

<b>INTERAGENCY AGREEMENT</b>		1. IAA NO. NRC-HQ-41-11-D-0001/M0021		PAGE OF 1 2	
2. ORDER NO.		3. REQUISITION NO.		4. SOLICITATION NO.	
5. EFFECTIVE DATE 03/07/2016		6. AWARD DATE 03/07/2016		7. PERIOD OF PERFORMANCE 10/01/2010 TO 06/30/2016	
8. SERVING AGENCY OAK RIDGE NATIONAL LABORATORY ORNL ALC: DUNS: +4: DEPARTMENT OF ENERGY ORNL SITE OFFICE POST OFFICE BOX 2008 OAK RIDGE TN 37831-6269  POC MICHELE BRANTON TELEPHONE NO. (865) 576-8130			9. DELIVER TO KIMBERLY CONWAY US NUCLEAR REGULATORY COMMISSION MAIL STOP T8J7 11555 ROCKVILLE PIKE ROCKVILLE MD 20852		
10. REQUESTING AGENCY US NUCLEAR REGULATORY COMMISSION ALC: 31000001 DUNS: 040535809 +4: ACQUISITION MANAGEMENT DIVISION ONE WHITE FLINT NORTH 11555 ROCKVILLE PIKE ROCKVILLE MD 20852-2738  POC Jeffrey R. Mitchell TELEPHONE NO. 301-415-5074			11. INVOICE OFFICE US NUCLEAR REGULATORY COMMISSION ONE WHITE FLINT NORTH 11555 ROCKVILLE PIKE MAILSTOP 03-E17A ROCKVILLE MD 20852-2738		
12. ISSUING OFFICE US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWFN-5E03 WASHINGTON DC 20555-0001			13. LEGISLATIVE AUTHORITY Energy Reorganization Act of 1974		
			14. PROJECT ID F1163		
			15. PROJECT TITLE SEE BLOCK 18		
16. ACCOUNTING DATA No Funds Obligated ZEROREQ-NMSS-16-0031					
17. ITEM NO.	18. SUPPLIER/SERVICES	19. QUANTITY	20. UNIT	21. UNIT PRICE	22. AMOUNT
	Project Title: Terminated License and Complex Sites Tracking System Master IAA: N/A The purpose of this modification is to extend the period of performance from March 31, 2016 to June 30, 2016 at no additional cost to the Government.  The Period of Performance is revised as follows: (1) October 1, 2010 - June 30, 2106  (2) Reference to the "Statement of Work, Rev 2" is hereby deleted in its entirety and replaced Continued ...				
23. PAYMENT PROVISIONS			24. TOTAL AMOUNT 00.00		
25a. SIGNATURE OF GOVERNMENT REPRESENTATIVE (SERVICING) 			25b. SIGNATURE OF GOVERNMENT REPRESENTATIVE (REQUESTING) 		
26a. NAME AND TITLE Deborah L. Garland, Contracting Officer		23d. DATE 3/23/16	26b. CONTRACTING OFFICER JEFFREY R. MITCHELL		26c. DATE 3/7/2016

MAR 28 2016

SUNSI REVIEW COMPLETE

ADM002

TEMPLATE - ADM001

with the following Statement of Work attached to this Modification No. 21 entitled, "Statement of Work, Rev 3".

All other terms and conditions remain unchanged including the authorized cost ceiling of \$1,572,645.00

**NRC-HQ-41-11-D-0001**  
**STATEMENT OF WORK, REVISION No. 3**

PROJECT TITLE:	Terminated License and Complex Sites Tracking Systems
JOB CODE:	F1163
B&R NUMBER:	0-5515-355-260
BOC CODE:	
NRC ISSUING OFFICE:	NMSS
NRC TECHNICAL ASSISTANCE:	Tira Patterson/ 301-415-7808
PROJECT MANAGER (TAPM)	
NRC TECHNICAL PROJECT:	Kim Conway / 301-415-1335
MANAGER (TPM)	
FEE RECOVERABLE:	Non-Fee-Recoverable

**1.0 BACKGROUND**

The staff of the Nuclear Regulatory Commission (NRC) began a project in late 1990 to identify terminated materials licenses that satisfied one or both of the following conditions: (1) one or more sites used under the license could not be demonstrated to have met the current rules for decommissioning at the time of license termination, or (2) one or more sealed sources that were authorized under the license were not accounted for at license termination. A license having at least one site whose closeout did not meet present decommissioning standards would be referred to as a 'Nonstandards Site License' or NSL. A license having at least one sealed source whose accounting did not meet current standards would be referred to as an 'Unaccounted Source License' or USL. Oak Ridge National Laboratory (ORNL) was contracted to identify the sites and sealed sources that required further follow-up. NRC Headquarters provided overall management of the follow-up process, and the NRC Region offices carried out actual review and follow-up activities for the identified licenses.

