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## FOIA Electronic Reading Room

### Document Coversheet

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**Document Description**

CONTRACT N68936-07-C-0077

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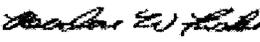
- This document has been released in its entirety.**
- Portions of this document have been excised pursuant to the Freedom of Information Act. The applicable portion(s) excised and the exemption(s) applied are indicated below.**
- Exemption (b)(1) Information excised is properly and currently classified in the interest of national defense or foreign policy.
- Exemption (b)(2) Information excised is related solely to the internal rules and practices of the Agency.
- Exemption (b)(3) Information excised is specifically exempt from disclosure by an Executive Order or Statute. Specifically:
- Exemption (b)(4) Information excised is commercial or financial information received from outside the Government and is likely to cause substantial harm to the competitive position of the source providing the information.
- Exemption (b)(5) Information excised is internal advice, recommendations, or subjective evaluations pertaining to the decision-making process of the Agency.
- Exemption (b)(6) Information excised is Personal information which if disclosed would result in an unwarranted invasion of personal privacy.
- Exemption (b)(7) Information excised is investigatory records or information compiled for law enforcement purposes.
- Exemption (b)(8) Information excised is records for the use of any agency responsible for the regulation or supervision of financial institutions.
- Exemption (b)(9) Information excised is records containing geological and geophysical information (including maps) concerning wells.

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Please direct inquiries regarding this document to:

Commander (Code K00000D FOIA)  
Naval Air Warfare Center Weapons Division  
1 Administration Circle Stop 1009  
China Lake, CA 93555-6100

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| SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS<br>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, AND 30   |  |  |  | 1. REQUISITION NUMBER<br>SEE SCHEDULE  |  | PAGE 1 OF 29  |  |   |  |
|---|--|--|--|--|--|---|--|---|--|
| 2. CONTRACT NO.<br>N68936-07-C-0077   |  | 3. AWARD/EFFECTIVE DATE<br>12-Sep-2007   |  | 4. ORDER NUMBER  |  | 5. SOLICITATION NUMBER<br>N68936-07-R-0011  |  | 6. SOLICITATION ISSUE DATE<br>14-Feb-2007 |  |
| 7. FOR SOLICITATION INFORMATION CALL:   |  | a. NAME<br>LINDA K SAPP  |  |  | b. TELEPHONE NUMBER (No Collect Calls)<br>(760) 939-4280 |   | 8. OFFER DUE DATE/LOCAL TIME<br>03:00 PM 20 Aug 2007 |   |  |
| 9. ISSUED BY<br>CDR NAWCWD CODE 220000D<br>ATTN: C. THOMPSON<br>(760) 939-2074<br>429 E BOWEN RD - STOP 4015<br>CHINA LAKE CA 93555-6108<br><br>TEL:<br>FAX: (760) 939-8329   |  | CODE N68936  |  | 10. THIS ACQUISITION IS<br><input checked="" type="checkbox"/> UNRESTRICTED<br><input type="checkbox"/> SET ASIDE: % FOR<br><input type="checkbox"/> SMALL BUSINESS<br><input type="checkbox"/> HUBZONE SMALL BUSINESS<br><input type="checkbox"/> 8(A)<br><br>NAICS: 335999<br>SIZE STANDARD: 500 |  | 11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED<br><input type="checkbox"/> SEE SCHEDULE<br><br><input type="checkbox"/> 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)<br>13b. RATING |  | 12. DISCOUNT TERMS                        |  |
| 15. DELIVER TO<br><br><b>SEE SCHEDULE</b>   |  | CODE   |  | 16. ADMINISTERED BY<br><br><b>SEE ITEM 9</b>   |  | CODE  |  |   |  |
| 17a. CONTRACTOR/OFFEROR<br>LOGAN ENERGY CORP<br>KEITH SPITZNAGEL<br>1080 HOLCOMBE BRIDGE RD.<br>BLDG. 100, SUITE 175<br>ROSWELL GA 30076-6206<br><br>TEL. (724) 449-4668  |  | CODE 09QC3   |  | 18a. PAYMENT WILL BE MADE BY<br>DFAS - CLEVELAND CENTER & OPLOCS<br>SAN DIEGO<br>4181 RUFFIN ROAD<br>SAN DIEGO CA 92123-1819   |  | CODE N68688   |  |   |  |
| FACILITY CODE   |  |  |  | 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER<br><input type="checkbox"/>  |  | 18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM   |  |   |  |
| 19. ITEM NO.  |  | 20. SCHEDULE OF SUPPLIES/ SERVICES   |  |  | 21. QUANTITY   | 22. UNIT  | 23. UNIT PRICE                                       | 24. AMOUNT                                |  |
|   |  | <b>SEE SCHEDULE</b>  |  |  |  |   |  |   |  |
| 25. ACCOUNTING AND APPROPRIATION DATA<br><br><b>See Schedule</b>  |  |  |  |  |  | 26. TOTAL AWARD AMOUNT (For Govt. Use Only)<br><br><b>\$3,197,636.00</b>  |  |   |  |
| <input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1. 52.212-4. FAR 52.212-3. 52.212-5 ARE ATTACHED.   |  | ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED |  | <input checked="" type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED.   |  | ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED   |  |   |  |
| 28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES<br><input type="checkbox"/> TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN. |  |  |  | 29. AWARD OF CONTRACT: REFERENCE<br><input type="checkbox"/> OFFER DATED . . . . . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:   |  |   |  |   |  |
| 30a. SIGNATURE OF OFFEROR/CONTRACTOR  |  |  |  | 31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)   |  | 31c. DATE SIGNED  |  |   |  |
|   |  |  |  |    |  | 11-Sep-2007   |  |   |  |
| 30b. NAME AND TITLE OF SIGNER<br>(TYPE OR PRINT)  |  | 30c. DATE SIGNED   |  | 31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT)<br>THEODORE W FISKE / PROCUREMENT CONTRACTING OFFICE<br>TEL: (760) 939-8182 EMAIL: theodore.fiske@navy.mil  |  |   |  |   |  |

**SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS  
(CONTINUED)**

| 19. ITEM NO.               | 20. SCHEDULE OF SUPPLIES/ SERVICES | 21. QUANTITY | 22. UNIT | 23. UNIT PRICE | 24. AMOUNT |
|----------------------------|------------------------------------|--------------|----------|----------------|------------|
| <p><b>SEE SCHEDULE</b></p> |                                    |              |          |                |            |

32a. QUANTITY IN COLUMN 21 HAS BEEN  
 RECEIVED  INSPECTED  ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: \_\_\_\_\_

|  |           |   |
|--|-----------|---|
| 32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE | 32c. DATE | 32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE |
|--|-----------|---|

|  |   |
|--|---|
| 32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE | 32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE |
|  | 32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE           |

|  |                    |                                 |  |                  |
|--|--------------------|---------------------------------|--|------------------|
| 33. SHIP NUMBER<br><input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL | 34. VOUCHER NUMBER | 35. AMOUNT VERIFIED CORRECT FOR | 36. PAYMENT<br><input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL | 37. CHECK NUMBER |
|--|--------------------|---------------------------------|--|------------------|

|                        |                        |             |
|------------------------|------------------------|-------------|
| 38. S/R ACCOUNT NUMBER | 39. S/R VOUCHER NUMBER | 40. PAID BY |
|------------------------|------------------------|-------------|

|   |                                   |                                      |                       |
|---|-----------------------------------|--------------------------------------|-----------------------|
| 41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT | 42a. RECEIVED BY ( <i>Print</i> ) |                                      |                       |
| 41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER                | 41c. DATE                         | 42b. RECEIVED AT ( <i>Location</i> ) |                       |
|   |                                   | 42c. DATE REC'D ( <i>YY/MM/DD</i> )  | 42d. TOTAL CONTAINERS |

Section A - Solicitation/Contract Form

CLAUSES INCORPORATED BY FULL TEXT

**FOR YOUR INFORMATION:**

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS): 335999

TIN#

DUNS#

The following addresses and points of contact are provided:

Name: Chris Thompson

Phone: (760) 939-2074

DSN: 437-2074

FAX: (760) 939-3095

Email address: [chris.thompson1@navy.mil](mailto:chris.thompson1@navy.mil)

U.S. Postal Service Mailing Address:

COMMANDER

CODE 220000D (C. Thompson – 760-939-2074)

NAVAIRWARCENWPNDIV

429 E. BOWEN RD. MAIL STOP 4015

CHINA LAKE, CA 93555-6108

Direct Delivery Address (UPS, FedEx, etc):

COMMANDER

CODE 220000D (C. Thompson)

NAVAIRWARCENWPNDIV

BLDG 982, MAIL STOP 4015

CHINA LAKE, CA 93555-6108

**ATTENTION-IMPORTANT MODIFICATION NUMBERING INFORMATION:**

Bilateral Modifications issued by the Department of Defense agencies are no longer assigned an official "P0000" number until the contracting officer has released/signed the modification. This change is a result of the Defense Finance and Accounting Service (DFAS) Business Management Modernization Program (BMMP) requirement that modifications are to be released in numerical order without skipping any "P0000" numbers.

