request) is followed during all phases of sample collection and analysis activities.

All results are stored in the NAREL computer and made available online at the EPA website and when necessitated by circumstances can be available daily. See Attachment 1 for the forms used by respondents and NAREL personnel to document sampling in all RadNet media: air, precipitation, and drinking water.

The utility of RadNet data is evidenced by its extensive use by a number of federal, state and commercial entities. DOE's National Laboratories (including Oak Ridge, Savannah River, Brookhaven, and Argonne) and many universities across the country utilize the data generated by the operation of the RadNet network. RadNet data are also used by the Nuclear Regulatory Commission (NRC) and NRC licensed nuclear power plants and their environmental contractors to establish background data. These data are used by some power plant operators as a baseline to ensure compliance with NRC release limits. The states also use RadNet data to supplement or compare with environmental radiation information generated by their own programs. RadNet data are also available to the public via the EPA website. More than one-million “hits” per day were recorded for this website following the Fukushima nuclear reactor accidents.

Data from this program have been used to measure fallout following atmospheric nuclear weapon tests until 1980, when atmospheric testing of nuclear weapons ceased. During and following the accident at Three Mile Island, RadNet stations in the adjacent states demonstrated to the public that there were no radioactive materials in their areas as a result of the accident. Increased monitoring following the nuclear incident at Chernobyl in 1986 provided daily reports of atmospheric concentrations of radionuclides across the United States. Most recently, RadNet was the largest source of radiological data in the U.S. following the Fukushima reactor accidents in 2011.

The collection of samples will involve 235 respondents with an annual respondent burden cost of approximately 139,843 dollars, including costs of benefits and overhead. The respondents are not asked or required to keep records and all supplies and equipment relating to RadNet activities are provided by NAREL at no cost to the respondents.

RadNet data back to 1981 may be found at the EPA web site http://www.epa.gov/radnet. RadNet data on the web are interactive--the database can be queried and searched. Quarterly reports are no longer produced in hard copy, due to the availability of RadNet data online. NAREL does not survey respondents, other than on specific issues regarding their work as sample collectors. That is done through routine conversations with them via telephone or e-mail as part of the process of maintaining the flow of samples and supplies between NAREL and respondents.

Currently, expansion of the real-time air network of RadNet, which began in 2006, is being completed. Since 2006, the number of air samplers has increased from 52 to the current 136 and is expected to increase to a total of 140 during the period of this ICR (from August 2016 through August 2019). The total of 136 samplers is a reduction in number of samplers from the previous ICR total of 156 due to shutting down the obsolete ERAMS air monitoring program. The size of the other media networks (drinking water and precipitation) are expected to remain essentially unchanged, except for the normal fluctuation of volunteer participants. The reduced burden for the Agency provided in this supporting statement is primarily the result of the elimination of the request for respondents to radiologically screen filters prior to shipping them to NAREL.

**2. Need for and Use of the Collection**

**2.(a) Need / Authority for the Collection**

The legal basis of RadNet originated and resides in Executive Order 10831 and Public Law 86-373. Executive order 10831 was announced to the public on July 31, 1959, and issued August 4, 1959. This order came in response to recommendations contained in a memorandum to the President from Elmer B. Staats on July 31, 1959. As reiterated before the Joint Committee on Atomic Energy by Maurice H. Stans, these recommendations also became a part of the legislative history of the 1959 amendments to the Atomic Energy Act. Radioactive fallout and environmental radiation monitoring became a responsibility of the Department of Health, Education and Welfare (HEW) under these legal mandates. In 1970, Reorganization Plan No. 3 transferred HEW's fallout and radioactive monitoring responsibilities to the Environmental Protection Agency (EPA). On July 1, 1973, through its Office of Radiation Programs (ORP), EPA developed and implemented a new continuous monitoring system. This system, originally termed ERAMS and now called RadNet, was designed to complete and complement the monitoring system previously instituted by HEW's Public Health Service under Executive Order 10831.

The objectives of RadNet are to provide a means of estimating ambient levels of radioactive pollutants in our environment, to follow trends in environmental radioactivity levels, and to assess the impact of fallout and other intrusions of radioactive materials. Data generated from EPA's RadNet have been and are being used to provide the information base for making decisions necessary to ensure the protection of public health. The system enables EPA to determine if additional sampling or other actions are required in particular cases of radioactive releases to the environment, and, where necessary, RadNet can provide ancillary information on population exposure, radiation trends, and other aspects of such releases.