The follow-up effort was coordinated through the NRC Headquarters Retired License Evaluation (RLE) tracking system. The tracking system project monitored follow-up activities of the Regions for NSL. Sealed source follow-up was not included in the RLE tracking system. Initial input for the RLE system was the identified sites and sealed sources supplied by ORNL. It then monitored the resolution of the NSL and USL by the use of information about specific sites and sources supplied by, or actively gathered from, the region offices. The final disposition of the identified site closeout issues was then monitored through the tracking system data.

During the tracking and documentation of terminated licenses identified by ORNL as concern items, an infrastructure for the retrieval, entry, and analysis of data was developed that served as a foundation for tracking all terminated licenses from 1995 forward. This infrastructure included a database of information, a web site for accessing the database, and a data flow plan for retrieving information.

The RLE tracking system tracked all licenses from the point of termination to the point of closure. Newly terminated licenses were the first registered in the system. Then any supporting documents were summarized in the database and scanned electronically. Supporting documents were then available on-line along with the database results. This system also served directly as a resource for information related to the terminated license such as Job number, Box number, Licensee name, Address, and related information. The RLE system

evolved into the current Terminated License Database (TLD).

The NRC also had a need for a centralized, interactive system to manage various aspects of all active decommissioning and uranium recovery sites. To address this need, NRC requested ORNL to develop an interactive system to make many aspects of related management more streamlined, while providing a central repository for valuable business data. In particular, queries would allow staff to search and summarize information on active decommissioning and uranium recovery sites and easily produce automatically generated monthly or quarterly reports. Information from the system is accessible to the public through NRC's public website. This centralized, interactive system is called the Complex Sites Tracking System (CSTS), and was created as a response to NRC's need to manage aspects of all active decommissioning and uranium recovery sites.

## 2.0 **OBJECTIVE**

The objective of this project is to update and maintain the TLD. ORNL shall: (1) update and maintain the TLD to include all licenses terminated through June 30, 2016; (2) update and maintain CSTS; and (3) develop and implement a methodology for the identification of historical sites with potential radium contamination.

## 3.0 **SCOPE OF WORK**

The effort will be divided into four tasks. Although interrelated and overlapping in the time span of execution, these are separately identifiable objectives of the ongoing TLD project effort.

### 3.1 **Technical Review of Terminated License Files**

ORNL shall retrieve lists of terminated licenses from NRC quarterly, conduct both an ADAMS search and, if necessary, an archival search on the history of these licenses to establish the sequence of events which leads a licensee from termination request until NRC grants termination of the license. This review process is ongoing, and ORNL will also follow up on licenses not yet closed out from previous quarters. ORNL shall maintain the TLD by adding information for licenses terminated between the start of this agreement and June 30, 2016. ORNL shall use technical expertise to review NRC's technical evaluation and any additional closure documentation based on 10 CFR Parts 30, 40, and 70, and determine if there is adequate documentation to support license termination.

The reviewers evaluating the documentation shall be familiar with the decommissioning process and NRC regulations regarding license termination, specifically 10 CFR Parts 30, 40, and 70. The reviewers shall also have experience with risk assessments for human health and the environment. Using the standard of care for a technical reviewer, ORNL shall immediately notify the NRC TPM of any decommissioning sites that require a decommissioning plan but have insufficient closure documentation. The technical reviewer shall also be familiar with the uranium recovery license termination process, specifically, the criteria in 10 CFR 40, Appendix A.

### 3.2 **Terminated License Database Maintenance**

The maintenance of the TLD is defined in task 2. ORNL shall maintain an automated system for

identifying licenses that continue to lag in available information. This system shall evaluate each license in a manner consistent with, or similar to, NUREG/CR-6592, "Evaluation of Terminated Material Licenses," to determine the need for additional information or immediate follow-up. This system shall notify website administrators and, if necessary, appropriate NRC managers of the lack of information. ORNL will compile a list of these licenses and discuss with NRC how to resolve them on a quarterly basis.