To accommodate this change the Standard Procurement System (SPS) now assigns a unique Modification Control Number (MCN) to each modification when it is created. The MCN was established for contractors to track the approved version of the modification. This number, unique to the modification, is included on both the draft modification and the released/signed modification. The MCN can be found in Block 14 of all modifications. The use of the MCNs ensures DFAS only receives modifications in numerical order

Section B - Supplies or Services and Prices

INFORMATION

The Government intends to procure at a minimum a 200 Kilowatt (KW) MCFC CHP power system. This system will use HD-5 propane gas as fuel. Selected operational parameters will be monitored, recorded, analyzed, and reported over a time period of 36 months. The location for installation of the power system is the Pacific Missile Range Facility, located at PMRF, Kauai, HI.

| ITEM NO | SUPPLIES/SERVICES  | QUANTITY | UNIT    | UNIT PRICE    | AMOUNT         |
|---------|--|----------|---------|---------------|----------------|
| 0001    | Molten Carbonate Fuel Cell Demonstration<br>FFP<br>The contractor shall provide the following CLINs/SubCLINs IAW Statement of Work.<br>FOB: Destination<br>PURCHASE REQUEST NUMBER: 0010223122 |          |         |               |                |
|         | CIN: 001022312200001   |          | ACRN AA | FUNDED AMOUNT | \$3,197,636.00 |

| ITEM NO | SUPPLIES/SERVICES   | QUANTITY | UNIT | UNIT PRICE    | AMOUNT    |
|---------|---|----------|------|---------------|-----------|
| 0001AA  | Site Selection<br>FFP<br>IAW Statement of Work, paragraph 3.1.<br>FOB: Destination<br>PURCHASE REQUEST NUMBER: 0010187756 | 1        | Job  | \$0.00        | \$0.00 NC |
|         |   |          |      | FUNDED AMOUNT |           |

| ITEM NO | SUPPLIES/SERVICES  | QUANTITY | UNIT | UNIT PRICE     | AMOUNT         |
|---------|--|----------|------|----------------|----------------|
| 0001AC  | 200 Kilowatt (KW) MCFC CHP Power System<br>FFP<br>The contractor is to manufacture, install, commission, operate, repair, and maintain<br>IAW Statement of Work, paragraph 3.<br>FOB: Destination<br>PURCHASE REQUEST NUMBER: 0010187756 | 1        | Each | \$3,148,639.00 | \$3,148,639.00 |

FUNDED AMOUNT

| ITEM NO | SUPPLIES/SERVICES  | QUANTITY | UNIT | UNIT PRICE  | AMOUNT      |
|---------|--|----------|------|-------------|-------------|
| 0001AD  | Quarterly Reports<br>FFP<br>IAW Statement of Work, paragraph 4.2.1.<br>FOB: Destination<br>PURCHASE REQUEST NUMBER: 0010187756 | 1        | Lot  | \$17,864.00 | \$17,864.00 |

FUNDED AMOUNT

| ITEM NO | SUPPLIES/SERVICES   | QUANTITY | UNIT | UNIT PRICE | AMOUNT     |
|---------|---|----------|------|------------|------------|
| 0001AE  | Initial Project Description Report<br>FFP<br>IAW Statement of Work, paragraph 4.2.2.<br>FOB: Destination<br>PURCHASE REQUEST NUMBER: 0010187756 | 1        | Each | \$9,697.00 | \$9,697.00 |

FUNDED AMOUNT

| ITEM NO | SUPPLIES/SERVICES  | QUANTITY | UNIT | UNIT PRICE | AMOUNT     |
|---------|--|----------|------|------------|------------|
| 0001AF  | Mid Term Report<br>FFP<br>IAW Statement of Work, paragraph 4.2.3.<br>FOB: Destination<br>PURCHASE REQUEST NUMBER: 0010187756 | 1        | Each | \$9,697.00 | \$9,697.00 |

FUNDED AMOUNT

| ITEM NO | SUPPLIES/SERVICES   | QUANTITY | UNIT | UNIT PRICE  | AMOUNT      |
|---------|---|----------|------|-------------|-------------|
| 0001AG  | Final Report<br>FFP<br>IAW Statement of Work, paragraph 4.2.4.<br>FOB: Destination<br>PURCHASE REQUEST NUMBER: 0010187756 | 1        | Each | \$11,739.00 | \$11,739.00 |

FUNDED AMOUNT

## Section C - Descriptions and Specifications

### DESCRIPTIONS AND SPECIFICATION

Work under this contract shall be performed in accordance with the following Statement of Work and Exhibit 's A through L Contract Data Requirements List (DD Form 1423-1) as well as all other terms and conditions set forth herein.

#### Statement of Work Molten Carbonate Fuel Cell Demonstration

### **1. Program Objective**

This turn-key project is to demonstrate and evaluate the operation and performance of a molten carbonate fuel cell (MCFC) Combined Heat and Power (CHP) system at the Pacific Missile Range Facility, located at PMRF, Barking Sands, island of Kauai, HI to provide base load power. The MCFC CHP system will consume HD-5 propane gas and provide grid-connected power and chilled water for air conditioning (AC) to support base load requirements while also providing environmental and energy security benefits. Demonstration of reliability, cost-effectiveness, energy efficiency, and interoperability with existing facility electrical and mechanical systems are key objectives. Operational data will be gathered, analyzed, and reported to validate the performance and suitability of MCFC CHP power systems at other Department of Defense facilities.

### **2. Applicable Documents**

2.1 Government Documents - Unless otherwise specified, the issues of these documents in effect on the date of request for proposal form a part of the specification to the extent specified herein.

- 2.1.1 Water sample from PMRF, Kauai, HI. electronic file 'water data.pdf'.
- 2.1.2 Stream G/C Analysis Report for HD-5 Propane, electronic file 'propane analysis report.pdf'
- 2.1.3 Map of Primary site.pdf
- 2.1.4 Map of Secondary site.pdf

2.2 Non-Government Documents - Unless otherwise specified, the issues of these documents in effect on the date of request for proposal form a part of the specification to the extent specified herein.

- 2.2.1 National Electric Code (NEC) 2002 or latest edition
- 2.2.2 Uniform Building Code, 1997 or latest edition
- 2.2.3 UL-1703 (Underwriter's Laboratory)
- 2.2.4 ACI 301-84 (American Concrete Institute)
- 2.2.5 ACI 304-85 (American Concrete Institute)

2.3 Governing Documents – Unless specifically stated otherwise, the design of all structures, equipment and foundations shall be based on applicable portions of the codes, specifications, industry standards, and other reference documents listed in section 2.2. All components shall be designed in accordance with the Uniform Building Code (UBC). All reinforced concrete work shall be in accordance with ACI 301-84 and ACI 304-85.

The internal design and configuration of the fuel cell power plants are not required to comply with the National Electrical Code and UL-1703 code/specification requirements, but any and all external interface with and connection to the fuel cell power plants are required to comply with the National Electrical Code and UL-1703.

This SOW includes a number of general and supporting specifications for equipment, material, and components. In cases of conflict between the referenced codes, standards and general specifications and this SOW, the Contractor shall notify the Contracting Officer (KO) of the conflict with suggested resolution(s) and shall not proceed until directed by the KO. The methods and materials specified herein are intended to represent minimum requirements.

### 3. Requirements:

The key performance objective of the proposed program is to manufacture, install, commission, operate, repair, and maintain a 200 kilowatt (KW) MCFC CHP power system at Pacific Missile Range Facility, located at PMRF, Kauai, HI. This system will use HD-5 propane gas as fuel. Selected operational parameters will be monitored, recorded, analyzed, and reported over a time period of 36 months after complete installation.

**3.1 Site Selection** - The government has a site identified for the MCFC CHP power system. The site can accommodate at least 600 KW of electric power generation. The MCFC CHP power system shall consist of any combination of separate fuel cells that are at least 200 KW capacity total.

The site is near a hangar that is labeled building 384. The fuel cell and propane tank(s) will be across a road from this building (see map). The distribution grid is near the site. The contractor will install buried water lines to carry heated water to building 384. This water will be used to operate an adsorption chiller that serves building 384. The price of the contract will cover purchasing, installing and maintaining this chiller for the duration of the contract. The contract will also include cost of modifying existing chiller equipment to accept new chiller.

**3.1.1 Utilities** - As part of the project, the contractor shall be responsible for identifying and meeting all environmental utility and facility interconnection requirements. This shall include all utilities (power, mechanical, input fuel, water, etc) to operate the system and all utility interconnection requirements to utilize the output (electrical and heat) of the system. This shall include investigation of all technical, legal, regulatory, and financial requirements of interconnection with any public utility affected. The contractor shall obtain all licenses, agreements, and permissions to interface with any public or government utility affected.

