

# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

18

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 05/06/2015		2. CONTRACT NO. (If any) GS10F048AA		6. SHIP TO.	
3. ORDER NO. NRC-HQ-60-15-T-0001		4. REQUISITION/REFERENCE NO. RES-15-0058		a. NAME OF CONSIGNEE ATTN TANYA OXENBERG	
5. ISSUING OFFICE (Address correspondence to) US NRC - HQ ACQUISITION MANAGEMENT DIVISION MAIL STOP TWEN-5E03 WASHINGTON DC 20555-0001				b. STREET ADDRESS 11555 ROCKVILLE PIKE MS CSB C3 A7	
				c. CITY ROCKVILLE	e. ZIP CODE 20852
7. TO:				f. SHIP VIA	
a. NAME OF CONTRACTOR OBSIDIAN ANALYSIS INC				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 1000 CONNECTICUT AVE NW 9TH FLR				REFERENCE YOUR:  Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
d. CITY WASHINGTON		e. STATE DC	f. ZIP CODE 200365302	Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OFF OF NUCLEAR REG RESEARCH	
11. BUSINESS CLASSIFICATION (Check appropriate box(es))					12. F.O.B. POINT
<input checked="" type="checkbox"/> a. SMALL <input type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB					
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 05/05/2017	
a. INSPECTION Destination	b. ACCEPTANCE Destination			16. DISCOUNT TERMS	
17. SCHEDULE (See reverse for Rejections)					
ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
	This is a non-personnel services Federal Supply Schedule (FSS) Order to provide The U.S. Nuclear Regulatory Commission with Offsite Response Organization (ORO) capabilities and practices for protective actions in the intermediate phase of Continued ...				
18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.	
21. MAIL INVOICE TO:					
a. NAME		US NUCLEAR REGULATORY COMMISSION			
b. STREET ADDRESS (or P.O. Box)		ONE WHITE FLINT NORTH 11555 ROCKVILLE PIKE MAILSTOP 03-E17A			
c. CITY		d. STATE	e. ZIP CODE	AMOUNT	
ROCKVILLE		MD	20852-2738	\$220,920.67	
22. UNITED STATES OF AMERICA BY (Signature)		05/07/2015		23. NAME (Typed) MONIQUE B. WILLIAMS TITLE: CONTRACTING/ORDERING OFFICER	

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OPTIONAL FORM 347 (Rev. 2/2012)  
Prescribed by GSA/FAR 48 CFR 53.213(f)

TEMPLATE - ADMIN

SUNSI REVIEW COMPLETE

JUN - 5 2015

ADM002

**ORDER FOR SUPPLIES OR SERVICES  
SCHEDULE - CONTINUATION**

PAGE NO

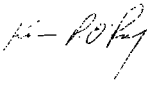
2

**IMPORTANT:** Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER  
05/06/2015

CONTRACT NO.  
GS10F048AA

ORDER NO.  
NRC-HQ-60-15-T-0001

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	<p>Emergency Response, in accordance with the Task Order Statement of Work.</p> <p>Period of Performance: May 6, 2015 - May 5, 2017</p> <p>Total Order Ceiling: \$220,920.67</p> <p>Total Obligated Amount: \$75,000.00</p> <p>Contracting Officer's Representative (COR): Tanya Oxenberg Email: Tanya.Oxenbergnrc.gov Phone: 301-251-7491</p> <p>Contractor POC: Micah McCutchan, Vice President of Operations Email: MMcCutchan@obsidiandc.com Phone: 202-459-0479</p> <p> Digitally signed by Kevin P. O'Prey, Ph.D. DN: cn=Kevin P. O'Prey, Ph.D., o=Obsidian Analysis, Inc., ou=President, email=koprey@obsidiandc.com, c=US Date: 2015.05.05.12:56:28 -04'00'</p> <p>Obsidian Authorized Date Official</p> <p>Accounting Info: 2015-X0200-FEEBASED-60-60D003-11-6-213-1045-255B</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$0.00

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OPTIONAL FORM 348 (Rev. 4/2006)

Prescribed by GSA FAR (48 CFR) 53.213(f)

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## TASK ORDER TERMS AND CONDITIONS

### B.1 NRCB010 BRIEF PROJECT TITLE AND WORK DESCRIPTION

(a) The title of this project is: "Offsite Response Organization (ORO) Capabilities and Practices for Protective Actions in the Intermediate Phase of Emergency Response."