**2.(b) Use / Users of the Data**

Data generated by RadNet are used to provide a means of estimating ambient levels of radioactive pollutants in our environment, to follow trends in environmental radioactivity levels, and to detect and assess the impact of fallout and other intrusions of radioactive materials. Data generated from EPA's RadNet have been and are being used to provide the information base for making decisions necessary to ensure the protection of public health. The system enables EPA to determine if additional sampling or other actions are required in particular cases of radioactive releases to the environment and, where necessary, RadNet can provide ancillary information on population exposure, radiation trends, and other aspects of such releases.

The utility of the RadNet data is evidenced by its extensive use by a number of federal, state and commercial entities. DOE's national Laboratories (including Oak Ridge, Savannah River, Brookhaven, and Argonne) and many universities across the country utilize the data generated by the operation of the RadNet network. RadNet data are also used by the Nuclear Regulatory Commission and NRC licensed nuclear power plants and their environmental contractors to establish background data. These data are used by some power plant operators as a baseline to ensure compliance with NRC release limits. The states also use RadNet data to supplement or compare with environmental radiation information generated by their own programs.

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**3. Non-duplication, Consultations, and Other Collection Criteria**

**3.(a) Non-duplication**

RadNet has been in operation for over 40 years. During that time, data derived from the system have been disseminated nationally and internationally. The professional/information network developed over the life of RadNet has identified other environmental radiation data systems in the United States, but none have RadNet's national scope or exact collection and analytical structure. This was recently highlighted during the months following the nuclear reactor accidents in Fukushima, Japan.

Immediately following the accident at Chernobyl in 1986 in the former Soviet Union, the President's order charged EPA with lead responsibility for monitoring possible environmental effects in the United States. It was the unique nationwide monitoring capability of RadNet that helped EPA respond to that Presidential Order. Similarly, during the nine-year EPA follow-up monitoring of the accident at Three Mile Island RadNet was called upon because of its unique national scope and analytical structure and capability.

**3.(b) Public Notice Required Prior to ICR Submission to OMB**

The first Federal Register (FR) notice has been completed and published by June 15, 2016 at 81 FR 39042.

One anonymous public comment on the first Federal Register Notice, June 15, 2016, for the RadNet ICR was received. EPA’s response is provided below.

Comment 1: “The U.S. needs a large radiation-detecting network like Germany has.”

Response 1: There are many ways to design a nation-wide radiation monitoring system. Each design will have its own pros and cons. RadNet was designed to meet EPA’s objectives for a nation-wide radiation monitoring system. The U.S. EPA radiation air monitoring system is a filter-based continuous air sampling program that includes acquisition of one hour data from detectors that measure radiation emitted by particulate collected on the filters, and then transmits these data to our laboratory for evaluation. These data are posted to our website after evaluation. The filters are subsequently sent to our laboratory for additional analyses.

Comment 2: “At present, it seems like RadNet has been stripped down to bare bones reporting. According to [www.enviroreporter.com](http://www.enviroreporter.com), RadNet is only reporting Beta at 9 or 130 stations.

Response 2: EPA has not discontinued monitoring of any type of radioactive particle. EPA maintains a routine sample and analysis program at NAREL for beta particles for each RadNet monitor location. Monitoring beta radiation gross count rates in real-time was attempted, but it was realized that, unlike for the gamma data, the beta data provided no actionable information such as identity or quantity of nuclides, and that the detector system was subject to external interferences. Beta monitoring in real time has been discontinued.

Comment 3: RadNet also falls short in that it only reports results quarterly and some times only once yearly. Don’t you think the U.S. would be better served to have a detection system that reports air-results daily, water results weekly, rain results right after a rain occurs, etc., so that citizens can be made aware of the radiation readings in their areas?

Response 3: As described in the response to Comment 1, each hour the RadNet program posts the most recent real-time data from each of its air monitors. The filters are subsequently sent to our laboratory for gross beta air concentration measurements, and additional analyses as indicated. These laboratory measurements are posted monthly. Annually, the particulate from each monitor’s filters collected for the entire calendar year are composited into a single sample and analyzed- these analyses are posted annually.