**3.1.2 Environmental** - The contractor shall be responsible for identifying and meeting all environmental requirements that must be met for site preparation and system installation/operation. This shall include, but not necessarily be limited to, all military, local, state, and federal requirements. No environmental remediation is required, and under no circumstances will the contractor be required to provide any environmental remediation for existing conditions. The contractor shall be responsible to obtain all necessary permits and permissions.

**3.2 Site Preparation** – The contractor shall prepare the site for the installation and operation of a MCFC CHP power system of at least 200 KW capacity total.

**3.2.1 Site Plan** – The contractor shall prepare, and provide to the Government, a site plan that details all pertinent installation details including, but not necessarily limited to, placement with regard to other structures, dimensions, mounting pad details, height requirements, utility (input and output) interconnections and dimensions, and access. The contractor shall cooperate and participate in the governmental site approval and Categorical Exclusion (CATEX) process.

**3.2.2 Utility Interconnections** - The contractor is responsible for all interconnections (electrical, propane, water, thermal, and mechanical) for both the input and output of the system. Access to the site will be controlled by the local installation personnel. Interconnection to the existing electrical grid shall be coordinated with the Naval Facilities Engineering Command (NAVFAC), Hawaii (HI) Utilities Department, the PMRF Facilities Office, and the Kauai Island Utilities Cooperative (KIUC). The Contractor shall provide a site plan to the Government for review and approval.

**3.3 System Design** – The contractor shall provide a design for the installation of a MCFC CHP system. This design must be approved by the government before installation begins. The system shall meet the following technical requirements:

**3.3.1 Fuel** – The MCFC power system shall input HD-5 propane and reform it internally to the fuel cell to produce hydrogen.

**3.3.2 Combined Heat and Power Operation** – The MCFC power system shall deliver all available electrical power to the grid. The heat available from the fuel cell will be used to provide chilled water to buildings (defined in SOW paragraph 3.1) adjacent to the fuel cell. There is no requirement to provide hot water or heated air to any building.

**3.3.2.1 Electrical Output** – The system shall have a net electrical power output of 200 KW minimum at a voltage of 480 VAC, 60 Hz. This voltage must be transformed to utility grid voltage +/- 5% using a new transformer, supplied by the contractor.

**3.3.2.2 Thermal Output** – The 200 KW fuel cell system shall have an available heat at rated power of 250,000 Btu/hr minimum. This will be consumed in adsorption chillers to produce chilled water for air conditioning.

**3.3.3 Chillers.** The thermal output from the system shall be directed to a new adsorption chiller. This new system shall be connected into the existing chilled water system at the site. The system will be designed to augment the existing chiller by pre-cooling the return water as much as the thermal capacity of the MCFC allows. In the event of failure of the MCFC, the existing chillers or DX system shall be able to assume the full cooling load. The contractor shall revise the existing AC controls as needed to ensure the balance of AC system not affected continues to operate.

**3.3.4 Instrumentation/Data Logging** – The contractor shall install instrumentation/data logging devices on the MCFC CHP system to record the following parameters(minimum). Some of these parameters may be calculated from other parameters:

Total operating hours of the MCFC unit,

Outages of the MCFC unit (date, time of start and end of event, duration of outage, cause of outage, manual or automatic restart of MCFC unit, etc),

Duration of events with dates and times,

Fuel consumption profile of the MCFC unit (gallons/hr or BTU),

Water consumption profile of the MCFC unit (gallons/hr or BTU),

Power output profile of MCFC unit ( KW and Mbtu/hr in 15 minute intervals),

Total kWh and kWh output profile of the MCFC unit ,

Availability of the MCFC (operating hours/total hours, mean operation hours between outages).

Chilled water production profile (degrees F/C input and discharge, flow rate gpm or BTU of chilled water, 15 minute intervals.)

Results of stratification analysis of the HD-5 propane fuel in storage tanks feeding the MCFC CHP system.

The Government reserves the right to attach and monitor it's own data logging devices, and will coordinate their suitability and placement with the contractor to assure safe and unimpaired operation. Any usage of such Government data logging equipment will not affect any warranty express or implied.

**3.4 System Installation** – The contractor shall provide all work, material and labor for a complete and useable MCFC CHP system. This will include site preparation, equipment installation and restoration of the site after completion of the demonstration project, in accordance with all applicable standards and practices. The contractor is responsible for coordination of all utility interconnections. This includes applying for and obtaining all permits (utility, environmental, etc) from all regulatory agencies/utilities.

**3.4.1 Required documents** - No site work will be allowed until the contractor has delivered the following documents to the government and the government has approved them:

1) One line electrical drawing of the electrical system and interconnect to the existing base electrical grid. This drawing shall be approved by a Professional Engineer (PE) licensed to do business in the State of Hawaii.

2) A drawing showing the installation and connection of the waste heat recovery system and adsorption chiller(s) to the existing chilled water systems. This drawing shall be approved by a Professional Engineer (PE) licensed to do business in the State of Hawaii.

3) A drawing showing the installation and connection of the MCFC CHP to the existing base water and sewer system. This drawing shall be approved by a Professional Engineer (PE) licensed to do business in the State of Hawaii.

4) An excavation permit must be obtained through the PMRF Public Works Department (PWD) prior to any digging.

5) A burn permit is required from the PMRF Base Fire Department for any hot work such as welding.

6) A contractor safety plan with Safety person on site during installation . The format for this plan will be provided by the government.

7) A contractor Quality Control person must be designated and remain on site during installation.

#### **3.4.2 Additional requirements –**

1) Site approval and National Environmental Policy Act (NEPA) documents must be in place prior to start of contract.

2) Utility outages must be scheduled through the PMRF PWD (Public Works Department) 21 days prior to planned outage.

3) Visitor Access/security is required during construction.

**3.5 System Commissioning** – The contractor shall commission the MCFC CHP system by demonstrating start up and steady state performance of the complete system. The contractor shall demonstrate that the MCFC CHP system meets all fuel cell manufacturer factory performance requirements. Total Harmonic Distortion (THD) shall be measured at start up. All performance parameters shall be monitored and recorded.

If the MCFC CHP does not meet the fuel cell manufacturer factory specifications, the Government shall review any discrepancies with the contractor to determine what corrective action shall be taken by the contractor. The contractor shall remedy the situation to the government's satisfaction at no additional cost to the government.

The contractor shall provide a minimum of 8 hours of training to designated government representatives as part of the commissioning process.

The contractor shall provide continuous commissioning throughout the demonstration period and may use remote/electronic means to ensure the system is performing optimally.

The contractor shall provide weatherproof, government approved, permanently affixed signage for this project on all major MFC CHP components with explanations and instructions in case of emergency.

**3.6 Operation** – The contractor shall operate and maintain the MCFC CHP system for a period of 36 months after acceptance or until the fuel stack fails. If the fuel cell stack fails prior to the end of the 36 month period, the contractor shall agree to a reduction in the contract price based on the actual run time experienced. The contractor may use remote/electronic means to operate the system. The contractor shall provide the name and contact information of the on-island maintenance person assigned to this project to the government prior to the government acceptance of the system.

**3.7 Maintenance** – The contractor shall be responsible for all maintenance, scheduled and unscheduled, and repair of the MCFC CHP system and the associated contractor installed instrumentation/data logging equipment, but not

any Government installed instrumentation/data logging equipment. The contractor will service and maintain the system in accordance with the manufacturer's procedures. All maintenance events will be logged and reported within 48 hours using forms that will follow standardized reporting procedures. The contractor shall work diligently to minimize callbacks and mean times to restore units to service. If the time to restore to service is more than 48 hours, the contractor shall contact the local PMRF Government POC and inform him/her of the situation.

**3.8 Data** – In accordance with paragraph 3.3.3 above, the contractor shall be responsible to monitor the MCFC CHP system, collect and store data as required. The contractor shall provide for: 1) interrogation of the power system once daily to record its operating status and 2) display data on a Web based project site, to be coordinated with the Government. The contractor shall protect all data collected during this project using appropriate and government-approved security measures. Only government approved personnel shall be allowed access to the data. The contractor shall request and receive government approval to release any data collected during this project to any party not directly associated with this project.

The government and contractor shall establish procedures to meet security requirements of both the government and the contractor.

**3.9 Site Restoration** – Restoration shall be accomplished one month after completion of the demonstration and evaluation period. The contractor shall remove all of the MCFC CHP system equipment that was installed under this contract and restore the site to its original condition. The contractor shall be responsible for terminating all utility connections as required. This includes restoring AC, electrical, water, and sewer systems to original configurations.

The government reserves the right to establish a lease agreement with the fuel cell manufacturer or representative after the completion of the demonstration and evaluation period. If this is done, the government will notify the contractor that site restoration is not required.

**4. Deliverables** – The contractor shall submit documentation of the project. All reports/deliverables, except for the Quarterly Reports, shall be submitted in both draft and final versions. The Government will provide comments on draft reports within 30 days after receipt of the draft report. Final submittal shall be within 15 days of receipt of Government comments. Contractor format is acceptable for all submittals, subject to specific requirements below. All submittals shall be in electronic format (MS Word compatible for reports, MS Excel for raw data, etc). The contractor shall include tables, figures, charts, and digital photos in reports. All digital photos are to be high resolution and in .jpeg format. The contractor shall provide PMRF with installation/as-built drawings and specifications.

