

LA-UR-11-11398

Approved for public release; distribution is unlimited.

Title: Statement of Work-Container Mechanism, Cranes, Jib Cranes and Retrieval Systems

Author(s): Spitzmiller, Theodore H

Intended for: DOE  
REO  
Report  
Air quality  
Reading Room  
Statement of Work



Disclaimer:

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the Los Alamos National Security, LLC for the National Nuclear Security Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By acceptance of this article, the publisher recognizes that the U.S. Government retains nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

LA-UR-

Approved for public release;  
distribution is unlimited.

<i>Title:</i>	Statement of Work-Container Transfer Mechanism, Cranes, Jib Cranes and Retrieval Systems
<i>Author(s):</i>	Michael A. Murphy TJ Spitzmiller
<i>Intended for:</i>	Fed Biz Ops Green Network External Trade Advertising



Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the Los Alamos National Security, LLC for the National Nuclear Security Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By acceptance of this article, the publisher recognizes that the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

UNCLASSIFIED

## Notice for Federal Business Opportunities

### General Information

**Document Type:** Sources Sought

**Solicitation Number:** 158710

**Title:** Statement of Work-Container Transfer Mechanism, Cranes, Jib Cranes and Retrieval Systems

**Response Date:** 09/12/2011

**Classification Code:** 39

**Set Aside:** No

**NAICS:** 333120,333923,

**Is this a Recovery Act project?** (NO)

Acquisition Services Management

Los Alamos National Laboratory

CMRR Project

Los Alamos National Laboratory, PO Box 1663 MS E550, Los Alamos, NM 87545.

**Point Of Contact:**

TJ Spitzmiller

[tjspitz@lanl.gov](mailto:tjspitz@lanl.gov)

Reserved for Classification Group (SAFE-1) <b>LA-UR</b> <b>LA-CP</b>	<b>Submit to Classification Group (SAFE-1), MS F674, TA-3-1400, Rm 3475, the following, in order and clipped (not stapled) together:</b> <input checked="" type="checkbox"/> This form, blocks 1-9 completed <input checked="" type="checkbox"/> Appropriate cover sheet ( <a href="#">Form 836</a> for LA-UR, <a href="#">Form 1756a-e</a> for LA-CP) <input checked="" type="checkbox"/> <b>1 copy</b> of STI product Allow 5 working days for processing.
--	--

1. Author(s) (Include all contributing authors; first must be LANL employee.)				
Last	First	Middle	Z No.	Group or affiliation
Murphy	Michael	A	234956	ASM-DEP
Spitzmiller	TJ		306588	ASM-DEP

2. Primary Responsible Author: *My signature attests to the integrity and validity of the information provided on this form and the associated STI product, and affirms that all authors concur with its publication.*

Printed Name TJ Spitzmiller	Signature 	Date 8-16-11
--------------------------------	--	-----------------

3. Document Title (use upper/lower case; spell out symbols)  
Statement of Work-Container Mechanism, Cranes, Jib Cranes and Retrieval Systems

4. Page/Image Count 21

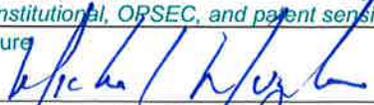
5. Type of Information	Intended for:
<input type="checkbox"/> Abstract <input type="checkbox"/> Full Paper/Report <input type="checkbox"/> Summary <input type="checkbox"/> Poster <input type="checkbox"/> Audio-Visual (abstract required) <input type="checkbox"/> Viewgraphs/Presentations (abstract required) <input checked="" type="checkbox"/> Other: SOW	<input type="checkbox"/> Journal <input type="checkbox"/> Proceedings <input type="checkbox"/> Meeting/Conference <input type="checkbox"/> Book/Book Chapter <input checked="" type="checkbox"/> Electronic/World-wide Web <input checked="" type="checkbox"/> Other: Green Network
Particulars: (see point # 4 of instruction sheet.)	
Meeting/Conf. Name: Fed Biz Ops	
City, State, and Country: _____ Mtg. Date: _____	
Journal Name: _____	
Other: External Trade Advertising	

6. Research sponsored by	Cost Center (Org./Group Code) and Program Code for this work:
<input checked="" type="checkbox"/> DOE/LANL/LDRD <input type="checkbox"/> DHS <input type="checkbox"/> DOD <input type="checkbox"/> Other: _____	Related publication(s):

7. Deadline Date	Z Number, name, e-mail, and phone number of contact for notification of release
------------------	---

8. Classification Category (Cite applicable DUSA or obtain Derivative Classifier review)	
<input type="checkbox"/> Unclassified Applicable DUSA Designator:	<input checked="" type="checkbox"/> Unclassified <input type="checkbox"/> Classified <input type="checkbox"/> Unclassified, controlled; Category: _____ OR Derivative Classifier Name: <u>Leroy Martinez</u> Signature: <u>Leroy Martinez</u> Date: <u>8/15/11</u>