During an emergency, after detection of anomalous radionuclides, or given reason to suspect potential anomalous radioactive contamination may be present, the periodicity of collection and analysis of drinking water and precipitation can be increased, as was done following the Fukushima nuclear reactor accidents.

Comment 4: One of RadNet’s best services was its reporting on milk samples, but this has now been passed over to the FDA, where it is very difficult to find results. Maybe the EPA can begin doing milk samples again.

Response 4: Milk collection will continue to be done by the Food and Drug Administration, which has the authority for milk collection and has an extensive milk network that provides information for use by the public, scientists, and decision-makers.

Comment 5: Citizen radiation reporting websites have sprung up to fill the gap that RadNet leaves. These citizen reporting websites operate on nickel-and-dime donations, yet appear to offer more information than RadNet. Perhaps the EPA can donate money to the citizens reporting sites.

Response 5: In terms of budget, EPA has many competing priorities over a very wide range of environmental issues. RadNet serves the EPA mission of national radiation monitoring.

Comment 6: RadNet is a very difficult system to understand and use. Is it possible to make it more user friendly and to create a user-friendly easy tutorial to explain the steps to access results?

Response 6: These data are available to the public via the internet at [www.epa.gov/radnet](http://www.epa.gov/radnet). This website has been updated to improve the user interface and make it easier to see the data.

Comment 7: Perhaps it is time to scrap RadNet for another system that works better?

Response 7: The RadNet system works extremely well. The RadNet system collects radiation data 24 hours a day, seven days a week, allowing scientists to establish baseline radiation levels across the country. It also monitors radiation during large-scale emergencies such as a nuclear power plant accident. In 2011, it was able to track minuscule levels of radiation in the U.S. from the Fukushima disaster thousands of miles away in Japan, providing identity and quantity of the man-made nuclides that reached the US.

Comment 8: RadNet fell short when it was needed most. According to an audit by the Inspector General, 20% of the monitors were out of service when Fukushima occurred. Do you think this is acceptable?

Response 8: RadNet is a unique system made up of real-time monitors which include radiation detection and supporting electronic and mechanical infrastructure. Given the complexity of the monitors which are located in a variety of environmental conditions, some of which are very extreme, it is only natural that monitors will temporarily go off-line. EPA makes every effort to maximize the number of RadNet monitors operating properly. Since 2011, the number of monitors operating has exceeded the program’s operational goal.

Comment 9: A $2.4 million dollar budget for a system that reports very little, reports so infrequently, uses volunteers, was not working fully when needed the most (Fukushima)…where is that money being spent?

Response 9: See responses to Comment 1, Comment 3, and Comment 7 as well as Tables 2 and 3 of this supporting statement.

Comment 10: Instead of limping along with an ineffective system, look into buying a great system that will educate citizens and employ even more people.

Response 10: See Response to Comment 7.

Comment 11: It must be noted that the EPA employees have been wonderful and helpful when written to with questions and how to utilize RadNet, etc.

Response 11: EPA appreciates the thoughtful comment commending our staff.

**3.(c) Consultations**

The National Analytical Radiation Environmental Laboratory (NAREL) is involved in telephone and written communication with the respondents who supply the samples. In addition, NAREL is an active participant in the Council of Radiation Control Program Directors (CRCPD), which is an association of individuals from radiation programs from all fifty states. These individuals and their associates make up a significant number of RadNet data users. NAREL's participation in this association allows for frequent consultations on a variety of issues involving RadNet with many RadNet data users. Comments from federal and state agencies and other organizations concerning RadNet are welcomed and are noted at NAREL.

For this renewal, the following respondents were contacted:

Mike Debonis (212) 637-3502

Eric Mead (218) 529.5017

Chuck Hooper (913) 551-7271

**3.(d) Effects of Less Frequent Collection**

Alternate, less frequent collection intervals have been considered but not adopted because these would not provide the continuous current "picture" of the radiation levels across the United States now available with the current system. Less frequent collection would eliminate the ability to determine and respond to elevated radiation levels soon after they occur and would dramatically decrease the ability to map trends in radiation data following a release, and would likely result in loss of data availability.

**3.(e) General Guidelines**

The respondents are requested to supply precipitation samples and air filters and accompanying forms more often than on a quarterly basis. This is done so that elevated levels of radiation will be detected as soon as possible so as to allow for the quickest response possible to potential health threats.