**4.1 Site Design Documentation** - The draft Site Design Documentation shall be submitted NLT 135 days after contract award. The purpose of the documentation is to provide details and a record of the process used, the issues addressed, and their resolution. The documentation shall serve as a checklist to assure readiness of the fuel cell system to be installed.

#### **4.2. Technical reports**

**4.2.1 Quarterly Reports** – The Quarterly Reports shall be submitted NLT 20 days after the end of each 3 month period after contract award. The reports shall summarize project progress and significant accomplishments. The report shall include, but not necessarily be limited to:

Performance monitoring data

A summary of challenges and accomplishments.

Outages shall be clearly described, including a summary of the maintenance performed on the system.

Raw data that is used for the quarterly reports shall be submitted

The report shall be in contractor format with the following minimum requirements:

Title page shall identify project, location, date of report, contract number, and contractor at a minimum. Content shall follow logical sequence, with financial, siting, and performance data segregated and reported in a clear and logical manner.

Digital pictures shall be no smaller than on half the size of an 8.5" x 11" page. All photos shall be identified by caption to give adequate description of location and content. Sizes shall be larger where additional clarity or detail is needed/useful.

**4.2.2 Initial Project Description Report** – The draft Initial Project Report shall be submitted NLT 60 days after the MCFC CHP system is installed and commissioned at the site. The report shall include, but not necessarily be limited to:

The specific building(s) and application(s)

The site POCs

Digital pictures of the site before any site preparation including the buildings and area where the MCFC CHP system is to be installed

Digital pictures of the site preparation process (at approximate 25% completion intervals)

Digital pictures of the of the installed MCFC CHP system including overall site views and specific power system views

Digital photos of specific utility connections (fuel, water, electrical, mechanical),

Utility rates (both propane and electrical) at the site

An estimate of the energy savings (Total energy savings = electrical energy and demand savings + heat energy savings)

Documentation of the installation process including the duration, dates, and other applicable parameters

Detail actual construction and installation costs of the MCFC CHP system units to include all materials, parts, labor, and other expenses

Detailed information on installation issues and solutions, specifically to include utility interconnection and environmental issues

Performance monitoring to date, to include at a minimum commissioning performance data and comparison to factory specifications, THD, and all parameters in SOW paragraphs 3.3 (& all subparagraphs) and 3.5 (& all subparagraphs)

The report shall be in contractor format with the following minimum requirements:

Title page shall identify project, location, date of report, contract number, and contractor at a minimum.

Content shall follow logical sequence, with financial, siting, and performance data segregated and reported in a clear and logical manner.

Digital pictures shall be no smaller than on half the size of an 8.5" x 11" page. All photos shall be identified by caption to give adequate description of location and content. Sizes shall be larger where additional clarity or detail is needed/useful.

Energy savings estimate shall be of sufficient detail to verify its accuracy.

Information on installation issues and solutions shall include organizations/individuals dealt with, timeframes involved, and specific difficulties encountered.

**4.2.3 Mid Term Report** –The draft Mid Term Report shall be submitted NLT 18 months after the MCFC CHP system is installed and commissioned at the site. The report shall include, but not necessarily be limited to:

The progress of the fuel cell demonstration

A discussion of the major operational and service events during the months of the fuel cell operation since commissioning. Sufficient detail shall be provided to document the events, duration, cause, and impact to overall system performance.

An overall evaluation of MCFC CHP system performance. Sufficient detail shall be provided to analyze performance, including parameters identified in SOW paragraphs 3.3 (& all subparagraphs) and 3.5 (& all subparagraphs).

A discussion of availability, supportability, and responses (contractor, service provider, manufacturer) to service issues.

Performance monitoring to date, to include at a minimum commissioning performance data and comparison to factory specifications, THD, and all parameters in SOW paragraphs 3.3 (& all subparagraphs) and 3.5 (& all subparagraphs).

The report shall be in contractor format with the following minimum requirements:

Title page shall identify project, location, date of report, contract number, and contractor at a minimum, Content shall follow logical sequence, with financial, siting, and performance data segregated and reported in a clear and logical manner.

Digital pictures shall be no smaller than on half the size of an 8.5" x 11" page. All photos shall be identified by caption to give adequate description of location and content. Sizes shall be larger where additional clarity or detail is needed/useful.

Energy savings estimate shall be of sufficient detail to verify its accuracy.

Information on installation issues and solutions shall include organizations/individuals dealt with, timeframes involved, and specific difficulties encountered.

Digital pictures shall be used liberally to document or clarify.

**4.2.4 Final Report** –The draft Final Report shall be submitted NLT 60 days after the completion of the demonstration period, be that the full 36 months or a shorter time due to fuel cell stack failure. The final report shall be a comprehensive summary and record of the project results. The report shall be stand alone, and shall not require the Initial Project Report or the Mid Term Report as supplements to document the entire project. The report shall include, but not necessarily be limited to:

A overall summary of the project, to include the background of the project, purpose, approach and expectations.

A description and digital photos of the demonstration site and fuel cell with site specific information

Installation, technical, and maintenance details

Changes and challenges to the demonstration

Economic analysis of the system performance

Lessons learned, especially about siting details, utility interconnection, environmental, and service/maintenance issues.

Component outages, unit availability, and efficiency

Major service issues part failure, and replacement

Complete performance data

Hardware issues and factory support

Fuel cell performance, data compilation and analysis, and recommendation of product suitability and readiness for widespread adoption by the DoD

Tables, figures, charts, and photos shall be used liberally for documentation and clarity.

## **5. Meetings**

### **5.1 Program review meeting**

Held at PMRF, Kauai, HI near the completion of the Site Preparation (SOW paragraph 3.2). The exact date and scheduling will be coordinated between the Government and the contractor. It is anticipated that the meeting will take place within 6 months of contract award. The purpose of the meeting will be to review project siting details and assure that all issues are identified and being successfully resolved.

### **5.2 Program review meeting**

Held at PMRF, Kauai, HI at the beginning of System Installation task (SOW paragraph 3.4). The exact date and scheduling will be coordinated between the Government and the contractor. It is anticipated that the meeting will take place within 18 months of contract award. The purpose of the meeting will be to review system installation details and assure that all issues are identified and being successfully resolved. Data monitoring plans will be reviewed. Installation drawings and specifications will be reviewed with pertinent parties.

**5.3 Project Completion and Decommissioning Meeting**

Held at PMRF after contractor has completed decommissioning process. The purpose of this meeting is to ensure all agreed upon actions were completed by the contractor prior to ending the formal contract.

Section D - Packaging and Marking

CLAUSES INCORPORATED BY REFERENCE

5252.247-9508 Prohibited Packing Materials

JUN 1998

CLAUSES INCORPORATED BY FULL TEXT

**5252.247-9507 PACKAGING AND MARKING OF REPORTS (NAVAIR) (OCT 2005)**

(a) All unclassified data shall be prepared for shipment in accordance with best commercial practice. Classified reports, data and documentation, if any, shall be prepared for shipment in accordance with the National Industry Security Program Operating Manual, DoD 5220.22-M.

(b) The contractor shall prominently display on the cover of each report the following information:

- (1) Name and business address of contractor.
- (2) Contract Number/Delivery/Task order number.
- (3) Contract/Delivery/Task order dollar amount.
- (4) Whether the contract was competitively or non-competitively awarded.
- (5) Name of sponsoring individual.
- (6) Name and address of requiring activity.

**5252.247-9508 PROHIBITED PACKING MATERIALS (NAVAIR) (JUN 1998)**

The use of asbestos, excelsior, newspaper or shredded paper (all types including waxed paper, computer paper and similar hydroscopic or non-neutral material) is prohibited. In addition, loose fill polystyrene is prohibited for shipboard use.

Section E - Inspection and Acceptance

INSPECTION/ACCEPTANCE

For required information of Inspection/Acceptance see Far Clause 52.212-4 CONTRACT TERMS AND CONDITIONS – COMMERCIAL ITEMS (SEP 2005), part (a) Inspection/Acceptance.

CLAUSES INCORPORATED BY REFERENCE

252.246-7000

Material Inspection And Receiving Report

MAR 2003

## Section F - Deliveries or Performance

## CLAUSES INCORPORATED BY REFERENCE

52.242-17 Government Delay Of Work

APR 1984

## CLAUSES INCORPORATED BY FULL TEXT

**5252.211-9507 PERIOD OF PERFORMANCE (MAR 1999)**

(a) The contract shall commence on the effective date of contract award and shall continue for a period of 60 months (twenty-three (23) months installation acceptance, thirty-six (36) months operation and maintenance and one (1) month site restoration).

(b) If FAR Clause 52.216-18, "Ordering", is incorporated into this contract, then the period in which the Government can issue orders under the contract will be extended at the exercise of an option, and extended to the end of that option period.