9. Responsible Line Manager: *Consistent with my responsibilities and authorities, my signature certifies that I have reviewed this STI product for professional, contractual, programmatic, institutional, OPSEC, and patent sensitivities, and that I concur with its publication.*

Printed Name Michael A. Murphy	Signature 	Date 8-16-11
-----------------------------------	--	-----------------

**To be completed by Classification Group, SAFE-1**

Date Received	OSTI Category	Date Released
---------------	---------------	---------------

Classification Analyst Signature	Classification Category:
	<input type="checkbox"/> U <input type="checkbox"/> C <input type="checkbox"/> S <input type="checkbox"/> RD <input type="checkbox"/> FRD <input type="checkbox"/> NSI <input type="checkbox"/> UCNI <input type="checkbox"/> OUO <input type="checkbox"/> ECI <input type="checkbox"/> Other: _____

Comments:



**Request For Expression of Interest**  
**Design, Fabricate, and Deliver**  
**Container Transfer Mechanism,**  
**Cranes, Jib Cranes and Retrieval Systems**  
**For**

**The Chemistry & Metallurgy Research Replacement (CMRR)**

Los Alamos National Laboratory (LANL) is seeking Expressions of Interest and Prequalification Data from qualified firms for the services described below.

**GENERAL NOTES:**

**The Chemistry and Metallurgy Research Replacement (CMRR) Project is issuing Requests for Expressions of Interest and Prequalification Data (REO) for potential procurements of engineered equipment for the planned CMRR Nuclear Facility at the Los Alamos National laboratory. A bidders list will be developed for each type of engineered equipment to be procured. This action will be followed by issuance of formal Requests for Proposal (RFP) and the bid, evaluate, award (BEA) cycle will follow. The successful bidder will be released to perform design activities upon award.**

**The balance of the work (material purchase, fabrication, delivery) will be released upon completion of the Supplemental Environmental Impact Study (SEIS), the Record of Decision (ROD), and National Nuclear Security Administration's (NNSA) authorization to proceed.**

**The reason for proceeding in this manner is to resolve design criteria, allow for design progress, and reduce design risk without reaching a final design that commits the agency to a single option.**

**This request does not represent any confirmation by LANS of inclusion on the final bidders list, notification of subcontract award or authorization to commence any work related to this request. Equipment fabrication is not currently authorized and will be dependent upon Government approval after the NEPA process is complete.**

**SCOPE OF WORK:**

The CMRR Project will need Container Transfer System Top Running Bridge Cranes with Retrieval Systems and Wall Mounted Jib Cranes in the Nuclear Facility.

- The Top Running Bridge Cranes shall be remote, (Computer, PLC), and manual (pendant) operation. The Crane supply shall include the Bridge Crane equipment (bridge, trolley with hoisting equipment) with runways, (crane rails and supporting runway beams with electrification). The Cranes equipped with Closed Circuit Television Cameras (CCTV) to monitor Crane activities. The supply shall include Crane controls (pendant and remote), PLC and PLC programming, crane control cabinet operator

station with HMI and CCTV. PLC programming shall include remote crane operation with coordinate system material storage/retrieval.

- The Crane Retrieval system shall be wall mounted, manually operated pendant control to pull disabled cranes to the service area.
- The Wall Mounted Jib Cranes shall be supplied with: electric hoist with pendant control and manual swing and manual trolley travel.
- The load capacity of the crane system, (bridge cranes and jib cranes) shall be based on 1000 lbs payload.
- The CMRR needs three (3) Bridge Cranes, three (3) Crane Retrieval Systems and three (3) Jib Cranes complete.
- Crane Room size: 18'-6" wide x 130'-0" long (length of runway) x 10'-0" high.
- Jib Crane radial reach: 16'-0" Max. Jib Crane will be mounted below the Crane runway.

The project is currently committed to ASME NQA-1 2008 with 2009 addenda. Reference within other ASME Codes, ASME NQA-2 have been reconciled to NQA-1, 2008 with 2009 addenda and NQA-1 should be used.

The Container Transfer System Top Running Bridge Crane shall be supplied according to ASME NOG-1, Type II; the Wall Mounted Jib Crane shall be supplied according to ASME NUM-1.

Additional requirements include but are not limited to meet seismic qualification requirements according to in-structure response spectra will be provided later.  
Hook attached Grapple details to handle loads will be provided later.

Factory testing of the equipment above will be required.  
Equipment installation on site is an option and could be determined later.