The respondents submit sample collection information on a one page form that accompanies the sample to the NAREL. Since most samples are collected in the field, electronic means of recording or sending the information are not feasible. In addition, to avoid assigning incorrect sampling information to a sample, the sample and sampling information need to be linked when they are sent to the lab. The most effective means to do this is to attach a form with the information to the sample.

**3.(f-g) Confidentiality and Sensitive Questions**

The section on confidentiality and sensitive questions does not apply to RadNet. The respondents do not supply confidential or sensitive information.

**4. The Respondents and the Information Requested**

**4.(a) Respondents / NAICS Codes**

All fifty states, primarily Public Health Departments (NAICS Code 92312), send samples along with one page sample collection forms to NAREL. The respondents were chosen for two basic reasons: most of them routinely collect samples of this type as part of their normal activities, and in order to obtain meaningful information concerning ambient radiation levels for the entire United States samples must be collected from as many parts of the country as feasible.

**4.(b)(i) Information Requested**

Respondents provide actual samples of air, precipitation, and drinking water. Respondents do provide descriptive information about their samples on one page forms (see Attachment). The respondents are not requested or required to maintain records. Since the forms, as shown in the attachment, have had only very minor changes over time expiration dates are not included on them.

**4.(b)(ii) Respondent Activities**

RadNet respondents perform the following tasks in order to provide samples to NAREL:

* Read instructions concerning the sampling process
* Collect samples in appropriate containers
* Mail/ship samples to NAREL in Montgomery, Alabama
* Complete description forms regarding samples

Most respondents are employees of state or local health agencies and routinely perform sampling of their own that is analogous to RadNet sampling.

**5. The Information Collected**

**5.(a) Agency Activities**

Since RadNet began operating in the early 1970's, the following functions have been part of EPA's inventory of Agency activities:

* Maintain a master database
* Answer respondent questions
* Coordinate respondent sample submissions
* Maintain records of sample submissions
* Publish and disseminate data from sample analyses
* Analyze samples submitted by respondents
* Prepare and send sampling material
* Provide maintenance and or replacements for sampling instruments

**5.(b) Collection Methodology and Management**

The RadNet network involves the collection of a variety of samples including air filters, drinking water, and rain water (precipitation) samples. Standard Operating Procedures (available upon request) contain the detailed procedures used to ensure uniform collection of the samples and the standard forms filled out by the respondents when they collect the samples. The forms were designed to minimize the burden on the respondents. In most cases only the date of sampling, location of sampling, and the name of the individual taking the sample are required. Since most samples are taken in the field, an electronic means of recording and sending this information is not feasible. To ensure that the sample collection information accompanies the correct sample, the sample and the information need to be sent together. This is best accomplished by attaching the one page form to each sample when it is sent to the NAREL.

When the samples and accompanying forms arrive at NAREL, the samples are assigned an identification number. This number and information from the accompanying forms are entered into the NAREL computer. The samples are then analyzed for a variety of radionuclides. Data from the analyses performed at NAREL are also entered into the computer. The data are stored in a database and are available to the public online at the EPA website www.epa.gov/radnet. When necessitated by unique circumstances, data from the RadNet network can be made available daily. The data are verified by at least two individuals at NAREL. To ensure that the data are accurate and reliable, all activities associated with the RadNet network must conform to the RadNet Quality Assurance Project Plan and the Quality Assurance Manual, which detail the data quality objectives, project organization and responsibility, internal quality control checks, and other areas relating to quality assurance.

**5.(c) Small Entity Flexibility**

This section is not applicable because most respondents are state agencies.

**5.(d) Collection Schedule**

Listed below are the requested sample collection frequencies that require completion of sample collection forms.

Sample Requested Collection frequency

Drinking water Quarterly

Precipitation As measureable precipitation occurs

Air filters Two times per week \*

\* Many variable, site-specific conditions may preclude predicting a specific number of filters changed by a respondent weekly. For example, operator safety may be compromised by construction or severe weather, which may preclude routine air sample collection. Reduced operator availability may cause reduced filter change frequency if an operator’s non-volunteer job duties increase, or if frequency of visits to a monitor site decreases, such as may occur with sites at remote locations generally visited in conjunction with non-volunteer job duties. The RadNet Quality Assurance Project Plan contains a detailed discussion of these conditions. It is important to recognize that these variations do not affect the quality of the results of the analyses.