ORNL shall continue to improve the quality assurance of the site by concentrating heavily on the continuity of information for each license and improving the ability to cross cut information a number of ways.

The reports generated by the database shall be in a form that can be easily incorporated into a report and into ADAMS.

During a previous interagency agreement ORNL made the TLD accessible to the public through the NRC public website. ORNL shall ensure that the information continues to be available to the public. Since release to the public may increase the user base and exposure to potential hackers, ORNL shall periodically re-evaluate safeguards and correct any identified security loopholes. ORNL will report on its efforts to periodically identify and address any identified security loopholes in the Monthly Letter Status Reports. Any security incidents shall be reported to the NRC immediately after discovery. Additional security requirements are listed in Section 14.0 of this document.

The TLD was constructed in Microsoft Access. The service which provides access to the database is done in Cold Fusion running on a Windows platform with Website Pro as the server software. The server shall be located at ORNL and be protected by their firewall system.

### 3.3 Complex Sites Tracking System Maintenance

NRC project managers will be requested to verify and update the information in the CSTS. ORNL developers shall retain access to the system to maintain the data, make minor changes, and maintain an adequate level of quality control, such as ensuring that data is entered in the appropriate fields. ORNL shall notify NRC as soon as any problems arise.

The CSTS consists of a relational database with a password-secure website interface to store and manage information about complex decommissioning and uranium recovery sites. The relational database was constructed in Microsoft Access. The web interface is a standard combination of HTML and Cold Fusion running on a Windows platform with Website Pro as the server software. The website shall be located on the same server as the TLD. This server shall be located at ORNL and be protected by their firewall system.

ORNL shall conduct a search quarterly within CSTS to establish a list of sites for which information has not been updated since the previous quarter. ORNL will notify the NRC project managers of these sites, via email, to verify and update the CSTS information for their respective decommissioning and uranium recovery sites. The system shall remind NRC project managers to update the site information on a daily basis until the CSTS has been updated. The NRC Technical Project Manager (TPM) shall have the ability to generate a report of site summaries for all active sites through CSTS for use on the NRC public website.

ORNL shall collect information quarterly, via e-mail, needed to maintain and update the Gantt charts in CSTS. Once this information has been collected, ORNL shall update the Gantt charts in CSTS and then e-mail the updated Gantt charts in a Word document to the TPM quarterly.

ORNL shall notify Agreement State project managers annually, via email, to verify and update the CSTS information for their respective decommissioning and uranium recovery sites. The system shall remind Agreement State project managers once annually two months prior to the end of each fiscal year.

### 3.4 CSTS and TLD System Delivery

NRC utilizes a Project Management Methodology which is described in MD 2.8, which provides guidance regarding things to consider and steps to be taken in developing and maintaining application systems. ORNL shall follow practices similar to those in NRC's PMM. Through these practices, ORNL shall ensure that tracking/management, design validation, configuration management, and software quality assurance requirements are met.

ORNL shall provide all data files to NMSS for the TLD and CSTS, along with any hardware, data access, working copies of all programs, and management routines developed. The format will be specified by NMSS at the conclusion of the project. As described in NRC's PMM, ORNL shall produce the "Operations and Maintenance" artifacts of Lessons Learned Study, Project Measurements, Security Re-Accreditation, System Support Material, Change Requests, and Solution Release. If any deliverable is provided on a compact disk (CD) or digital video disk (DVD), the CD or DVD shall be scanned for viruses prior to delivery to NRC.

One year prior to this contract expiring, ORNL shall create a transition plan, and work with NMSS or its designee to ensure the continuity of operations of CSTS and TLD. This transition plan shall include the PMM required transition artifacts and shall include a period of time for ORNL to respond to any questions on the software or hardware needed to maintain and update CSTS and TLD. The transition plan needs to be approved by the NMSS TPM and Technical Assistance Project Manager (TAPM) prior to its implementation.

After June 30, 2016, the database could be turned over to NRC, in accordance to the ORNL developed transition plan. In addition, the system would be made available to NRC at any point in time during the updating and maintenance, using a mutually approved method for access.