Supplier Requirements:

- Demonstrated safety performance equal to or lower than the following standards:

<b>Statistical Standards</b>		
<b>Experience Modification Rate</b>	The "EMR" is a number that is assigned to your company based on the insurance premium you pay and your loss statistics. Contact your insurance company for these numbers.	Maximum Allowable Average: <b>1.00</b>
<b>Total Recordable Injury/Illness Case Rate</b> (from Company OSHA 300 log)	Rate = $\frac{\text{Total Recordable Injuries/Illnesses} \times 200,000}{\text{Total Employee Hours Worked}}$	Maximum Allowable Average: <b>3.2</b>
<b>DART Case Rate</b> (Days Away From Work, Restriction, or Job Transfer) (from Company OSHA 300 log)	Rate = $\frac{\text{Total Days Away/Restricted/Transferred Work Day Cases} \times 200,000}{\text{Total Employee Hours Worked}}$	Maximum Allowable Average: <b>1.4</b>

- Minimum of 5 years experience providing like equipment
- Provide your Organizational structure
- Table of contents from your Quality Assurance Manual and completion of the attached Quality Questionnaire.
- Listing of references who can confirm your capabilities. References must be based on work performed within the last 3 years.

Interested contractors that meet the above criteria may contact Mike Murphy, CMRR Purchasing Manager ([mamurphy@lanl.gov](mailto:mamurphy@lanl.gov)) TJ Spitzmiller, CMRR Procurement ([tjspitz@lanl.gov](mailto:tjspitz@lanl.gov)) or Theresa Paisano ([theresap@lanl.gov](mailto:theresap@lanl.gov)).

# SUPPLIER / CONTRACTOR QUESTIONNAIRE

<b>Enter Dun and Bradstreet (DUNS) Number:</b>	
--	--

**1. GENERAL INFORMATION**

NAME OF COMPANY (Full Legal Name)	
-----------------------------------	--

STREET ADDRESS	CITY - STATE - ZIP CODE
----------------	-------------------------

MAILING ADDRESS	CITY - STATE - ZIP CODE
-----------------	-------------------------

TELEPHONE	FACSIMILE	E-MAIL
-----------	-----------	--------

WEBSITE	TELEX/TWX/CABLE	OTHER
---------	-----------------	-------

A. Type of Business (check box or boxes)      CORPORATION OR COMPANY      SUBSIDIARY      DIVISION      PARTNERSHIP

Name and location of Parent Company \_\_\_\_\_ DUNS No. \_\_\_\_\_  
 If a Division, enter name and location of Corporate Headquarters \_\_\_\_\_ DUNS No. \_\_\_\_\_  
*If more than one DUNS number applies to your operation, attach additional explanatory page(s).*

B. Type of Facility (check box or boxes)

<input type="checkbox"/> MANUFACTURER/ FABRICATOR	<input type="checkbox"/> DISTRIBUTOR/ SUPPLY HOUSE	<input type="checkbox"/> ASSEMBLY/ SHOP	<input type="checkbox"/> MANUFACTURERS REPRESENTATIVE
<input type="checkbox"/> CONSTRUCTION	<input type="checkbox"/> ARCHITECT/ ENGINEER	<input type="checkbox"/> TECHNICAL SERVICE	<input type="checkbox"/> GENERAL SERVICE
<input type="checkbox"/> OTHER (SPECIFY) _____			

C. Enter Applicable SIC Codes: \_\_\_\_\_

D. Enter Applicable NAICS Codes (North America): \_\_\_\_\_

E. Date Business Founded:	Under Present Ownership Since:	
---------------------------	--------------------------------	--

F. Number of Employees (All Facilities)	Manual:	Non-Manual:	
---	---------	-------------	--

G. Small, Disadvantaged, Women-Owned or Veteran Status

Check Applicable Boxes      SMALL      WOMEN-OWNED      DISADVANTAGED:      HUB ZONE

VETERAN OWNED      SERVICE DISABLED VETERAN OWNED

**2. FINANCIAL INFORMATION (This section MUST BE COMPLETED for consideration. Information is kept CONFIDENTIAL.)**

A. Banking Reference: \_\_\_\_\_

B. Annual Sales Volume (Last 3 Years):     YR \_\_\_\_\_ \$ \_\_\_\_\_     YR \_\_\_\_\_ \$ \_\_\_\_\_     YR \_\_\_\_\_ \$ \_\_\_\_\_

C. Present Net Worth	Bank Phone No.
----------------------	----------------

Can you furnish a Performance Bond?      Yes      No

If "Yes", indicate dollar limits.	To \$250,000	To \$500,000	To \$1,000,000	To \$5,000,000	To \$10,000,000	\$25,000,000 and up
-----------------------------------	--------------	--------------	----------------	----------------	-----------------	---------------------

Surety \_\_\_\_\_ Agent \_\_\_\_\_ Phone No. \_\_\_\_\_

D. If required, can you furnish a Bank Guarantee or Letter of Credit?      Yes      No     If "Yes," indicate dollar limits below:

To \$250,000      To \$500,000      To \$1,000,000      To \$5,000,000      To \$10,000,000      \$25,000,000 and Up