In the rare case of an emergency, such as Three Mile Island, Chernobyl, or Fukushima, EPA may request an increased sample collection frequency.

**6. Estimating the Burden and Cost of Collection**

**6.(a) Estimating Respondent Burden**

Total individual respondent burden for RadNet is estimated to be 3,726 hours annually. This 55 percent reduction in burden from 8,243 hours annually is primarily driven by the use of improved technology, by transfer of the milk program to FDA, and by elimination of the request for respondents to radiologically screen air-filters prior to shipment to NAREL. Improved technology of the RadNet real-time air monitors also allows some operations to be performed by EPA personnel at NAREL rather than requiring respondent time. EPA continues to look for other ways to reduce operator burden, particularly in the real-time air monitoring program.

Burden hour estimates are based primarily on sample collection times tested by NAREL personnel and informal telephone conversations with respondents over the years. Additional information used in estimating burden hours was obtained through discussions of NAREL personnel with personnel from state radiation departments at Council of Radiation Control Program Directors (CRCPD) meetings. Discussions with respondents and RadNet management revealed that the technical labor category is the most appropriate one for all RadNet burden activities.

Although the respondent burden assumes 235 total sampling locations, there can be times when the actual number of stations reporting is less than that, mainly due to unexpected nonparticipation by some stations. However, participation is not anticipated to decrease by more than 15 percent.

**6.(b) Estimating Respondent Cost**

Total respondent cost for RadNet is estimated to be about $139,843 annually. This 53 percent reduction in cost from $299,913 annually is again primarily driven by the use of improved technology and elimination of requests for radiological screening of air filters by respondents. The improved technology of the real-time RadNet air monitors allows operation by volunteers with a much wider range of technological skills which reduces the hourly rate assumed in the calculation. Additionally, as stated in 6.(a), improved technology aides in reducing respondent burden and thus cost.

Informal conversations and discussions with respondents and RadNet management have revealed that the technical labor category is the correct one for all RadNet respondent burden activities. Since the hourly wages of the respondents depend on years of employment and the pay scales of their respective states, an actual average hourly wage would require obtaining confidential information from the respondents. Based on our informal discussions with respondents and RadNet managers, the hourly rate at the GS-9(1) level, 37.54 dollars/hour ($23.46 per hour times a 1.6 overhead multiplication factor, based upon OPM salary tables for “rest of U.S.” effective January 2016 as displayed at https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2016/RUS\_h.pdf), is a good approximation of the respondents’ hourly wage for this technical labor category.

The respondents are not asked or required to keep records, and all supplies and materials relating to RadNet activities are provided by the NAREL at no cost to the respondents.

There are no capital costs for sample collectors (respondents). All equipment and materials are supplied by NAREL.

**6.(c) Estimating Agency Burden and Cost**

Total agency burden and cost for RadNet are estimated to be about 27,672 hours and $2,478,647 annually. The 3.6 percent decrease in burden from 28,700 is primarily due to improved efficiency in sending supplies, the transfer of the milk sampling program to FDA, and elimination of the maintenance of field radiation screening meters which were provided to respondents by EPA. The reduction in hours results in a 1.8% decrease in agency personnel cost from about $1,803,000 to $1,770,004 annually. Additionally, EPA estimates the cost for supplies for the RadNet program to be $70,500 annually, which is a 9.6% decrease due to transfer of the milk sampling program to FDA, elimination of the maintenance of field radiation screening meters which were provided to respondents by EPA, and discontinuation of the outdated ERAMS non-real-time air sampling program. Finally, EPA estimates the capital costs to increase minimally from about $495,000 to about $498,300.

Our agency burden estimates are based on our years of experience in operating the RadNet network. Since the activities for the operation of RadNet involves worker at various GS levels, we used composite burden hours and calculated hourly costs at the GS-13 level (step 1) times 1.6 (the overhead multiplication factor) to be 64.74 dollars/hour. The total number of annual hours devoted to RadNet by Agency personnel is estimated to be 27,672 hours.