(b) The contractor shall conduct an applied research study to advance NRC understanding of ORO practices and capabilities to support modeling of protective actions in consequence studies and regulatory analyses. The study may also inform guidance and oversight practices. This information would provide a technical basis for assumptions used in NRC consequence analyses. Although the information gathered may inform guidance and oversight practices in the future, the NRC does not intend that the information be used to evaluate directly any ORO. It may be appropriate to collect the information in a manner that is anonymous.

(End of Clause)

### B.2 NRCB084 CONSIDERATION AND OBLIGATION- LABOR-HOUR CONTRACT

(a) The ceiling price to the Government for full performance under this contract is **\$220,920.67**.

(b) The contract includes direct labor hours at specified fixed hourly rates, inclusive of wages, fringe, overhead, general and administrative expenses, and profit.

(c) The amount presently obligated by the Government with respect to this contract is **\$75,000.00**.

(d) This is an incrementally-funded contract and FAR 52.232-22 – "Limitation of Funds" applies.

(End of Clause)

### B.3 PRICE/COST SCHEDULE

CLIN	GSA FSS Labor Category	Total Estimated Hours	GSA FSS Labor Rate	Total Estimated Cost
0001	Sr. Subject Matter Expert			
0002	Sr. Coordinator			
0003	Associate 2			
0004	Analyst 2			
Subtotal Estimated Costs				\$213,920.67

CLIN	Labor Category	Total Estimated Cost
0005	Estimated Travel (Cost Reimbursable) The government will pay up to the rates specified in the Government Federal Travel Regulations (FTR) for travel destination. NO PAYMENT WILL BE MADE WITHOUT BACKUP DOCUMENTATION/RECEIPTS. All travel must be approved in advance by the NRC Contracting Officer Representative	
Total Estimated Travel		
<b>Total Estimated Costs</b>		<b>\$220,920.67</b>

#### B.4 NRCD020 BRANDING

The Contractor is required to use the statement below in any publications, presentations, articles, products, or materials funded under this contract/order, to the extent practical, in order to provide NRC with recognition for its involvement in and contribution to the project. If the work performed is funded entirely with NRC funds, then the contractor must acknowledge that information in its documentation/presentation.

Work Supported by the U.S. Nuclear Regulatory Commission (NRC), Office of Research under Contract/order number GS10F048AA NRC-HQ-60-T-0001.

(End of Clause)

#### B.5 NRCD010 PACKAGING AND MARKING

(a) The Contractor shall package material for shipment to the NRC in such a manner that will ensure acceptance by common carrier and safe delivery at destination. Containers and closures shall comply with the Surface Transportation Board, Uniform Freight Classification Rules, or regulations of other carriers as applicable to the mode of transportation.

(b) On the front of the package, the Contractor shall clearly identify the contract number under which the product is being provided.

(c) Additional packaging and/or marking requirements are as follows: none.

(End of Clause)

## **B.6 NRCF032 TASK/DELIVERY ORDER PERIOD OF PERFORMANCE (SEP 2013)**

This order shall commence on **May 6, 2015** and will expire on **May 5, 2017**.

(End of Clause)

## **B.7 NRCG030 ELECTRONIC PAYMENT (SEP 2014)**

The Debt Collection Improvement Act of 1996 requires that all payments except IRS tax refunds be made by Electronic Funds Transfer. Payment shall be made in accordance with FAR 52.232-33, entitled "Payment by Electronic Funds-Central Contractor Registration".