Surety \_\_\_\_\_ Bank \_\_\_\_\_ Phone No. \_\_\_\_\_

<b>E. Current Financial Ratios (Public companies only)</b>			
Working Capital / Total Assets		Retained Earnings / Total Assets	
Earnings Before Interest and Taxes / Total Assets		Market Value of Equity / Total Liabilities	
Sales / Total Assets			
<b>F. Current Financial Ratios (Private companies only)</b>			
(Current Assets-Current Liabilities) / Total Assets		Retained Earnings / Total Assets	
Earnings Before Interest and Taxes / Total Assets		Book Value of Equity / Total Liabilities	
Sales / Total Assets			
<b>3. PERSONNEL (For this location –State “Not Applicable” if the position does not exist at this location)</b>			
A. President:		D. Engineering Manager:	
B. Sales Manager:		E. QA/QC Manager:	
C. Production Manager:		F. Field Support Manager:	
<b>4. LABOR RELATIONS – Shop Fabrication</b>			
<i>(List all crafts with which you have contracts and/or working agreements. Check here if not applicable: <input type="checkbox"/>)</i>			
	CRAFT	EXPIRATION DATE	
	CRAFT	EXPIRATION DATE	
1.			3.
2.			4.

<b>5. PLANT OPERATIONS</b> <i>(For this facility only. Use a separate Page 2 for other facilities)</i>		Check here if not applicable <input type="checkbox"/>
A. Name/Address of This Facility <i>(if different than for facility named at top of Page 1)</i>		
Name _____	Address _____	Phone _____
		Facsimile _____
B. Number of Employees at This Facility:		C. Plant in Operation Since:
D. Do you have a Quality Assurance/ program written to comply with the following:		
Nuclear related activities – 10CFR 830, Subpart A and DOE Order O 414.1C, Contractor requirements document (Attachments 2, 3 and 4) as implemented through a quality assurance program compliant with ASME NQA-1-2000.		
Other: Specify _____		
Non Nuclear related activities – 10 CFR 830, Subpart A and DOE Order O 414.1.C, Contractor requirements document (Attachments 2, 3 and 4) as implemented through a quality assurance program compliant with ISO 9001-2000		
Other: Specify _____		
Nuclear	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other Certification (Please Specify) _____
ISO 9001	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other Certification (Please Specify) _____
<i>For your Quality Assurance/Quality Control program(s), attach the Table of Contents from relevant manual(s) or, on additional pages, describe the method and level of compliance standard(s).</i>		
E. Export Capabilities	PROVIDE EXPORT PACKING? <input type="checkbox"/> YES <input type="checkbox"/> NO	FAMILIAR WITH EXPORT FORMALITIES? <input type="checkbox"/> YES <input type="checkbox"/> NO
F. Shipping Facilities	RAIL SIDING <input type="checkbox"/> TRUCK DOCKS <input type="checkbox"/> WATER ACCESS <input type="checkbox"/>	WATER ACCESS DRAFT _____ meters

**6. BIDDING INTEREST AND QUALIFICATIONS**

A. Indicate your relevant experience and qualifications as described in the attached "Scope of Work".  
(Attach additional pages if necessary)

B. Indicate appropriate Contract/Purchase Order dollar range within which you prefer, and are currently able, to bid (i.e., \$250,000 to \$1,500,000)  
\$ \_\_\_\_\_ to \$ \_\_\_\_\_

C. Indicate Industry or Code Certifications (ASME, API, TEMA, Class of Code-Stamp, etc.)

CERTIFICATION		EXPIRATION DATE		CERTIFICATION		EXPIRATION DATE	
1.				4.			
2.				5.			
3.				6.			

D. Subcontract Services (List type of work normally subcontracted to others)

**7. PROFESSIONAL LICENSES**

Indicate the work category you are licensed for and the area(s) (Country/State/Province) in which you hold each. Attach additional pages, if necessary.

TYPE OF LICENSE		LOCATION		TYPE OF LICENSE		LOCATION	
1.				4.			
2.				5.			
3.				6.			

**8. ENGINEERING, ARCHITECTURAL AND OTHER TECHNICAL SERVICES CONTRACTORS / SPECIFIC DATA LISTINGS**

A. In addition to circling applicable work categories in Appendix A (Goods and Services Codes), also indicate fields of specialization by your firm (i.e., chemical engineering, hydrology, geology, ecological surveying, etc.) on the bottom of the appendix.

B. List Personnel by Discipline (Number on Staff)

_____ Administrative	_____ Electrical Engineers	_____ Oceanographers
_____ Architects	_____ Estimators	_____ Planners (Urban/Regional)
_____ Chemical Engineers	_____ Geologists	_____ Sanitary Engineers
_____ Construction Inspectors	_____ Interior Designers	_____ Specification Writers
_____ Draftsman	_____ Landscape Architects	_____ Structural Engineers
_____ Ecologists	_____ Mechanical Engineers	_____ Surveyors
_____ Economists	_____ Mining Engineers	_____ Transportation Engineers

**9. WORK HISTORY** (Complete the attached Work History form per Appendix "C" and attach to this Questionnaire)

Also attach a list of permanent offices and any brochures that further describe your company's activities and capabilities. Please do not include product catalogs, inventory or price lists.