**6.(d) Bottom Line Burden Hours and Cost/Burden Tables**

Annual Respondent Burden Totals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ANNUAL** | **Respondents** | **Responses** | **Hours** | **Cost** |
| Air | 141 | 209 | 3,248 | $119,905.70 |
| Precipitation | 30 | 56 | 320 | $12,011.52 |
| Drinking Water | 64 | 12 | 158 | $5,925.69 |
| **Total** | **235** | **277** | **3,726** | **$139,842.87** |

See detailed burden tables starting on page 13.

**6.(e) Reasons For Change in Burden**

There is a decrease of 3,815 hours in the total estimated respondent burden compared with the ICR currently approved by OMB. This decrease is due to the transfer of the milk program to FDA and the elimination of the request to radiologically screen air-filters prior to shipment to NAREL.Total hourly respondent burden for RadNet was reduced by 55% primarily due to the use of improved technology of the RadNet real-time air monitors, the elimination of the request for respondents to perform radiological air filter screening, and transfer of the milk program to FDA. Total agency burden decreased by 3.6 percent, primarily due to improved efficiency in supply shipments and elimination of maintenance of radiological air filter screening equipment.

**6.(f) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average about 13 hours per response. Burden means the total time and effort expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. EPA-HQ-OAR-2003-0041, which is available for online viewing at [www.regulations.gov](http://www.regulations.gov/), or in person viewing at the Office of Air and Radiation Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA/DC 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 Reading Room is 202-566-1744, and the telephone number for the Office of Air and Radiation Docket is 202-566-1742. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2003-0041 and OMB Control Number 2060-0015 in any correspondence.

**Section II: Part B**

In the case of the RadNet network, respondents send in actual samples such as air filters, drinking water, and precipitation. With each sample the respondents send in a one page form which basically requires the date and location of sampling, the size of the sample, and the name of the individual taking the sample. This is basic information that identifies the sample and requires no real data gathering on the part of the respondent. The respondent simply supplies information on the sampling process that he/she just performed.

The design of RadNet makes it the most comprehensive radiation monitoring network in the nation. The 235 sampling sites span the United States and cover most major population centers in all geographical regions. They are typically located at or near state health facilities and samples are collected voluntarily by state or local officials. Although the choice of sampling station locations is not based on a truly randomized design, the nationwide dispersion of sites does represent a close approximation to randomly selected locations with consideration given to population centers as well as geographical coverage of the U.S. This arrangement maximizes the coordination with state and local agencies collecting the samples as it does not place stations in extremely remote and relatively inaccessible locations.

The RadNet network satisfies the three major objectives of an environmental monitoring program as set forth by the Health Physics Society's Committee on Upgrading the Quality of the Environmental Data (EPA 520/1-80-012). These objectives are:

a. to assess dose,

b. to determine any trends of environmental radiation dose rates and concentrations of radioactive materials, and

c. to reassure members of the public and governmental organizations regarding radiation hazards and environmental radiation exposures.

The Society specifically references EPA's RadNet as an example of a functioning environmental monitoring program that incorporates these major desirable features.

**TABLE 1\***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Annual Respondent Burden Cost Estimates** | | | | | | |
| **Activity** | **Hours per Occurrence**  **(A)** | **Occurrences per Year**  **(B)** | **Hours per Respondent per Year**  **(C = A x B)** | **Respondents per Year**  **(D)** | **Burden-hours per years**  **(E = C x D)** | **Cost per year**  **(F = E x $37.54/hr)\*\*** |
| **Read Instructions** |  |  |  |  |  |  |
| Air | 0.5 | 1 | 0.5 | 141 | 71 | 2,646.29 |
| Precipitation | 0.5 | 4 | 2 | 30 | 60 | 2,252.16 |
| Drinking water | 0.5 | 4 | 2 | 64 | 128 | 4,804.61 |
|  |  |  |  |  |  |  |
| **Collect Samples** |  |  |  |  |  |  |
| Air | 0.167 | 104 | 17.3 | 141 | 2444 | 91,737.98 |
| Precipitation | 0.250 | 26 | 6.5 | 30 | 195 | 7319.52 |
| Drinking Water | 0.033 | 4 | 0.1 | 64 | 9 | 320.31 |
|  |  |  |  |  |  |  |
| **Complete and Mail Forms** |  |  |  |  |  |  |
| Air | 0.050 | 104 | 5.2 | 141 | 733 | 27,521.40 |
| Precipitation | 0.083 | 26 | 2.2 | 30 | 65 | 2,439.84 |
| Drinking Water | 0.083 | 4 | 0.3 | 64 | 21 | 800.77 |
|  |  |  |  |  |  |  |
| **TOTAL ANNUAL HOURS** | | | | | **3,726** |  |
|  |  |  |  |  |  |  |
| **TOTAL ANNUAL LABOR COST** | | | | |  | **139,842.87** |
|  |  |  |  |  |  |  |
| **RESPONDENTS’ TOTAL ANNUAL COST\*\*\*** | | | | |  | **139,842.87** |