To receive payment, the contractor shall prepare invoices in accordance with NRC's Billing Instructions. Claims shall be submitted on the payee's letterhead, invoice, or on the Government's Standard Form 1034, "Public Voucher for Purchases and Services Other than Personal," and Standard Form 1035, "Public Voucher for Purchases Other than Personal – Continuation Sheet." The preferred method of submitting invoices is electronically to: [NRCPayments@nrc.gov](mailto:NRCPayments@nrc.gov).

(End of Clause)

## **B.8 NRCH480 USE OF AUTOMATED CLEARING HOUSE (ACH) ELECTRONIC PAYMENT/REMITTANCE ADDRESS**

The Debt Collection Improvement Act of 1996 requires that all Federal payments except IRS tax refunds be made by Electronic Funds Transfer. It is the policy of the Nuclear Regulatory Commission to pay government vendors by the Automated Clearing House (ACH) electronic funds transfer payment system. Item 15C of the Standard Form 33 may be disregarded.

(End of Clause)

## **B.9 NRCH470 GREEN PURCHASING (SEP 2013)**

(a) In furtherance of the sustainable acquisition goals included in Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," products and services acquired under this contract/order shall be energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, recycled content, and non-toxic or less toxic alternatives, to the maximum extent practicable in meeting NRC contractual requirements.

(b) See NRC's Green Purchasing Plan (GPP) at: <http://pbadupws.nrc.gov/docs/ML1219//ML12191A130.pdf> and the General Service Administration's (GSA) Green Procurement Compilation at: <http://www.gsa.gov/portal/content/198257>.

(c) The contractor shall flow down this clause into all subcontracts and other agreements that relate to

performance of this contract/order.

(End of Clause)

#### **B.10 NRCH410 WHISTLEBLOWER PROTECTION FOR NRC CONTRACTOR AND SUBCONTRACTOR EMPLOYEES**

(a) The U.S. Nuclear Regulatory Commission (NRC) contractor and its subcontractor are subject to the Whistleblower Employee Protection public law provisions as codified at 42 U.S.C. 5851. NRC contractor(s) and subcontractor(s) shall comply with the requirements of this Whistleblower Employee Protection law, and the implementing regulations of the NRC and the Department of Labor (DOL). See, for example, DOL Procedures on Handling Complaints at 29 C.F.R. Part 24 concerning the employer obligations, prohibited acts, DOL procedures and the requirement for prominent posting of notice of Employee Rights at Appendix A to Part 24 entitled: "Your Rights Under the Energy Reorganization Act".

(b) Under this Whistleblower Employee Protection law, as implemented by regulations, NRC contractor and subcontractor employees are protected from discharge, reprisal, threats, intimidation, coercion, blacklisting or other employment discrimination practices with respect to compensation, terms, conditions or privileges of their employment because the contractor or subcontractor employee(s) has provided notice to the employer, refused to engage in unlawful practices, assisted in proceedings or testified on activities concerning alleged violations of the Atomic Energy Act of 1954 (as amended) and the Energy Reorganization Act of 1974 (as amended).

(c) The contractor shall insert this or the substance of this clause in any subcontracts involving work performed under this contract.

(End of Clause)

#### **B.11 REGISTRATION IN FEDCONNECT® (JULY 2014)**

The Nuclear Regulatory Commission (NRC) uses Compusearch Software Systems' secure and auditable two-way web portal, FedConnect®, to communicate with vendors and contractors. FedConnect® provides bi-directional communication between the vendor/contractor and the NRC throughout pre-award, award, and post-award acquisition phases. Therefore, in order to do business with the NRC, vendors and contractors must register to use FedConnect® at <https://www.fedconnect.net/FedConnect>. The individual registering in FedConnect® must have authority to bind the vendor/contractor. There is no charge for using FedConnect®. Assistance with FedConnect® is provided by Compusearch Software Systems, not the NRC. FedConnect® contact and assistance information is provided on the FedConnect® web site at <https://www.fedconnect.net/FedConnect>.