**10. SAFETY & HEALTH EXPERIENCE** (Complete the attached S&H form per Appendix "D" and attach to this Questionnaire)

**11. SOCIAL AND ENVIRONMENT SUSTAINABILITY INITIATIVES** (Check all that are employed through company initiatives)

<input type="checkbox"/> Written environmental policy	<input type="checkbox"/> Products that have achieved "Cradle-to-Cradle" certification
<input type="checkbox"/> Environmental performance integrated into corporate mission	<input type="checkbox"/> Policies and practices to minimize fuel usage or use of alternative energy
<input type="checkbox"/> Social performance integrated into corporate mission	<input type="checkbox"/> Initiatives to mitigate environmental impacts of finished

	products
<input type="checkbox"/> Annual report detailing its mission-related performance (e.g. corporate social and environmental targets)	<input type="checkbox"/> Code of conduct holding subsuppliers accountable for social and environmental performance
<b>12. COMPLETED BY:</b>	
SIGNATURE	TITLE
NAME	DATE

**APPENDICES:**

APPENDIX "A" – GLOSSARY FOR SMALL, DISADVANTAGED, WOMEN-OWNED AND VETERAN ENTERPRISES

APPENDIX "C" – CONTRACTOR/SUPPLIER WORK HISTORY

APPENDIX "D" – CONTRACTOR SAFETY & HEALTH QUALIFICATION DATA

## APPENDIX A

### GLOSSARY FOR SMALL, DISADVANTAGED, WOMEN-OWNED, AND VETERAN ENTERPRISES

Following are definitions of small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUB Zone small business concerns, minority business enterprises, small disadvantaged business concerns, women-owned small business concerns and labor surplus area business concerns (all called "Enterprises") as defined by the U.S. Federal Acquisition Regulations:

<b>Small-Business Concern</b>	Firms, including affiliates, that are independently owned and operated, not dominant in the field of operation in which they are bidding on Government contracts, and that qualify under the criteria and size standards for small businesses in 13 CFR Part 121 as determined by the SBA.
<b>HUB Zone</b>	A historically underutilized business zone which is located within one or more qualified census tracts, qualified metropolitan counties, or lands within the external boundaries of an Indian reservation. HUBZone's appear on the List of Qualified HUBZone Small Business Concerns maintained by the SBA.
<b>Veteran-owned Small Business Concern</b>	A small business concern – (1) not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and (2) the management and daily business operations of which are controlled by one or more veterans.
<b>Service-disabled Veteran-owned small Business Concern</b>	(1) A small business concern – (i) not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and (ii) The management and daily business operations of which are controlled by one or more service-disabled or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran. (2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).
<b>Small Disadvantaged Business Concern (Minority)</b>	An offeror that represents, as part of its offer, that it is a small business under the size standard applicable to the acquisition; and either – It self certifies as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B; and (i) No material change in disadvantaged ownership and control has occurred since its certification; (ii) Where the concern is owned by one or more disadvantaged individuals upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and (iii) It is identified, on the date of its representation, as a self certified small disadvantaged business concern in the database maintained by the SBA (Central Contractor Registration (CCR)).
<b>Women-Owned Small Business Concern</b>	A small business concern – 1) which is at least 51 percent owned by one or more women: or in the case of any publicly owned business, at least 51 percent of the stock which is owned by one or more women; and 2) whose management and daily operations are controlled by one or more women.





**APPENDIX D**

**CONTRACTOR SAFETY AND HEALTH QUALIFICATION DATA**

**NAME OF COMPANY:** \_\_\_\_\_

The above named Company submits the following Safety & Health qualification data:

<b>1. SAFETY PERFORMANCE</b>			
1.1.a Provide a brief description of each fatality your firm has incurred in the three most recent years (add pages if required):			
Year 20[ ] _____	Year 20[ ] _____	Year 20[ ] _____	
_____	_____	_____	
_____	_____	_____	
1.1.b Provide a brief description of each fatality by any sub-tier subcontractor working under your direction has incurred in the three most recent years (add pages if required):			
Year 20[ ] _____	Year 20[ ] _____	Year 20[ ] _____	
_____	_____	_____	
_____	_____	_____	
1.2.a Provide the following information on your firm for the three most recent years:			
	20[ ] _____	20[ ] _____	20[ ] _____
a. Number of lost workday cases.	_____	_____	_____
b. Number of restricted workday cases.	_____	_____	_____
c. Number of cases with medical attention only.	_____	_____	_____
d. Number of fatalities.	_____	_____	_____
e. Number of hours worked.	_____	_____	_____
1.2.b Provide the following information on any sub-tier subcontractor working under your direction for the three most recent years:			
	20[ ] _____	20[ ] _____	20[ ] _____
a. Number of lost workday cases.	_____	_____	_____
b. Number of restricted workday cases.	_____	_____	_____
c. Number of cases with medical attention only.	_____	_____	_____
d. Number of fatalities.	_____	_____	_____
e. Number of hours worked.	_____	_____	_____

2. Are accident reports and report summaries sent to the following and how often?

	No	Yes	Monthly	Quarterly	Annually
a. Project Superintendent/Site Manager.	<input type="checkbox"/>				
b. Vice President/Manager of Construction	<input type="checkbox"/>				
c. Safety Director	<input type="checkbox"/>				
d. President of Firm	<input type="checkbox"/>				

3. Do you hold site safety meetings for field employees both Manual and Non-Manual?

Yes  No

How Often?