### 3.5 Identification of Sites with Potential Radium Contamination

NRC staff is seeking assistance with its search to identify other possible radium contaminated sites from ORNL, which previously identified and researched historically-contaminated sites for the NRC in the 1990s. The scope of ORNL's effort, in this instance, includes identifying, describing, and apply NRC's prioritization scheme to historic radium sites. It is expected that most of the sites to be identified will have never been licensed by the NRC.

ORNL shall formulate a preliminary plan to identify historic radium sites based on existing literature and databases, historical knowledge of sites that may have used this material (archival research), existing U.S. Department of Energy flyovers, and information provided by States. For each site that is identified, ORNL will conduct a search for the following information:

The amount/extent of radium contamination at these sites (including historical information and/or informed assumptions about the radium facilities' structures/areas, processes, and activities).

- Location and population near the sites.
- Current State/Federal involvement.
- Current access, activities, and uses at the site (including existing controls, such as signs, fences, and restrictions on use).

ORNL shall notify the NRC immediately if, during its investigation, it encounters information that suggests a site poses an immediate public health or safety concern. The staff has limited the ORNL scope to searching for sites in non-Agreement States because Agreement States are responsible for such sites in their States

By specified deadlines no later than June 30, 2016, ORNL shall provide the following deliverables:

- A listing of all sites with potential historical radium contamination from discrete sources identified in non-Agreement and Agreement States
- Site summaries for sites in non-Agreement States
- A final summary report describing this work

#### 4.0 **PERIOD OF PERFORMANCE**

October 01, 2010 through June 30, 2016.

#### 5.0 **LEVEL OF EFFORT**

Intentionally left blank.

#### 6.0 **REPORTING REQUIREMENTS**

##### 6.1 **Monthly Letter Status Reports**

ORNL shall submit a Monthly Letter Status Report (MLSR) by the 20th day of each month with distribution the TAPM and the TPM. The MLSR shall contain at a minimum all of the required information shown in Management Directive (MD) 11.7, Exhibit 7, "Monthly Letter Status Report Requirements". The report shall summarize significant findings and results of: (1) the work performed (including specific researched licensees); (2) personnel time expenditures; (3) travel costs for each individual by trip; (4) specific efforts to periodically identify and address any security loopholes; and (5) costs and uncosted obligations including subcontracts, listed separately: (a) during the previous months; (b) cumulative to date (fiscal year and total); and (c) projection by month to completion of the work effort for the current fiscal year. The first monthly report shall provide the initial projections, and subsequent reports shall either indicate revised projections or indicate "no change in the cost and uncosted obligation projection."

6.2 Annual Summary Report

At the end of each fiscal year, ORNL shall prepare a letter report summarizing the progress made during that fiscal year. The report shall contain security upgrades, planned recommendations for system changes, and the number of public users.

It shall be ORNL's responsibility to be familiar with the latest version of NRC's PMM. All software development, modifications or maintenance tasks shall follow general guidance in MD 2.8 and specific quality guidance designated by the NRC TPM.

6.3 Report Distribution

The following summarizes the required report distribution under this SOW. The TAPM shall provide the performing organization with current NRC mailing addresses for this distribution.

DISTRIBUTION

REPORT	NMSS TPM	NMSS TAPM	NRC DOCUMENT CONTROL BRANCH
Monthly Letter Status Reports	1	1	1
Annual Summary Report	1	1	1

7.0 MEETINGS AND TRAVEL

A total of six domestic trips are anticipated to be needed to complete the work described in this SOW. The following trips will be required for the effort:

One trip for one person per year, to Headquarters, to review and retrieve license files. This is to update information in TLD (Task 1). This would take approximately two days.

One trip for one person at the end of the project, to Headquarters, to meet with NRC personnel involved in the project. This is to ensure the smooth transition of the project (Task 4). This would take approximately two days.

8.0 DELIVERABLES

Deliverable	Task	Delivery Date
Gantt Charts	Task 3	Quarterly
Transition Plan	Task 4	One year prior to contract expiration

9.0 TECHNICAL/PROJECT DIRECTION

TAPM – Tira Patterson (301-415-7808)

TPM – Kim Conway (301-415-1335)



The TAPM is the focal point for all contract related activities. All work assignments and program funding actions are initiated by the TAPM. All proposed work scope or schedule changes must be processed through the TAPM.

