

SUPPORTING STATEMENT FOR RadNet ICR# 0877.11

Section I: Part A

1. Identification of the Information Collection

1.(a) Title of the Information Collection

RadNet (formerly, Environmental Radiation Ambient Monitoring System [ERAMS]), EPA ICR Number 0877.11, 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, drinking water, and pasteurized milk samples. Most 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), 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 personnel, 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.
- Pasteurized milk samples are collected quarterly.
- 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.

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, milk, 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.

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 following the Fukushima reactor accidents in 2011.

The collection of samples will involve 302 respondents with an annual respondent burden cost of approximately 299,913 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/online-data.html>. 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 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 146 and will increase to a total of 156 during the period of this ICR (from February 2013 through February 2016). The total of 156 samplers will be comprised of 140 near-real-time samplers plus a legacy of approximately 16 conventional samplers. The size of the other media networks (milk, drinking water, and precipitation) are expected to remain essentially unchanged, except for the normal fluctuation of volunteer participants. The increased burden for the Agency provided in

this supporting statement is primarily the result of the increased sample load inherent in an expanded air monitoring system.

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.

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 following the Fukushima reactor accidents in 2011.

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

3. (a) Non-duplication

RadNet has been in operation for 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. The notice was published February 15, 2013 (78 FR 11171). EPA received no comments.

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.

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.

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 the State 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, drinking water, and milk. Respondents do provide descriptive information about their samples on one page forms (see Attachments 1-6). The respondents are not requested or required to maintain records. Since the forms, as shown in the attachments, 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 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, milk, 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 http://iaspub.epa.gov/enviro/erams_query_v2.simple_query. 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 the respondents are state agencies.

5.(d) Collection Schedule

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

<u>Sample</u>	<u>Requested Collection frequency</u>
Milk	Quarterly
Drinking water	Quarterly
Precipitation	As 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 respondent burden for RadNet is estimated to be 8,243 hours annually. Currently, the number of air samplers is 146, but will increase to a total of 156 during the period of this ICR (from February 2013 through February 2016). The total of 156 samplers will be comprised of 140 near-real-time samplers plus a legacy of approximately 16 conventional samplers. The size of the other media networks (milk, drinking water, and precipitation) are expected to remain essentially unchanged, except for the normal fluctuation of volunteer participants. The process and actual calculations for the burden estimate are shown in Table 1.

The total respondent burden for this ICR (8,243 hours) reflects a 5 percent reduction in burden from the 8,710 hours annually in the previous ICR. The reduction is primarily driven by the use of improved technology that reduces manual calculations for the real-time air monitors. 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. The primary improvement is remote connectivity which allows NAREL personnel to log into the monitor and perform some operations that previously required the operator to make a special trip to the monitor's field location. It is noteworthy that the annual respondent burden decreased in spite of EPA's expansion of the air monitoring system from 52 monitors in 2006 to a projected 156 samplers as shown in Table 1. 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 302 sampling locations, there can be times when the actual number of stations reporting is less than that, 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 \$299,913 annually. This 37 percent reduction in cost when compared to the previous submission is primarily driven by the use of improved technology which makes operations of the monitor easier than previous models. 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, 36.384 dollars/hour (\$22.74 per hour times a 1.6 overhead multiplication factor, based upon OPM salary tables for “rest of U.S.” effective January 2012 as displayed at http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2012/general-schedule/rus_h.pdf), is a good approximation of the respondents’ hourly wage for this technical labor category. This is reduced from the previous reports which used GS-12(1) as a basis as EPA discovered that the new technology does not require the same higher level of scientific skill as the older monitors did. This reduction is due to newer information concerning respondent’s time burden and reduced burden of the real-time air program due to improved technology.

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 28,700 hours and \$2,376,209 annually. The 31 percent increase in burden from 21,930 is primarily due to additional sample throughput in the laboratory and additional data review and maintenance operations needed to support the expanded network of real-time air monitors. These additional hours result in a 25% increase in agency personnel cost from about \$1,447,000 to \$1,803,000 annually. Additionally, EPA estimates the cost for supplies for the RadNet program to be \$78,000 annually, which is a 5% increase due to the additional RadNet air samplers. Finally, EPA estimates the capital costs to decrease significantly from about \$1,383,000 to about \$495,000. The decrease in capital cost is primarily due to EPA having completed air monitor purchases, which was the largest capital acquisition.