Weekly  Bi-Weekly  Monthly  Less Often, As needed

4. Do you conduct project safety inspections?

Yes  No

If yes, who conducts this inspection?

TITLE

HOW OFTEN?

5. How are accident records and accident summaries kept? How often are they reported?

	No	Yes	Monthly	Annually
a. Accidents totaled for the entire company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Accidents totaled by project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(1) Subtotalled by superintendent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) Subtotalled by foreman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. How are costs of individual accidents kept? How often are they reported?

	No	Yes	Monthly	Annually
a. Costs totaled for the entire company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Costs totaled by project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(1) Subtotalled by superintendent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) Subtotalled by foreman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. List key Safety and Health personnel planned for this project. Please list name and expected position. When a project has not been specified, list key company personnel.

NAME	POSITION	PROPOSED / CURRENT PROJECT

8. Do you have a written safety & health program?

Yes  No

If yes, submit a copy for evaluation.

9. Do you have an orientation program for new hires?

Yes  No

If yes, submit a copy for evaluation. Does it include instruction on the following?

	Yes	No		Yes	No
a. Head protection	<input type="checkbox"/>	<input type="checkbox"/>	i. Fire protection	<input type="checkbox"/>	<input type="checkbox"/>
b. Eye protection	<input type="checkbox"/>	<input type="checkbox"/>	j. First aid facilities	<input type="checkbox"/>	<input type="checkbox"/>
c. Hearing protection	<input type="checkbox"/>	<input type="checkbox"/>	k. Emergency procedures	<input type="checkbox"/>	<input type="checkbox"/>
d. Respiratory protection	<input type="checkbox"/>	<input type="checkbox"/>	l. Toxic substances	<input type="checkbox"/>	<input type="checkbox"/>
e. Safety belts and lifeline	<input type="checkbox"/>	<input type="checkbox"/>	m. Trenching and excavation	<input type="checkbox"/>	<input type="checkbox"/>
f. Scaffolding	<input type="checkbox"/>	<input type="checkbox"/>	n. Signs, barricades, flagging	<input type="checkbox"/>	<input type="checkbox"/>
g. Perimeter guarding	<input type="checkbox"/>	<input type="checkbox"/>	o. Electrical safety	<input type="checkbox"/>	<input type="checkbox"/>
h. Housekeeping	<input type="checkbox"/>	<input type="checkbox"/>	p. Rigging and crane safety	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	q. Road Safety (Driving)	<input type="checkbox"/>	<input type="checkbox"/>

10. Do you have a program for newly hired or promoted foremen?

Yes  No

If yes, submit a copy for evaluation. Does it include the following?

	Yes	No		Yes	No
a. Safe work practices	<input type="checkbox"/>	<input type="checkbox"/>	e. First aid procedures	<input type="checkbox"/>	<input type="checkbox"/>
b. Safety supervision	<input type="checkbox"/>	<input type="checkbox"/>	f. Accident investigation	<input type="checkbox"/>	<input type="checkbox"/>
c. Toolbox meetings	<input type="checkbox"/>	<input type="checkbox"/>	g. Fire protection and prevention	<input type="checkbox"/>	<input type="checkbox"/>
d. Emergency procedures	<input type="checkbox"/>	<input type="checkbox"/>	h. New worker orientation	<input type="checkbox"/>	<input type="checkbox"/>

11. Do you hold craft "toolbox" safety meetings?

Yes  No

How Often?

Weekly  Bi-Weekly  Monthly  Less Often, As needed

12. Do you have a written Hazard Communication program?

Yes  No

If yes, how is it implemented on each project?

13. Do you have/require Material Safety Data Sheets (M.S.D.S.) for material/chemicals/equipment?

Yes  No

If yes, explain field procedure for informing craft workers about potential hazards:

14. List three (3) client references that could verify the quality and management commitment of your safety program.

	Name	Address	Phone No.
a.	_____	_____	_____
	_____	_____	
		_____	
b.	_____	_____	_____
	_____	_____	
		_____	
c.	_____	_____	_____
	_____	_____	
		_____	

## Supplier Quality Assurance Questionnaire

	<b>SUPPLIER QUALITY ASSURANCE QUESTIONNAIRE</b>	
--	---	--

**Supplier or Sub-Tier Name:** \_\_\_\_\_

**Location/Address of Supplier facility (ies):**  
 \_\_\_\_\_  
 \_\_\_\_\_

**Product Description:**  
 \_\_\_\_\_

Does the manufacturer (distributors should obtain the assistance of the manufacturer to complete this) or contractor have a written Quality Assurance Program (QAP) Management System that is developed, implemented and maintained?