#### **B.12 CONTRACTING OFFICER'S REPRESENTATIVE AUTHORITY**

(a) The contracting officer's authorized representative (hereinafter referred to as the COR) for



this contract is:

Name: **Tanya Oxenberg**

Address: **11555 Rockville Pike  
MS: CSB/ C3 A7  
Rockville, MD 20852**

Telephone Number: **301-415-7491**

Email: **Tanya.Oxenber@nrc.gov**

(b) Performance of the work under this contract is subject to the technical direction of the NRC COR. The term "technical direction" is defined to include the following:

(1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work (SOW) or changes to specific travel identified in the SOW), fills in details, or otherwise serves to accomplish the contractual SOW.

(2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.

(3) Review and, where required by the contract, approval of technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

(c) Technical direction must be within the general statement of work stated in the contract. The COR does not have the authority to and may not issue any technical direction which:

(1) Constitutes an assignment of work outside the general scope of the contract.

(2) Constitutes a change as defined in the "Changes" clause of this contract.

(3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.

(4) Changes any of the expressed terms, conditions, or specifications of the contract.

(5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

(d) All technical directions must be issued in writing by the COR or must be confirmed by the COR in writing within ten (10) working days after verbal issuance. A copy of the written direction must be furnished to the contracting officer. A copy of NRC Form 445, Request for Approval of Official Foreign Travel, which has received final approval from the NRC must be furnished to the contracting officer.



(e) The contractor shall proceed promptly with the performance of technical directions duly issued by the COR in the manner prescribed by this clause and within the COR's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the COR is within one of the categories as defined in paragraph (c) of this section, the contractor may not proceed but shall notify the contracting officer in writing within five (5) working days after the receipt of any instruction or direction and shall request the contracting officer to modify the contract accordingly. Upon receiving the notification from the contractor, the contracting officer shall issue an appropriate contract modification or advise the contractor in writing that, in the contracting officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the "Changes" clause.

(g) Any unauthorized commitment or direction issued by the COR may result in an unnecessary delay in the contractor's performance and may even result in the contractor expending funds for unallowable costs under the contract.

(h) A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect thereto is subject to 52.233-1 -Disputes.

(i) In addition to providing technical direction as defined in paragraph (b) of the section, the COR shall:

(1) Monitor the contractor's technical progress, including surveillance and assessment of performance, and recommend to the contracting officer changes in requirements.

(2) Assist the contractor in the resolution of technical problems encountered during performance.

(3) Review all costs requested for reimbursement by the contractor and submit to the contracting officer recommendations for approval, disapproval, or suspension of payment for supplies and services required under this contract.

(4) Assist the contractor in obtaining the badges for the contractor personnel.

(5) Immediately notify the Security Branch, Division of Facilities and Security (SB/DFS) (via e-mail) when a contractor employee no longer requires access authorization and return of any NRC issued badge to SB/DFS within three days after their termination.

(6) Ensure that all contractor employees that require access to classified Restricted Data or National Security Information or matter, access to sensitive unclassified information (Safeguards, Official Use Only, and Proprietary information) access to sensitive IT systems or data, unescorted access to NRC controlled buildings/space, or unescorted access to protected and vital areas of nuclear power plants receive approval of SB/DFS prior to access in accordance with Management Directive and Handbook 12.3.

(7) For contracts for the design, development, maintenance or operation of Privacy Act Systems of Records, obtain from the contractor as part of closeout procedures, written certification that the



contractor has returned to NRC, transferred to the successor contractor, or destroyed at the end of the contract in accordance with instructions provided by the NRC Systems Manager for Privacy Act Systems of Records, all records (electronic or paper) which were created, compiled, obtained or maintained under the contract.

#### **B.13 52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)**

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within the term of the contract.

#### **B.14 2052.215-70 KEY PERSONNEL (JAN 1993)**

(a) The following individuals are considered to be essential to the successful performance of the work hereunder:

**Tom Park**  
**Doug Hoell**

**Sr. Subject Matter Expert**  
**Sr. Coordinator**

The contractor agrees that personnel may not be removed from the contract work or replaced without compliance with paragraphs (b) and (c) of this section.