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 62.74 dollars/hour. The total number of annual hours devoted to RadNet by Agency personnel is estimated to be 28,706 hours.

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

See burden tables on pages 11-13.

6.(e) Reasons For Change in Burden

Total respondent burden for RadNet was reduced by 5% primarily due to the use of improved technology of the RadNet real-time air monitors. Total agency burden increased by 31 percent, primarily due to additional sample throughput in the laboratory and additional data review and maintenance operations needed to support the expanded network of real-time air monitors.

Additionally, forms 25, 26, and 31, which were previously used by RadNet and mentioned in the previous ICR, have been eliminated from RadNet. The impact of removing these forms has been accounted for in estimating the respondent burden of this ICR. The impact of the form removal has been to help in reducing respondent burden and cost.

6.(f) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average just under 0.5 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-2003-0041-0008, which is available for online viewing at 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. Use EPA's electronic docket and comment system at www.regulations.gov, to submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the docket that are available electronically. Once in the system, select "docket search," then key in the docket ID number identified above. Please note that EPA's policy is that public comments, whether submitted electronically or in paper, will be made available for public viewing at www.regulations.gov as EPA receives them and without change, unless the comment contains

copyrighted material, CBI, or other information whose public disclosure is restricted by statute. For further information about the electronic docket, go to www.regulations.gov.

Section II: Part B

In the case of the RadNet network, respondents send in actual samples such as air filters, milk, drinking water, and rain. 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 302 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 personnel. 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 and potential radiation source distribution. 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 \$36.38/hr)*
Read Instructions						
Air	1	2	2	156	312	11,351.81
Precipitation	0.5	2	1	33	33	1,200.67
Drinking water	0.5	2	1	74	74	2,692.42
Milk	1	2	2	39	78	2,837.95
Collect Samples						
Air	0.32	104	32.9	156	5137.6	186,926.44
Precipitation	0.23	26.2	6.1	33	201.6	7,335.01
Drinking Water	0.15	4	0.6	74	44.4	1,615.45
Milk	3.90	4	15.6	39	608.4	22,136.03
Complete and Mail Forms						
Air	0.1	104	10.4	156	1622.4	59,029.40
Precipitation	0.1	26.2	2.6	33	86.4	3,143.58
Drinking Water	0.1	4	0.4	74	29.6	1,076.97
Milk	0.1	4	0.4	39	15.6	567.59
TOTAL ANNUAL HOURS					8243	
TOTAL ANNUAL LABOR COST						299,913.31
RESPONDENTS' TOTAL ANNUAL COST**						299,913.31

* The rate used in this table is that of a GS-9/1 for 2012. The \$36.384 per hour amounts to the GS-9/1 rate of \$22.74/hr 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	3,137.00
2	Monitoring real-time data (contractor)	3,288	206,000.00
3	Monitoring real-time data (NAREL)	500	31,370.00
4	Maintain real-time monitors (contractor)	6,480	421,200.00
5	Maintain system operations (NAREL)	1,500	94,120.00
76	IT support (contractor)	1,920	108,000.00
7	Answering respondent questions	210	13,175.40
8	Coordinating respondent submissions	1,462	91,725.88
9	Maintaining records of samples	1,462	91,725.88
10	Publishing and disseminating data	300	18,822.00
11	Analyzing samples	9,734	610,711.16
12	Providing sampling supplies	1,800	112,932.00
	TOTAL	28,706	1,802,909.32

* For federal employees, the activity costs assume an average of GS-13/1 (\$62.74/hr) rate. Lines 2, 4, and 6 are contractor costs. GS hourly rates are based upon 2012 data from the Office of Personnel Management (http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2012/general-schedule/rus_h.pdf).

TABLE 3

Agency Burden/Cost Estimates (Capital Costs)*			
Line Item	Unit Cost (\$)	No. Units	Total (\$)
Physical site preparation for air samplers	3,000	4	12,000
Supplies to field stations	500	156	78,000
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			573,300

*All capital costs in this table, except for the \$78,000 to supply field stations, pertain to costs supporting the expansion and upgrade of the RadNet air network.

TABLE 4

Summary of Respondent and Agency Total Costs	
Line Item	Total (\$)
Annual Respondent Burden	299,913.31
Annual Agency Burden for Activities	1,802,909.32
Annual Agency Burden for Capital Costs	573,300
Combined (activity and capital cost) Burden to the Agency	2,376,209.32

ATTACHMENT 1

Forms Used by RadNet Respondents
(click on PDF icon below)