The TPM is responsible for providing technical guidance to the performing organization regarding staff interpretations of the technical aspects of regulatory requirements along with copies of relevant documents (e.g., Regulatory Guides) when requested by the performing organization. All work products must be reviewed and approved by the TPM before they are submitted as final documents. All technical direction given to the performing organization must be consistent with the work scope and schedule. The TPM is not authorized to unilaterally make changes to the approved work scope or schedule or give the performing organization any direction that would increase costs over approved levels. Directions for changes in cost or period of performance will be provided by the DOE Operations Office after receipt of an appropriated Standard Order for DOE Work (SOEW) (NRC Form 173) from the Office of Federal and State Materials and Environmental Management Programs. If the performing organization receives guidance which is believed to be invalid under the criteria cited above, the performing organization shall immediately notify the TAPM. If the TAPM and the performing organization are unable to resolve the question within five days, the performing organization shall notify the DOE Operations Office.

#### 10.0 QUALITY ASSURANCE

For all draft and final reports delivered under this agreement, the performing organization shall assure that an independent review and verification of all numerical computations and mathematical equations and derivations is performed by qualified personnel other than the original author(s) of the reports. If the performing organization proposes to verify/check less than 100 percent of all computations and mathematical equations and derivations in the report(s), (such as might be the case when there a large number of routine, repetitive calculations), the performing organization must first obtain written approval from the TPM. Computer generated calculations will not require verification where the computer program has already been verified. The TPM has the option of auditing all documentation including project correspondence, drafts, calculations and unrefined data.

All reports, including those which do not contain numerical analyses must be reviewed by the performing organization's management and approved with two signatures, one of which is for the performing organization's management at a level above the program manager.

When revisions for the reports are issued, a section must be included in the revised report to document dates of, reasons for, and scope of all changes made since the issuance of the first performing organization's approved report.

NRC has the option of appointing a Peer Group to review, comment and recommend changes to the draft and final reports. The performing organization may recommend candidates for the Peer Group for approval by the TPM. In the occasion of dissent in the content of the final report, the dissenting party will have the option of stating its viewpoints and findings in a section of the report.

#### 11.0 DISPOSAL OF PROPERTY

Management of property purchased under this Interagency Agreement will follow the procedures as stated in Part VIII of Management Directive 11.7.

#### **12.0 DOE ACQUIRED PROPERTY**

The performing organization must notify the Office of Federal and State Materials and Environmental Management Programs (Attn: Director, PBPA) and the TPM prior to acquisition of any capital, investment, or word processing equipment.

#### **13.0 ORGANIZATIONAL CONFLICT OF INTEREST**

DOE recognizes that Section 170A of the Atomic Energy Act of 1954, as amended, requires that NRC be provided with disclosures on potential conflicts when NRC obtains technical, consulting, research and other support services. DOE further recognizes that the assignment of NRC work to DOE laboratories must satisfy NRC's conflicts standards. Accordingly, when NRC enters into an agreement with a DOE laboratory to perform work for NRC, and during the life of the agreement, the laboratory shall review its current work, planned work and where appropriate past work for DOE and others (meaning, organizations, in the same/similar technical area as the NRC project scope of work, e.g., (included but not limited to), NRC licensees, vendors, industry groups or research institutes that represent or are substantially comprised of nuclear utilities) to determine whether such work is in the same or similar area as the proposed NRC project.

Should that review reveal current or planned work for DOE or others in the same or similar technical area as the proposed NRC work, the laboratory shall provide name of organization, dollar value, and period of performance of the work identified as well as descriptions of such potentially conflicting present/planned/past work to NRC. NRC shall then determine whether a conflict would result and, if one does, determine, after consultation with the laboratory and DOE, the appropriate action NRC or DOE should take to avoid the conflict or when appropriate under NRC procedures, waive the conflict.

#### **14.0 PROTECTION OF DATA AND SYSTEMS**

The TLD/CSTS security requirements shall comply with NRC MD 12.5, "NRC Automated Information Security Program."

The Security Planning and Reporting Requirements relative to the system category shall be delivered as described in Section 3.1 of MD 12.5. At the very least, the "Annual System Sponsor Review" shall be delivered once a year on the anniversary date of this awarded contract. Other security deliverables are dictated by the "category" designation. In addition, compliance with the C&A scheduling shall be maintained as described in Section 4.3.

Operation plans shall ensure that there is an ability to recover and provide service sufficient to meet the minimal needs of users of the system should there be a service interruption. Manual procedures are not a viable back-up option; therefore, it is important to take cost-effective steps to manage any disruption of service.