Yes  No  [Hint: Double-click on a box to default to checked, then cut and paste box for the rest of the answers.]

QA/QC MANUAL TITLE \_\_\_\_\_

REVISION AND ISSUE DATE \_\_\_\_\_

ATTACH A TABLE OF CONTENTS OR LISTING AND OTHER SUPPORTING INFORMATION TO THE QUESTIONNAIRE

QA/QC program table of contents and other supporting information attached? Yes  No

**IDENTIFY CODES AND/OR STANDARDS WITH WHICH YOUR QA/QC PROGRAM COMPLIES**

Codes/Standards/Supplements	Yes	No	Comments/Equivalent
1. DOE Order 414.1__ (identify version), Attachment 2	<input type="checkbox"/>	<input type="checkbox"/>	
2. ASME NQA-1_____ (identify year)	<input type="checkbox"/>	<input type="checkbox"/>	
3. ASME Section _____ (Certificate No. _____)	<input type="checkbox"/>	<input type="checkbox"/>	
4. ISO _____ (Certificate No. _____)	<input type="checkbox"/>	<input type="checkbox"/>	

5. What industry standards do you currently use to develop software/firmware? \_\_\_\_\_

6. Other Codes and Standards: \_\_\_\_\_

**ASME NQA-1-2008/ASME NQA-1a-2009**

Indicate whether your QA/QC Manual and/or implementing procedures address the following:			
ASME NQA-1 Program Elements	Yes	No	Procedure/Manual
ASME NQA-1, Requirement 1, Organization	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 2, Quality Assurance Program	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 2, Auditor/Lead Auditor Qualifications	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 2, Qualification of Inspection and Test Personnel	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 2, Qualification of Nondestructive Testing Personnel	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 3, Design Control	<input type="checkbox"/>	<input type="checkbox"/>	
Do you develop software in accordance with NQA-1 software engineering requirements?	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 4, Procurement Document Control	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 5, Instructions, Procedures, and Drawings	<input type="checkbox"/>	<input type="checkbox"/>	

<b>Indicate whether your QA/QC Manual and/or implementing procedures address the following:</b>			
<b>ASME NQA-1 Program Elements</b>	<b>Yes</b>	<b>No</b>	<b>Procedure/Manual</b>
ASME NQA-1, Requirement 6, Document Control	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 7, Control of Purchased Items and Services	<input type="checkbox"/>	<input type="checkbox"/>	
Do you dedicate commercial off-the-shelf software for use as a Commercial Grade Item in accordance with NQA-1 requirements?	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 8, Identification and Control of Items	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 9, Control of Special Processes Identify the welding codes _____	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 10, Inspection	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 11, Test Control	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 12, Control of Measuring and Test Equipment	<input type="checkbox"/>	<input type="checkbox"/>	
Do your reference standards have a minimum accuracy four times greater than that of the measuring and test equipment being calibrated?	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 13, Handling, Storage, and Shipping	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 14, Inspection, Test, and Operating Status	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 15, Control of Nonconforming Items	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 16, Corrective Action	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 17, Quality Assurance Records	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Requirement 18, Audits	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Subpart 2.2, Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Nuclear Power Plants	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Subpart 2.7, Quality Assurance Requirements for Computer Software for Nuclear Facility Applications	<input type="checkbox"/>	<input type="checkbox"/>	
ASME NQA-1, Subpart 2.14, Quality Assurance Requirements for Commercial Grade Items and Services	<input type="checkbox"/>	<input type="checkbox"/>	
Identify other ASME NQA-1 Part II, Subparts applicable to the quality assurance/quality control program _____			

**DOE ORDER 414.1**

<b>Indicate whether your QA/QC Manual and/or implementing procedures address the following:</b>			
<b>DOE ORDER 414.1 Requirement</b>	<b>Yes</b>	<b>No</b>	<b>Procedure/Manual</b>
<b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (1) - Program</b> Establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing work. Establish management processes, including planning, scheduling, and providing resources for work. (An NQA-QA program will need to describe the management process for providing resources.)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (2) - Personnel Training and Qualification</b> Establish an organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing work. Establish management processes, including planning, scheduling, and providing resources for work.	<input type="checkbox"/>	<input type="checkbox"/>	