**5252.247-9505 TECHNICAL DATA AND INFORMATION (NAVAIR) (FEB 1995)**

Technical Data and Information shall be delivered in accordance with the requirements of the Contract Data Requirements List, DD Form 1423, Exhibit's A through L, attached hereto, and the following:

(a) The contractor shall concurrently deliver technical data and information per DD Form 1423, Blocks 12 and 13 (date of first/subsequent submission) to all activities listed in Block 14 of the DD Form 1423 (distribution and addresses) for each item. Complete addresses for the abbreviations in Block 14 are shown in paragraph (g) below. Additionally, the technical data shall be delivered to the following cognizant codes, who are listed in Block 6 of the DD Form 1423.

(1) NAWCWD CODE 7J2000D

(b) Partial delivery of data is not acceptable unless specifically authorized on the DD Form 1423, or unless approved in writing by the PCO.

(c) The Government review period provided on the DD Form 1423 for each item commences upon receipt of all required data by the technical activity designated in Block 6.

(d) A copy of all other correspondence addressed to the Contracting Officer relating to data item requirements (i.e., status of delivery) shall also be provided to the codes reflected above and the technical activity responsible for the data item per Block 6, if not one of the activities listed above.

(e) The PCO reserves the right to issue unilateral modifications to change the destination codes and addresses for all technical data and information at no additional cost to the Government.

(f) Unless otherwise specified in writing, rejected data items shall be resubmitted within thirty (30) days after receipt of notice of rejection.

(g) DD Form 1423, Block 14 Mailing Addresses: TPOC – COMMANDER  
CODE 7J2000D (Hugh Edwards)  
NAVAIRWARCENWPNDIV  
429 E BOWEN RD. MAIL STOP 4010  
CHINA LAKE, CA 93555-6108

PCO: COMMANDER  
CODE 220000D (Theodore W. Fiske)  
NAVAIRWARCENWPNDIV  
429 E. BOWEN RD. MAIL STOP 4015  
CHINA LAKE, CA 93555-6108

## Section G - Contract Administration Data

## ACCOUNTING AND APPROPRIATION DATA

AA: 1761319 44TX 255 00019 0 050119 2D 000000  
 COST CODE: AIR710FCAA00  
 AMOUNT: \$3,197,636.00  
 CIN 001022312200001: \$3,197,636.00

## CLAUSES INCORPORATED BY FULL TEXT

**5252.201-9500 GOVERNMENT POINTS OF CONTACT (NAVAIR)(OCT 2005)**

(a) The primary TPOC for this contract is Hugh (Sam) Edwards.

The alternate TPOC for this contract is Charles (Chuck) Combs.

(b) The TPOC(s) will provide technical direction and discussion, as relating, but not limited to the specification and/or statement of work, and will monitor the progress and quality of contractor performance.

(c) The TPOC(s) is not an Administrative Contracting Officer and does not have authority to take any action, either directly or indirectly, that would change the pricing, quantity, quality, place of performance, delivery schedule, or any other terms and conditions of the contract, or to direct the accomplishment of effort which goes beyond the scope of the statement of work in the contract. When, in the opinion of the contractor, the TPOC(s) requests any of the aforementioned changes, the contractor shall promptly notify the Contracting Officer in writing. If the contractor believes or interprets any action by the TPOC(s) to be a change to the contract, the contractor will promptly notify the Contracting Officer in writing. Any failure by the contractor to notify the Contracting Officer in writing of any changes is an admission that the contractor is working at its own risk on a voluntary basis. No action shall be taken by the contractor under such direction until the Contracting Officer has issued a modification to the contract concerning the subject change(s) or has otherwise resolved the issue.

**5252.201-9502 CONTRACTOR'S AUTHORIZED CONTRACT COORDINATOR AND TECHNICAL LIAISON (NAVAIR)(OCT 2005)**

(a) The contractor shall state below the name and telephone numbers of the contractor's employees responsible for coordination of contract functions/liaison with the Contracting Officer and/or Contract administrator, and providing technical assistance as required regarding product specifications, functionality, etc.

**CONTRACT COORDINATOR:**

NAME: Chris Davis

PHONE (BUS): 770/ 650-6388 x 102

PHONE (AFTER HOURS): \_\_\_\_\_ N/A \_\_\_\_\_

**ALTERNATE:**

NAME: Keith Spitznagel

PHONE (BUS): 724/ 449-4668

PHONE (AFTER HOURS): \_\_\_\_\_ N/A \_\_\_\_\_

(b) The contractor shall notify the Contracting Officer and/or Contract Administrator in advance, in writing, of any changes in the above listed personnel.

**5252.232-9513 INVOICING AND PAYMENT (WAWF) INSTRUCTIONS (NOV 2006)**

(a) Invoices for goods received or services rendered under this contract shall be submitted electronically through Wide Area Work Flow -- Receipt and Acceptance (WAWF):

(1) The vendor shall have their cage code activated by calling 866-618-5988. Once activated, the vendor shall self-register at the web site <https://wawf.eb.mil>. Vendor training is available on the Internet at <http://www.wawftraining.com>. Additional support can be obtained by calling the NAVY WAWF Assistance Line: 1-800-559-WAWF (9293).

(2) WAWF Vendor "Quick Reference" Guides are located at the following web site:  
<http://www.acquisition.navy.mil/navyaos/content/view/full/3521>.

(3) Select the invoice type within WAWF as specified below. Back up documentation (such as timesheets, etc.) can be included and attached to the invoice in WAWF. Attachments created in any Microsoft Office product are attachable to the invoice in WAWF. Total limit for the size of files per invoice is 5 megabytes.

(b) The following information, regarding invoice routing DODAAC's, must be entered for completion of the invoice in WAWF:

|  |   |
|--|---|
| WAWF Invoice Type:   | -- Select <b>2-in-1</b> for FFP Services Only.<br>-- Select <b>Combo</b> for Supplies, or Supplies AND FFP Services.<br>-- Select <b>Cost Voucher</b> for all Cost or T&M contracts or CLINs.<br>If none of the above apply, please call 1-800-559-WAWF (9293). |
| Issuing Office DODAAC  | N68936  |
| Admin Office DODAAC:   | N68936  |
| Inspector DODAAC (usually only used when Inspector & Acceptor are different people):                           |   |
| Ship To DODAAC (for Combo),<br>Service Acceptor DODAAC (for 2 in 1),<br>Service Approver DODAAC (Cost Voucher) | N68936  |
| Local Processing Office (applicable if DFAS DoDAAC begins with an "N"):  | N68936  |
| DCAA Office DODAAC (Used on Cost Voucher's only):  |   |
| Paying Office DODAAC:  | N68688  |

(c) Contractors approved by DCAA for direct billing will not process vouchers through DCAA, but may submit directly to DFAS. Final voucher submission will be approved by the ACO.

(d) For each invoice / cost voucher submitted for payment, the contractor shall also email the WAWF automated invoice notice directly to the following points of contact:

| Name        | Email  | Phone        | Role         |
|-------------|--|--------------|--------------|
| SAM EDWARDS | <a href="mailto:HUGH.EDWARDS@NAVY.MIL">HUGH.EDWARDS@NAVY.MIL</a>   | 760-939-1280 | TECH POC     |
| CHUCK COMBS | <a href="mailto:CHARLES.COMBS@NAVY.MIL">CHARLES.COMBS@NAVY.MIL</a> | 760-939-0048 | ALT TECH POC |
|             |  |              |              |

All Naval Air Warfare Center Weapons Division Contracts/ Purchase Orders and other related documents are now distributed by electronic mail.

Please provide the e-mail address to which distribution of contracts/purchase orders should be made.

E-Mail Address:           kspitznagel@loganenergy.com          

**G-TXT-13      COURTESY COPY OF INVOICE/VOUCHER (APR 2002)**

A courtesy copy of each invoice/voucher processed for payment will be sent to:

COMMANDER

CODE (220000D (C. Thompson)

NAVAIRWARCENWPNDIV

429 E. BOWEN RD, MAIL STOP 4015

CHINA LAKE, CA 93555-6108

## Section H - Special Contract Requirements

## CLAUSES INCORPORATED BY FULL TEXT

**5252.211-9502 GOVERNMENT INSTALLATION WORK SCHEDULE (NAVAIR)(OCT 2005) - ALT I (OCT 2005)**

(a) The Holidays applicable to this contract are: New Year's Day, Martin Luther King's Birthday, President's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

(b) In the event that the contractor is prevented from performance as the result of an Executive Order or an administrative leave determination that applies to the using activity, such time may be charged to the contract as a direct cost provided such charges are consistent with the contractor's accounting practices. In the event that any of the above holidays occur on a Saturday or Sunday, or Compressed Work Schedule Alternate Friday, then such holiday shall be observed as they are by the assigned Government employees at the using activity.

(c) The Naval Air Warfare Center Weapons Division works a 4/5/9 work schedule. Therefore alternate Fridays are not a part of the normal workweek for work performed on-site at a Naval Air Warfare Center Weapons Division site. The majority of the Government offices are closed on alternate Fridays.