(b) If one or more of the key personnel, for whatever reason, becomes, or is expected to become, unavailable for work under this contract for a continuous period exceeding 30 work days, or is expected to devote substantially less effort to the work than indicated in the proposal or initially anticipated, the contractor shall immediately notify the contracting officer and shall, subject to the concurrence of the contracting officer, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.

(c) Each request for approval of substitutions must be in writing and contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request must also contain a complete resume for the proposed substitute and other information requested or needed by the contracting officer to evaluate the proposed substitution. The contracting officer and the project officer shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing.

If the contracting officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated, or have otherwise become unavailable for the contract work is not reasonably forthcoming, or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the contracting officer for default or for the convenience of the Government, as appropriate. If the contracting officer finds the contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.





## **Task Order Statement of Work**

### **1. Project Title**

Offsite Response Organization (ORO) Capabilities and Practices for Protective Actions in the Intermediate Phase of Emergency Response.

### **2. Background**

Within this statement of work (SOW), the NRC refers to the period in a nuclear power plant (NPP) emergency response after the immediate response has subsided and radiological releases are controlled or understood, as the intermediate phase of response. The technical basis for NRC staff assumptions of ORO protective action decisions (PAD) is incomplete. Staff and licensees make conservative and improbable assumptions in major studies due to a lack of technical basis. This results in overly conservative and generally inaccurate consequence estimates.

Understanding of OROs practices in the intermediate phase of emergency response is not robust. Due to the limitations of biennial exercise conduct, participants and observers have not experienced fully the consultation and decision-making that would take place during the intermediate phase response. The intermediate response is not as time sensitive as during the early response phase and decision-making. However, there is a lack of experience-based guidance to support ORO efforts to protect public health and safety from long term but low-level exposure.

Thirty years of evaluated exercise response by OROs provides good data for PADs during the early phase of emergency response. However, data for PADs made in the intermediate phase is not available in a useable form, although there may be some data available from ingestion pathway exercises evaluation reports.

The ORO decision makers are the management and/or elected officials who decide upon protective actions.. They are supported by ORO response staff and use licensee and Federal agency input to guide PADs but hold the civil authority for such issues. The SOW envisions gathering information from ORO staff and decision makers that are responsible for nuclear power plant offsite emergency preparedness programs (referred to as radiological emergency response programs - RERP).

### **3. Objective**

The contractor shall conduct an applied research study to advance NRC understanding of ORO practices and capabilities to support modeling of protective actions in consequence studies and regulatory analyses. The study may also inform guidance and oversight practices. This information would provide a technical basis for assumptions used in NRC consequence analyses. Although the information gathered may inform guidance and oversight practices in the future, the NRC does not intend that the information be used to evaluate directly any ORO. It may be appropriate to collect the information in a manner that is anonymous.

### **4. Scope of Work**

The contractor shall conduct an applied research study of ingestion exercise reports and practices of State OROs. The contractor shall review the report record, discuss practices with State decision makers to document likely protective action decision making, and support capabilities in the following study areas:

- Crop condemnation
- Capability to identify radiological hot spots outside of evacuated areas



- Relocation of public from contaminated areas
- Relaxation of evacuation and relocation orders
- Use of other practices to limit exposure in the long term

The contractor shall develop and publish a NUREG/CR document that provides a technical basis for modeling assumptions used in consequence analyses and provides insight to inform guidance, oversight of protective action decisions in the intermediate phase of emergency response and construct of demonstration exercises.