Indicate whether your QA/QC Manual and/or implementing procedures address the following:			
DOE ORDER 414.1 Requirement	Yes	No	Procedure/Manual
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (3) - Quality Improvement</b>                      Establish and implement processes to detect and prevent quality problems. Identify, control, and correct items, services, and processes that do not meet established requirements. Identify the causes of problems and work to prevent them. Review item characteristics, process implementation, and other quality-related information to identify items, services, and processes needing improvement.                      (The DOE Order extends the requirements of NQA-1 to all problems including all conditions [not limited to significant] adverse to quality and to all nonconforming items [not limited to generic]).</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (4) - Documents and Records</b>                      Prepare, review, approve, issue, use, and revise documents to prescribe processes, specify requirements, or establish design. Specify, prepare, review, approve, and maintain records.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (5) - Work Processes</b>                      Perform work consistent with technical standards, administrative controls, and hazard controls adopted to meet regulatory or contract requirements using approved instructions, procedures, etc. Identify and control items to ensure their proper use. Maintain items to prevent their damage, loss, or deterioration. Calibrate and maintain equipment used for process monitoring or data collection.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (6) - Design</b>                      Design items and processes using sound engineering/scientific principles and appropriate standards. Incorporate applicable requirements and design bases in design work and design changes. Identify and control design interfaces. Verify/validate the adequacy of design products using individuals or groups other than those who performed the work. Verify/validate work before approval and implementation of the design.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (7) - Procurement</b>                      Procure items and services that meet established requirements and perform as specified. Evaluate and select prospective suppliers on the basis of specified criteria. Establish and implement processes to ensure that approved suppliers continue to provide acceptable items and services.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (8) - Inspection and Acceptance Testing</b>                      Inspect and test specified items, services, and processes using established acceptance and performance criteria. Calibrate and maintain equipment used for inspections and tests.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (9) - Management Assessment</b>                      Ensure that managers assess their management processes and identify and correct problems that hinder the organization from achieving its objectives.</p>	<input type="checkbox"/>	<input type="checkbox"/>	
<p><b>DOE Order 414.1, Attachment 2, Quality Assurance Criterion (10) - Independent Assessment</b>                      Plan and conduct independent assessments to measure item and service quality and the adequacy of work performance and to promote improvement. Establish sufficient authority and freedom from line management for independent assessment teams. Ensure that persons conducting independent assessments are technically qualified and knowledgeable in the areas to be assessed.</p>	<input type="checkbox"/>	<input type="checkbox"/>	

Indicate whether your QA/QC Manual and/or implementing procedures address the following:			
DOE ORDER 414.1 Requirement	Yes	No	Procedure/Manual
<b>DOE Order 414.1, Attachment 2, Suspect/Counterfeit Items</b> Preventing the introduction and use of S/CIs through engineering involvement, design, procurement, testing, inspection, maintenance, evaluation, disposition, reporting, trend analysis, and lessons learned work process controls. Training and informing managers, supervisors, and workers on S/CI processes and controls (including prevention, detection, and disposition of S/CIs). Identifying and disposing of S/CIs on site. Restricting S/CI use to only those items that have been found acceptable through engineering analysis and formal disposition process. Collecting, maintaining, disseminating, and using the most accurate, up-to-date information on S/CIs and associated suppliers using all available sources. (An NQA-1 QA program will need to be expanded to address Suspect/Counterfeit items.)	<input type="checkbox"/>	<input type="checkbox"/>	
<b>DOE Order 414.1, Attachment 2, Safety Software Quality Requirements</b> Is your software quality assurance program based on national or international standards? If yes, identify which ones apply below: ___ ASME NQA-1, Part I, Requirement 3 ___ ASME NQA-1, Part I, Requirement 11 ___ ASME NQA-1, Part II, Subpart 2.7 Other _____	<input type="checkbox"/>	<input type="checkbox"/>	
<b>DOE Order 414.1, Attachment 2, Safety Software Quality Requirements</b> Is your software quality assurance program based on DOE G 414.1-4, <i>Safety Software Guide for use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance?</i>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>DOE Order 414.1, Attachment 2, Safety Software Quality Requirements</b> Does your quality assurance program define a process for identifying and evaluating software failures and their effects on system performance (software hazard analysis)?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>DOE Order 414.1, Attachment 2, Safety Software Quality Requirements</b> Does your software quality assurance program define a method for grading safety software and establishing controls based on the level of importance?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>DOE Order 414.1, Attachment 2, Safety Software Quality Requirements</b> Does your software quality assurance program include controls for software configuration management and quality planning, software risk management, software procurement and supplier management, software requirements identification and management, software design and implementation, software verification and validation, and problem reporting and corrective action?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>DOE Order 414.1, Attachment 2, Safety Software Quality Requirements</b> Do you train personnel who design, develop, or use safety software?	<input type="checkbox"/>	<input type="checkbox"/>	

**General**

Do you understand the questions above? Yes  No

If no, please provide your comments or suggestions. Also, provide any additional information relevant to your quality assurance program.

Preparer \_\_\_\_\_ Signature \_\_\_\_\_ Title \_\_\_\_\_  
 Date \_\_\_\_\_