(d) No deviation in the normal workweek will be permitted without express advance approval by the designated Contracting Officer with coordination of the using departments.

**5252.228-9501 LIABILITY INSURANCE (NAVAIR) (MAR 1999)**

The following types of insurance are required in accordance with the clause entitled, FAR 52.228-5, Insurance-- Work on a Government Installation, and shall be maintained in the minimum amounts shown:

(a) Comprehensive General Liability: \$200,000 per person and \$500,000 per accident for bodily injury.

(b) Automobile Insurance: \$200,000 per person and \$500,000 per accident for bodily injury and \$500,000 per accident for property damage.

(c) Standard Workman's Compensation and Employer's Liability Insurance (or, where maritime employment is involved, Longshoremen's and Harbor Worker's Compensation Insurance) in the minimum amount of \$100,000.

(d) Aircraft public and passenger liability: \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability; \$200,000 per occurrence for property damage. Passenger bodily injury liability limits of \$200,000 per passenger, multiplied by the number of seats or number of passengers, whichever is greater.

**5252.243-9504 AUTHORIZED CHANGES ONLY BY THE CONTRACTING OFFICER (NAVAIR) (JAN 1992)**

(a) Except as specified in paragraph (b) below, no order, statement, or conduct of Government personnel who visit the contractor's facilities or in any other manner communicates with contractor personnel during the performance of this contract shall constitute a change under the "Changes" clause of this contract.

(b) The contractor shall not comply with any order, direction or request of Government personnel unless it is issued in writing and signed by the Contracting Officer, or is pursuant to specific authority otherwise included as a part of this contract.

(c) The Contracting Officer is the only person authorized to approve changes in any of the requirements of this contract and notwithstanding provisions contained elsewhere in this contract, the said authority remains solely the Contracting Officer's. In the event the contractor effects any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in charges incurred as a result thereof. The address and telephone number of the Contracting Officer is:

NAME: THEODORE W. FISKE  
 ADDRESS: COMMANDER  
 CODE 220000D,  
 NAVAIRWARCENWPNDIV  
 429 E. BOWEN RD. MAIL STOP 4015  
 CHINA LAKE, CA 93555-6108

**5252.245-9500 GOVERNMENT PROPERTY FOR THE PERFORMANCE OF THIS CONTRACT  
 (NAVAIR) (APR 1998)**

(a) Definition. Government production and research property, as the term is used herein, shall consist of special tooling to which the Government has title or the right to acquire title, Government-owned special test equipment and Government-owned facilities as each term is defined respectively in FAR 45.101 and 45.301.

(b) Authorization to Use Government Production and Research Property, Material, and Agency Peculiar Property Currently Covered by Government Contracts Without Rental Charge in Performing this Contract. Government production and research property, material, and agency peculiar property covered by the following listed Government contracts on the effective date of this contract is hereby authorized for use on a rent-free, non-interference basis in the performance of this contract and sub-contracts of any tier issued hereunder:

Contract No(s): None

(c) Authorization to Use Government Production and Research Property and Agency Peculiar Property to be Provided Under this Contract Without Rental Charge in Performing this Contract. (This paragraph does not cover such property in possession of the contractor or his subcontractors on the date of award of this contract.)

(1) Subject to the provisions of the Government Property clause of this contract, the Government hereby agrees to provide hereunder the Government production and research property and agency peculiar property identified in (c)(2) through (c)(5) to the contractor. The contractor is hereby authorized to use, on a rent-free basis, said property in the performance of this contract.

(2) Special Tooling (as defined in FAR 45.101): None

(3) Special Test Equipment (as defined in FAR 45.101): None

(4) Facilities (as defined in FAR 45.301 and DFARS 245.301): Pacific Missile Range Facility, located at PMRF, Kauai, HI.

(These facilities shall, when provided, become accountable under and be subject to that facilities contract, if any, in effect between the Government and the contractor or any of his subcontractors at the plant where they are to be located during performance of this contract.)

(5) Agency Peculiar Property (as defined in FAR 45.301 and DFARS 245.301): None

The following terms and conditions shall be applicable to the agency peculiar property, if any, identified above:

(A) each item of agency peculiar property shall be identified by its Federal Item Identification Number and Government Nomenclature;

(B) the agency peculiar property shall be accounted for under this contract; and

(C) upon completion or termination of this contract, the contractor shall request and comply with disposition instructions from the Contracting Officer.

(d) Government Material and Agency Peculiar Property to be Furnished Under this Contract. (This paragraph covers Government-owned material and agency peculiar property furnished to the contractor for (A) consumption in the course of manufacture, testing, development, etc., or (B) incorporation in items to be delivered under this contract, e.g., Master Government-Furnished Equipment List (MGFEL).)

(1) Subject to the provisions of the Government Property clause of this contract, the Government hereby agrees to provide hereunder the Government-owned agency peculiar property and material identified in (d)(2) and (d)(3) to the Contractor. The Contractor is hereby authorized as appropriate, (A) to consume the material identified in (d)(2) and the agency peculiar property identified in (d)(3) in performing this contract or (B) to incorporate such material and agency peculiar property in articles under this contract.

(2) Material (as defined in FAR 45.301): None

Requisitioning Documentation: Contractor access to the federal supply system is permitted only when the material as well as the quantity is identified in the above paragraph. The contractor shall prepare requisitioning documentation for the above material in accordance with the "Military Standard Requisitioning and Issue Procedures (MILSTRIP) for Defense Contractors", DoD 4000.25-1-M, Chapter 11 and NAVSUP Publication 437 as revised by DoD AMCL 1 A guidance. The contractor must submit all requisitions for Government Furnished Material (GFM) from the supply system to the Material Control Activity (MCA) specified in Section G of this contract. Upon completion or termination of this contract, the contractor shall request and comply with disposition instructions from the Contracting Officer.

(3) Agency Peculiar Property (as defined in FAR 45.301 and DFARS 245.301): None

The terms and conditions made applicable to agency peculiar property in (c)(5) shall be applicable to the agency peculiar property, if any, identified above.

(e) Government Installations to be Made Available Under this Contract. (This paragraph covers Government installations, or portions thereof, to be made available to a contractor but not transferred to his possession - for example, test centers, wind tunnels, aircraft fields, as well as buildings, furniture or equipment. Instructions may be needed to establish ground rules or plans governing availability of installations.)

(1) The Government hereby agrees to make available hereunder on a rent-free, non-interference basis for performing this contract the Government installations, or portions thereof, identified in (e)(2) in accordance with standard operating procedures and priorities unless otherwise specified in the Schedule. Although not "Government-furnished property" under this contract, the provisions of paragraph (a) of the Government Property clause of this contract shall apply to these installations.

(2) Installations.

Pacific Missile Range Facility, located at PMRF, Kauai, HI.

(f) Bailed Property to be Used Under this Contract. (This paragraph will not obviate the need to set forth in this contract the terms of the project agreement as required by the pertinent bailment agreement.)

(1) The bailed property identified in (f)(2) is hereby authorized for use on a rent-free basis in the performance of this contract. Although not "Government-furnished property" under this contract, the provisions of paragraph (a) of the Government Property clause of this contract shall apply to this bailed property.

Bailment Agreement

Under which

(2) Description      Serial Number      Accountable - None

(3) The bailed property identified in (f)(2) is furnished "as is" and the Government makes no representations or warranties with respect to such property, including the suitability of such property for the intended use.

(g) This clause shall in no event be construed to authorize rent-free use of any property identified above for any effort other than that called for under this contract.

(h) Installation Cost. The price of this contract constitutes full compensation to the contractor for all costs to be incurred under this contract for the adaptation and installation of the property identified in this clause.

(i) Installation. Government production and research property, other than foundations and similar improvements necessary for the installation of special tooling, special test equipment, and plant equipment, as defined in FAR 45.101, shall not be installed or constructed on land nor owned by the Government in such fashion as to be non-severable unless authority is granted by the Contracting Officer cognizant of the contract under which the property is provided in accordance with FAR 45.309.

(j) Limitation: This clause does not authorize the contractor to acquire any property for the Government.

(k) The contractor represents that the price and delivery schedule of this contract have been established in reliance on the Government granting the authorization in (b), (c), (d), (e) and (f), and that no charge has been included in this contract for use of the property as authorized above.

(l) Whenever the Contracting Officer authorizes or makes available the use, on a rent-free basis, of additional Government production and research property or other Government property in the performance of this contract or subcontracts of any tier under this contract, the contract will be equitably adjusted in accordance with the procedures provided for in the Changes clause.

(m) If the Government production and research property or other Government property authorized or made available above is decreased by the Government, the contractor will be entitled to an equitable adjustment to the terms of this contract in accordance with the procedures provided for in the Changes clause hereof, as a result of such decrease; provided, however, that if any such decrease is due to the failure of the contractor or his subcontractors of any tier under this contract to fulfill their respective obligations either with respect to the

Government property or with respect to the work such property is to be used to perform, the Contracting Officer will take such circumstances into account in establishing the equitable adjustment.