## **5. Specific Tasks**

### **5.1 Develop a Questionnaire for Interviews and Exercise Report Review**

The contractor shall develop a questionnaire for use in face-to-face or telecom interaction with State ORO decision makers and support staff that captures the study areas listed below (Task 5.3). The questionnaire would also be used to guide the review of ingestion pathway exercise reports (Task 5.2). The contractor shall provide the questionnaire to the NRC TM and COR for review. The contractor should expect at least two rounds of review. Additional rounds of review may be required to include comments from another Federal agency with oversight of ORO plans. The contractor shall include a contingency in the business portion of the proposal for this potential outcome. The questionnaire shall include the areas below but may be modified with TM/COR agreement as insights are gained in process:

#### **5.1.1 Crop Condemnation**

The contractor shall determine the extent of crop condemnation or embargo demonstrated during the exercise. The contractor shall address the following areas:

- Would decision makers conservatively embargo crops widely?
- Would decision makers develop plans to release the crop embargo?
- Would decision makers use Food and Drug Administration (FDA) guidance in the embargo criteria?
- If guidance/criteria would be used, was it more conservative than FDA guidance?
- Would decision makers release crops that were contaminated below FDA guidance?
- Would the sociological aspects of the embargo be considered, i.e., was the embargo broadened in an attempt to ensure public acceptance of crops from unaffected areas?
- Would plans to lift the embargo include surveys/analyses to demonstrate areas were free of contamination?
- Do plans (not necessarily the FEMA approved RERP) or procedures specify a process to accomplish lifting of embargo?

#### **5.1.2 Capability to identify radiological hot spots outside of evacuated areas**

Note: The NRC uses the MACCS code to calculate hypothetical dose to the public in consequence analyses. MACCS models a function called "hot spot" that assumes OROs (supported by Federal resources) would perform surveys beyond evacuated areas and use the information to relocate individuals that are likely to receive 1 or 5 rem over the following 7 days. The staff models the timing of these protective actions based upon estimate of available response resources following completion of evacuation. There is no current experience basis for assumptions.

The contractor shall determine the extent of State capability and intention to perform radiological survey beyond evacuated areas. The contractor shall address the following areas:

- Is there a "hot spot" type of capability or intention?
- How soon after evacuation, could/would the ORO implement this capability?
- Would the ORO await the completion of evacuation, due to resource limitations? If so, the



contractor shall determine the priority given to the "hot spot" relocation activity.

- Would the State expect federal assets solely to perform the survey function? The contractor shall be aware that Federal assets may not be functional for 24-36 hours.
- Are there criteria for relocation decision making in the intermediate phase, i.e., criteria that decision makers might apply more rapidly than the EPA annual limits? What are the criteria and describe any supporting guidance if it exists?
- Does the RERP describe this process/capability?
- Has the ORO demonstrated this capability/process?
- Does the ORO verify that areas are evacuated (not necessarily in RERP) and how and when would that done

### **5.1.3 Relaxation of evacuation and relocation orders**

The contractor shall determine the extent of ORO capability or intention to allow the evacuated/relocated public back into their homes/towns. The contractor shall determine if plans or procedures exist to provide for short-term entry to recover possessions, maintain equipment, or tend animals. The contractor shall determine if there are criteria for lifting of evacuation/relocation and answer the following questions:

- Are there criteria or processes for allowing the public back into areas evacuated but not (significantly) contaminated?
- How are these actions prioritized?
- Would decision makers allow the public into areas contaminated below EPA long-term exposure protective action guides?
- Is there guidance or forethought on information that decision makers would provide to the public returning to contaminated areas (below EPA guides)?

### **5.1.4 Use of other practices in the intermediate phase**

The contractor shall determine if there are criteria or procedures that would recommend protective actions other than evacuation/relocation to reduce long-term exposure. Collect alternative protective action practices that may be of benefit to reduce long-term public exposure while allowing access to normal community activities. The contractor shall answer the following questions and may suggest others:

- Would OROs, who are cognizant, use shelter in place (SIP), or some limited sheltering advisory to reduce long-term public exposure?
- Did the exercises demonstrate SIP?
- Would decision makers limit the time they allow the public into areas contaminated below EPA long-term exposure protective action guides?