\* Round-off errors may affect the numbers as shown. These errors are insignificant.

\*\* The rate used in this table is that of a GS-9/1 for 2016. The $37.54 per hour amounts to the GS-9/1 “Rest of US” rate of $23.46/hour multiplied by an overhead rate of 1.6.

\*\*\* Record keeping costs, capital costs, and maintenance costs are zero (0) for respondents.

**TABLE 2**

|  |  |  |  |
| --- | --- | --- | --- |
| **Annual Agency Burden/Cost Estimates**  **(Activities)** | | | |
| **Line Item** | **Burden Activity** | **Annual Hours** | **Agency Costs\*** |
| 1 | Maintaining master database | 50 | 3,237.00 |
| 2 | Monitoring real-time data (contractor) | 3,288 | 206,000.00 \*\* |
| 3 | Monitoring real-time data (NAREL) | 500 | 32,370.00 |
| 4 | Maintain real-time monitors (contractor) | 6,480 | 421,200.00 \*\* |
| 5 | Maintain system operations (NAREL) | 1,500 | 97,110.00 |
| 6 | IT support (contractor) | 1,920 | 108,000.00 \*\* |
| 7 | Answering respondent questions | 210 | 13,595.40 |
| 8 | Coordinating respondent submissions | 1,462 | 94,649.88 |
| 9 | Maintaining records of samples | 1,462 | 94,649.88 |
| 10 | Publishing and disseminating data | 300 | 19,422.00 |
| 11 | Analyzing samples | 10,000 | 647,400.00 |
| 12 | Providing sampling supplies | 500 | 32,370.00 |
|  | **TOTAL** | **27,672** | **1,770,004.16** |

\* For federal employees, the activity costs assume an average of GS-13/1 ($64.74/hr) rate. Lines 2, 4, and 6 are contractor costs. GS hourly rates are based upon 2016 data from the Office of Personnel Management (<https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2016/RUS_h.pdf>).

\*\* For contractor activities, costs of those activities are estimated based on previous costs for those activities.

**TABLE 3**

|  |  |  |  |
| --- | --- | --- | --- |
| **Agency Burden/Cost Estimates (Capital Costs)** | | | |
| **Line Item** | **Unit Cost ($)** | **No. Units** | **Total ($)** |
| Physical site preparation for air samplers | 3,000 | 5 | 15,000 |
| Supplies to field stations | 500 | 141 | 70,500 |
| Maintain real-time monitors parts (annual total) | 180,000 | 1 | 180,000 |
| Maintain real-time monitors (contractor site visits, annual total) | 180,000 | 1 | 180,000 |
| IT costs |  |  |  |
| * Data disaster recovery site | 22,000 | 1 | 22,000 |
| * Oracle license | 15,000 | 1 | 15,000 |
| * Internet access | 18,000 | 1 | 18,000 |
| * FTP software | 500 | 1 | 500 |
| * Records retention | 1,800 | 1 | 1,800 |
| * Backup software | 6,000 | 1 | 6,000 |
| * Equipment refresh | 10,000 | 1 | 10,000 |
| * CDX website host | 50,000 | 1 | 50,000 |
| **Grand Total** | | | **568,800** |

**TABLE 4**

|  |  |
| --- | --- |
| **Summary of Respondent and Agency Total Costs** | |
| **Line Item** | **Total ($)** |
| Annual Respondent Burden | 139.842.87 |
| Annual Agency Burden for Activities | 1,770,004.16 |
| Annual Agency Burden for Capital Costs | 568,800.00 |
| Combined (activity and capital cost) Burden  to the Agency | 2,478,647.03 |

**ATTACHMENT**

**Forms Used by RadNet Respondents**

(click on PDF icon below)