(n) The contractor is responsible for scheduling the use of all property covered by this clause and the Government shall not be responsible for conflicts, delays, or disruptions to any work performed by the contractor due to use of any or all such property, either under this contract or any other contracts under which use of such property is authorized.

## Section I - Contract Clauses

## CLAUSES INCORPORATED BY REFERENCE

|              |  |          |
|--------------|--|----------|
| 52.203-3     | Gratuities   | APR 1984 |
| 52.204-4     | Printed or Copied Double-Sided on Recycled Paper   | AUG 2000 |
| 52.204-9     | Personal Identity Verification of Contractor Personnel   | NOV 2006 |
| 52.212-4     | Contract Terms and Conditions--Commercial Items  | SEP 2005 |
| 52.219-16    | Liquidated Damages-Subcontracting Plan   | JAN 1999 |
| 52.223-5     | Pollution Prevention and Right-to-Know Information   | AUG 2003 |
| 52.228-5     | Insurance - Work On A Government Installation  | JAN 1997 |
| 52.232-17    | Interest   | JUN 1996 |
| 52.237-2     | Protection Of Government Buildings, Equipment, And Vegetation  | APR 1984 |
| 52.242-13    | Bankruptcy   | JUL 1995 |
| 52.253-1     | Computer Generated Forms   | JAN 1991 |
| 252.204-7003 | Control Of Government Personnel Work Product   | APR 1992 |
| 252.205-7000 | Provision Of Information To Cooperative Agreement Holders  | DEC 1991 |
| 252.209-7004 | Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country                        | DEC 2006 |
| 252.211-7003 | Item Identification and Valuation  | JUN 2005 |
| 252.219-7003 | Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (DOD Contracts)                          | APR 1996 |
| 252.223-7006 | Prohibition On Storage And Disposal Of Toxic And Hazardous Materials   | APR 1993 |
| 252.225-7001 | Buy American Act And Balance Of Payments Program   | JUN 2005 |
| 252.225-7012 | Preference For Certain Domestic Commodities  | JUN 2004 |
| 252.225-7016 | Restriction On Acquisition Of Ball and Roller Bearings   | MAR 2006 |
| 252.226-7001 | Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns | SEP 2004 |
| 252.227-7015 | Technical Data--Commercial Items   | NOV 1995 |
| 252.232-7010 | Levies on Contract Payments  | DEC 2006 |
| 252.243-7001 | Pricing Of Contract Modifications  | DEC 1991 |
| 252.243-7002 | Requests for Equitable Adjustment  | MAR 1998 |
| 252.247-7023 | Transportation of Supplies by Sea  | MAY 2002 |

## CLAUSES INCORPORATED BY FULL TEXT

**52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (NOV 2006) (DEVIATION)**

(a) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (a) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records-Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times, the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available

for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(b) Notwithstanding the requirements of any other clause in this contract, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vii) of this paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (MAY 2004)(15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (APR 2002)(E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006)(38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998)(29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

(vi) 52.222-41, Service Contract Act of 1965, as Amended (JUL 2005), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, seq.).

(vii) 52.247-64, Preference for Privately-Owned U.S. Flag Commercial Vessels (FEB 2006)(46 U.S.C. Appx 1241 and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(c) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

#### **52.223-11 OZONE-DEPLETING SUBSTANCES (MAY 2001)**

(a) Definition. Ozone-depleting substance, as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR part 82 as--

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including, but not limited to, hydrochlorofluorocarbons.

(b) As required by 42 U.S.C. 7671j(b), (c), and (d) and 40 CFR Part 82, Subpart E, the Contractor shall label products which contain a class I or class II ozone-depleting substance or are manufactured with a process that uses class I or class II ozone-depleting substances, or containers of class I or class II ozone-depleting substances, as follows: "WARNING: Contains (or manufactured with, if applicable) \_\_\_\_\_\*, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere."

\*The Contractor shall insert the name of the substance(s).

#### **52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)**

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): <http://www.arnet.gov/far> or <http://farsite.hill.af.mil>.

#### **52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)**

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Defense Federal Acquisition Regulation (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

**252.212-7001 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (NOV 2006)(DEVIATION)**

In addition to the clauses listed in paragraph (b) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items clause of this contract FAR 52.212-5 (DEVIATION), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

|              |  |
|--------------|--|
| 252.225-7014 | Preference for Domestic Specialty Metals, (JUN 2005) Alternate I (APR 2003) (10 U.S.C. 2241 note).     |
| 252.237-7019 | Training for Contractor Personnel Interacting with Detainees (SEP 2006) (Section 1092 of Pub. L. 108). |
| 252.247-7023 | Transportation of Supplies by Sea (MAY 2002) (10 U.S.C. 2631).   |
| 252.247-7024 | Notification of Transportation of Supplies by Sea (MAR 2000) (10 U.S.C. 2631).                         |

**5252.204-9502 REQUIREMENTS FOR LOCAL SECURITY SYSTEM (NAVAIR) (OCT 2005)**

The contractor agrees to provide locator information regarding all employees requiring a permanent badge for authorized entrance to the Pacific Missile Range Facility, located at PMRF, Barking Sands, Kauai, HI. Entrance is authorized by this contract as a result of tasks associated with performance of the Section C - Statement of Work only. Initial information shall be provided as each individual is assigned to this contract by using the Locator Form provided as an attachment to this contract. Thereafter, quarterly reports (due at the beginning of each quarter by the fifth day of the month) will be provided with gains/losses (identification of new and replaced or added individuals) and any changes to current personnel (such as telephone number, building number and room number). A point of contact is to be named on each quarterly report for any questions/additional information needed by the Government recipient. The quarterly reports are to be addressed to [insert address]. All losses are to have the permanent badges returned to [insert address] on the last day of the individual's task requirement.

**5252.204-9503 EXPEDITING CONTRACT CLOSEOUT (NAVAIR)(DEC 2006)**

(a) As part of the negotiated fixed price or total estimated amount of this contract, both the Government and the Contractor have agreed to waive any entitlement that otherwise might accrue to either party in any residual dollar amount of \$1,000 or less at the time of final contract closeout. The term "residual dollar amount" shall include all money that would otherwise be owed to either party at the end of the contract, except that, amounts connected in any way with taxation, allegations of fraud and/or antitrust violations shall be excluded. For purposes of determining residual dollar amounts, offsets of money owed by one party against money that would otherwise be paid by that party might be considered to the extent permitted by law.

(b) This agreement to waive entitlement to residual dollar amounts has been considered by both parties. It is agreed that the administrative costs for either party associated with collecting such small dollar amounts could exceed the amount to be recovered.

**5252.204-9504 DISCLOSURE OF CONTRACT INFORMATION (JAN 2007)**

(a) The Contractor shall not release to anyone outside the Contractor's organization any unclassified information (e.g., announcement of contract award), regardless of medium (e.g., film, tape, document), pertaining to any part of this contract or any program related to this contract, unless the Contracting Officer has given prior written approval.

(b) Requests for approval shall identify the specific information to be released, the medium to be used, and the purpose for the release. The Contractor shall submit its request to the Contracting Officer at least ten (10) days before the proposed date for release.

(c) The Contractor agrees to include a similar requirement in each subcontract under this contract. Subcontractors shall submit requests for authorization to release through the prime contractor to the Contracting Officer.

## Section J - List of Documents, Exhibits and Other Attachments

## Exhibit/Attachment Table of Contents

| DOCUMENT TYPE  | DESCRIPTION                              | PAGES | DATE      |
|----------------|--|-------|-----------|
| ADDENDUM 1     | 52.212-3                                 | 7     | Apr 02    |
| ADDENDUM 2     | 52.212-5                                 | 3     | Nov 06    |
| EXHIBIT A-A001 | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT B-A002 | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT C-A003 | Technical Data Pkg                       | 1     | 11 Jan 07 |
| EXHIBIT D-A004 | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT E-A005 | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT F-A006 | Training Materials                       | 1     | 11 Jan 07 |
| EXHIBIT G-A007 | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT H-A008 | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT I-A009 | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT J-A00A | Progress Report                          | 1     | 11 Jan 07 |
| EXHIBIT K-A00B | Technical Report                         | 1     | 11 Jan 07 |
| EXHIBIT L-A00C | Presentation Material                    | 1     | 11 Jan 07 |
| ATTACHMENT 1   | Water Data, State of Hawaii              | 13    | 05 Jul 06 |
| ATTACHMENT 2   | Stream G/C Analysis Report               | 1     | Apr 05    |
| ATTACHMENT 3   | Map of Primary Site                      | 1     | 07 Feb 07 |
| ATTACHMENT 4   | Map of Secondary Site                    | 1     | 07 Feb 07 |
| ATTACHMENT 5   | Contractor Performance Evaluation Survey | 2     | 07 Feb 07 |

**OFFEROR REPRESENTATIONS AND CERTIFICATIONS -- COMMERCIAL ITEMS  
(NOV 2006) - ALT I (APR 2002)**

An offeror shall complete only paragraph (j) of this provision if the offeror has completed the annual representations and certifications electronically at <http://orca.bpn.gov>. If an offeror has not completed the annual representations and certifications electronically at the ORCA website, the offeror shall complete only paragraphs (b) through (i) of this provision.