### **5.1.5 Evacuation beyond the Emergency Planning Zone (EPZ)**

The NRC staff recognizes that in a very unlikely nuclear power plant accident it may be necessary to evacuate the public in areas beyond the EPZ. (The EPZ as required by 10 CFR 50.47(c)(2).) The contractor shall determine the level of ORO awareness of and preplanning for this unlikely contingency. RERP does not require detailed planning for this contingency and the SOW intention is to determine what planning element may available OROs.

- Determine the level of awareness of this potential contingency
- Determine if there are plans (not necessarily RERP) or procedures that could be used should evacuation beyond the EPZ be necessary.
- Determine the extent of experience with evacuations



- Document briefly any recent evacuations
- Gather estimates (not verified, just ORO estimates) on the time it would take to notify residents beyond the EPZ (to 15 miles for example)

#### **5.1.6 Letter Report**

### **5.2 Review Ingestion Pathway Evaluated Exercise Reports and Plans**

The contractor shall review ingestion pathway evaluated exercise reports to compile data on PAD making for the intermediate phase of radiological emergency response. The contractor shall review reports since 1990, to the extent available. The contractor shall also review a representative sample of State response plans to determine capability and practice. The contractor shall compile exercise experience data on the areas specified in the questionnaire developed in Task 5.1. The contractor shall identify other study areas and where appropriate, in coordination with the NRC TM and COR, modify the data compilation based upon availability, direct experience or other factors.

The contractor shall develop a letter report documenting the task 5.2. The contractor shall provide it to the NRC TM and COR for review. The contractor shall make revisions based on comments received from the NRC TM and COR and finalize. The contractor shall expect two rounds of comment and resolution. The contractor shall provide the final letter report suitable for public release.

### **5.3 Conduct Interviews with Decision Makers and Support Staff**

The contractor shall conduct interviews of cognizant ORO decision makers and support staffs that are willing to discuss these issues using the questionnaire developed in Task 5.2. The NRC prefers that the contractor conduct the interviews face to face, but this may not be possible in all cases, due to schedule, resources, and ORO availability. The contractor shall conduct interviews via telephone where it is an efficient method. The contractor may collect data from interviewees anonymously if the ORO decision maker or support staff prefers. In any case, no regulatory agency will use the information for direct oversight purposes.

### **5.4 Documentation**

The contractor shall compile all data gathered into a final report suitable for publication as a NUREG/CR document. The contractor shall use NRC guidance for NUREG/CR development and submit a final report that compiles the various letter reports as revised into a NUREG/CR document suitable for publication by NRC. The contractor shall develop a conclusion section that summarizes the results of the study and suggests future uses. The contractor shall expect up to four rounds of review.

## **6. Applicable Documents and Standards**

The NRC staff will provide the contractor with a list of the ADAMS accession numbers for Regulatory Guides, NUREG publications, and reports, which the contractor may obtain from the NRC website.

NUREG-0650, "Preparing NUREG-Series Publication." The contractor shall follow the guidance in this document to ensure the document complies with NRC and GPO publishing/printing standards.

## 7. Deliverables and Delivery Schedule

Deliverable	Quantity/Media Type	Completion Date
<b>Project kickoff meeting</b>		1-2 weeks after award
<b>Task 1 "Develop a Questionnaire"</b>		Start 2- weeks after kickoff meeting
• Draft Copy	1 electronic copies to TM and COR	6 weeks after kickoff meeting
• Incorporate comments into	1 electronic copy to TM and COR	3 weeks after receipt of comments from TM and COR
• Incorporate comments into Final	1 printed copy and 1 electronic provided to	3 weeks after receipt of comments from TM and COR
<b>Task 2 "Review Of Ingestion Pathway Evaluated Exercise"</b>		Start 10 weeks after kickoff meeting
• Draft Letter Report	1 electronic copy to TM and COR	20 weeks after kick off meeting
• Incorporate comments into second draft	1 electronic copy to TM and COR	2 weeks after receipt of comments from TM and COR
• Incorporate comments into Final Questionnaire	1 printed copy and 1 electronic copy to TM and COR	2 weeks after receipt of comments from TM and COR
<b>Task 3 "Conduct Interviews of Cognizant ORO Decision Makers"</b>		Start 14 weeks after kickoff meeting
• Draft Report	1 electronic copy to TM and COR	30 weeks after kickoff meeting (subject to ORO availability)
• Incorporate comments into	1 electronic to TM and COR	3 weeks after receipt of comments from TM and COR
• Incorporate comments into Final	1 printed copy and 1 electronic copy to TM	3 weeks after receipt of comments from TM and COR
<b>Task 4 Documentation</b>		Start 40 weeks after kickoff meeting
• Draft Report (part of Task 5.4)	1 electronic copy to TM and COR	50 weeks after kickoff meeting
• Incorporate comments into second draft report	1 electronic copy to TM and COR	3 weeks after receipt of comments from TM and COR
• Incorporate comments into Final NUREG/CR	1 Electronic file suitable for publication as a NUREG/CR report in accordance with NRC guidance	5 weeks after receipt of comments from TM and COR, but no later than 104 weeks after award



## **8. Progress and Compliance**

The contractor shall submit a monthly status report electronically via email that includes expenditures to date. Quarterly meetings between the contractor and the TM and/or COR shall be summarized by the contractor and provided to the TM and COR. The contractor shall also provide a monthly progress and financial report with the invoice. The fourth quarterly meeting each year shall also include a review of the prior year. Monthly reports are due within 20 calendar days after the end of the report period. A copy of the periodic status report shall be provided to the TM, COR, and CO.

## **9. Technical and Other Qualifications Required**

The contractor shall have extensive experience in conducting or evaluating Federal Emergency Management Agency (FEMA) graded exercises. The contractor shall have knowledge of offsite response organization emergency response programs, and knowledge of State radiological monitoring capabilities. The contractor shall have experience in deployment of State radiological monitoring capabilities in an exercise setting, as well as experience in the conduct or evaluation of ingestion pathway exercises. The contractor shall have experience in an exercise setting of the following:

- Development and use of State protective action strategies
- The use of relocation protective action guides
- The use of FDA food and water derived intervention levels (DILs)

## **10. Travel**

NRC staff expects that one or two contractor staff to travel up to three days for each trip to NRC Headquarters in Rockville, MD and potentially other locations for meetings. The NRC anticipates up to 10 trips during the contract period and attendance at applicable conferences where data could be effectively gathered. The contractor should plan to host the TM and COR for project meetings on occasion as the project demands. The following travel is anticipated to occur under this contract. All travel requires prior written approval from the COR.

Although work will be primarily performed at the contractor's site, the contractor may be required to travel to the NRC headquarters for update meetings. Details of these trips will be worked out cooperatively between the contractor and the COR. Additionally, travel to attend conferences where pertinent data can be effectively gathered may be required.

1. 10 trips, 1 to 2 persons, for 2 nights and 3 days from the contractor's site to the NRC (Rockville, MD).

The contractor may be authorized travel expenses consistent with the substantive provisions of the Federal Travel Regulation (FTR) and the limitation of funds specified in this contract. All travel requires written Government approval from the CO, unless otherwise delegated to the COR.

Travel will be reimbursed in accordance with FAR 31.205-46, "Travel costs" and the General Services Administration's Federal Travel Regulations at: <http://www.gsa.gov/portal/content/104790>.

## **11. Publications**

Any reports generated by the contractor under this contract/order shall not be released for publication or dissemination without CO written approval.

All information and data related to this project that the contractor gathers or obtains shall be both protected from unauthorized release and considered the property of the Government. The contracting officer will be the

sole authorized official to release verbally or in writing, any data, the draft deliverables, the final deliverables, or any other written or printed materials pertaining to this contract/order. Press releases, marketing material, or any other printed or electronic documentation related to this project, must not be publicized without the written approval of the contracting officer. (See NRCAR §2052.235-70, "Publication of research results").