(a) Definitions. As used in this provision:

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

"Forced or indentured child labor" means all work or service--

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

"Manufactured end product" means any end product in Federal Supply Classes (FSC) 1000-9999, except--

(1) FSC 5510, Lumber and Related Basic Wood Materials;

(2) Federal Supply Group (FSG) 87, Agricultural Supplies;

(3) FSG 88, Live Animals;

(4) FSG 89, Food and Related Consumables;

(5) FSC 9410, Crude Grades of Plant Materials;

(6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;

(7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;

(8) FSC 9610, Ores;

(9) FSC 9620, Minerals, Natural and Synthetic; and

(10) FSC 9630, Additive Metal Materials.

"Place of manufacture" means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

"Service-disabled veteran-owned small business concern"--

(1) Means 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 veterans or, in the case of a service-disabled 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).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

"Veteran-owned small business concern" means 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.

"Women-owned small business concern" means a small business concern --

(1) That 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 of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

"Women-owned business concern" means a concern 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 its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Taxpayer identification number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (b)(3) through (b)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) Taxpayer Identification Number (TIN).

TIN: \_\_\_\_\_

TIN has been applied for.

TIN is not required because:

Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

Offeror is an agency or instrumentality of a foreign government;

Offeror is an agency or instrumentality of the Federal Government;

(4) Type of organization.

Sole proprietorship;

Partnership;

Corporate entity (not tax-exempt);

Corporate entity (tax-exempt);

Government entity (Federal, State, or local);

Foreign government;

International organization per 26 CFR 1.6049-4;

Other \_\_\_\_\_.]

(5) Common parent.

Offeror is not owned or controlled by a common parent:

Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_

(c) Offerors must complete the following representations when the resulting contract will be performed in the United States or its outlying areas. Check all that apply.

(1) Small business concern. The offeror represents as part of its offer that it  is,  is not a small business concern.

(2) Veteran-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents as part of its offer that it  is,  is not a veteran-owned small business concern.

(3) Service-disabled veteran-owned small business concern. [Complete only if the offeror represented itself as veteran-owned small business concern in paragraph (c)(2) of this provision.] The offeror represents as part of its offer that it  is,  is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, for general statistical purposes, that it  is,  is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) Women-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it  is,  is not a women-owned small business concern.

Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) Women-owned business concern (other than small business concern). [Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.]. The offeror represents that it  is, a women-owned business concern.

(7) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price: \_\_\_\_\_

(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. [Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the designated industry groups (DIGs).) The offeror represents as part of its offer that it  is,  is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or designated industry groups (DIGs).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts). (Check one of the following):

| <u>Number of Employees</u>           | <u>Average Annual Gross Revenues</u>               |
|--------------------------------------|--|
| <input type="checkbox"/> 50 or fewer | <input type="checkbox"/> \$1 million or less       |
| <input type="checkbox"/> 51-100      | <input type="checkbox"/> \$1,000,001-\$2 million   |
| <input type="checkbox"/> 101-250     | <input type="checkbox"/> \$2,000,001-\$3.5 million |
| <input type="checkbox"/> 251-500     | <input type="checkbox"/> \$3,500,001-\$5 million   |
| <input type="checkbox"/> 501-750     | <input type="checkbox"/> \$5,000,001-\$10 million  |
| <input type="checkbox"/> 751-1,000   | <input type="checkbox"/> \$10,000,001-\$17 million |
| <input type="checkbox"/> Over 1,000  | <input type="checkbox"/> Over \$17 million         |

(9) [Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.]

(i) General. The offeror represents that either-

(A) It  is,  is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual 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); or

(B) It  has,  has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(9)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: \_\_\_\_\_]

(10) HUBZone small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, as part of its offer, that--

(i) It  is,  is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR part 126; and

(ii) It  is,  is not a joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (c)(10)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. [The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: \_\_\_\_\_.] Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.

(11) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) or (c)(9) of this provision.) [The offeror shall check the category in which its ownership falls]:

[ ] Black American.

[ ] Hispanic American.

[ ] Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

[ ] Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory or the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

[ ] Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

[ ] Individual/concern, other than one of the preceding.

(d) Representations required to implement provisions of Executive Order 11246 --

(1) Previous contracts and compliance. The offeror represents that --

(i) It [ ] has, [ ] has not, participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

(ii) It [ ] has, [ ] has not, filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that --

(i) It [ ] has developed and has on file, [ ] has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR Subparts 60-1 and 60-2), or

(ii) It [ ] has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C.1352). (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person or influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract.

(f) Buy American Act Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act - Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products. The terms "component", "domestic end product", "end product", "foreign end product", and "United States" are defined in the clause of this solicitation entitled "Buy American Act--Supplies".

(2) Foreign End Products:

| LINE ITEM NO. | COUNTRY OF ORIGIN |
|---------------|-------------------|
|               |                   |
|               |                   |
|               |                   |
|               |                   |

(List as necessary)

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)

(1) Buy American Act -- Free Trade Agreements -- Israeli Trade Act Certificate. (Applies only if the clause at FAR 52.225-3, Buy American Act -- Free Trade Agreements Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms "Bahrainian end product", "component", "domestic end product", "end product", "foreign end product", "Free Trade Agreement country", and "United States" are defined in the clause of this solicitation entitled "Buy American Act-- Free Trade Agreements--Israeli Trade Act".

(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian or Moroccan end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act--Free Trade Agreements--Israeli Trade Act":

Free Trade Agreement Country End Products (Other than Bahrainian or Moroccan End Products) or Israeli End Products:

| LINE ITEM NO. | COUNTRY OF ORIGIN |
|---------------|-------------------|
|               |                   |
|               |                   |
|               |                   |

(List as necessary)

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) or this provision) as defined in the clause of this solicitation entitled "Buy American Act- Free Trade Agreements-Israeli Trade Act." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products:

| LINE ITEM NO. | COUNTRY OF ORIGIN |
|---------------|-------------------|
|               |                   |
|               |                   |
|               |                   |

(List as necessary)

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) Buy American Act-- Free Trade Agreements--Israeli Trade Act Certificate, Alternate I. If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act-- Free Trade Agreements--Israeli Trade Act":

Canadian End Products

| LINE ITEM NO. |
|---------------|
|               |
|               |
|               |

(List as necessary)

(3) Buy American Act-- Free Trade Agreements--Israeli Trade Act Certificate, Alternate II. If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act-- Free Trade Agreement-Israeli Trade Act":  
Canadian or Israeli End Products

| LINE ITEM NO. | COUNTRY OF ORIGIN |
|---------------|-------------------|
|               |                   |
|               |                   |
|               |                   |

(List as necessary)

(4) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements".

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

| LINE ITEM NO. | COUNTRY OF ORIGIN |
|---------------|-------------------|
|               |                   |
|               |                   |
|               |                   |

(List as necessary)

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals.

(1)  Are,  are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency; and

(2)  Have,  have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: Commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(3)  Are,  are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses.

(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).]

(1) Listed end products.

| Listed End Product | Listed Country of Origin |
|--------------------|--------------------------|
|                    |                          |
|                    |                          |
|                    |                          |

(List as necessary)

(2) Certification. [If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.].

(i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

(ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j) Place of manufacture. (Does not apply unless the solicitation is predominantly for the acquisition of manufactured end products.) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly--

(1)  In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or

(2)  Outside the United States.

(k)(1) *Annual Representations and Certifications.* Any changes provided by the offeror in paragraph (j) of this provision do not automatically change the representations and certifications posted on the Online Representations and Certifications Application (ORCA) website.

(2) The offeror has completed the annual representations and certification electronically via the ORCA website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of this offer that the representation and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and certifications-- Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201), except for paragraphs \_\_\_\_\_. [*Offeror to identify the applicable paragraphs at (b) through (i) of this provision that the offeror has completed for the purposes of this solicitation only, if any. These amended representation(s) and/or certification(s) are also incorporated into his offer and are current, accurate, and complete as of the date of this offer. Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.*].

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS -- COMMERCIAL ITEMS (NOV 2006)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.233-3, Protest after Award (Aug 1996)(31 U.S.C 3553).

(2) 52.233-4, Applicable Law for Breach of Contract Claim (Oct 2004)(Pub.L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the contracting officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

[Contracting Officer shall check as appropriate.]

(1) 52.203-6, Restrictions on Subcontractor Sales to the Government (Sep 2006), with Alternate I (Oct 1995)(41 U.S.C. 253g and 10 U.S.C. 2402).

(2) 52.219-3, Notice of Total HUBZone Set-Aside (Jan 1999)(15 U.S.C. 657a).

(3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (Jul 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer)(15 U.S.C. 657a).

(4) (i) 52.219-5, Very Small Business Set-Aside (June 2003)(Pub. L. 103-403, section 304, Small Business Reauthorization and Amendments Act of 1994).

(ii) Alternate I (Mar 1999) of 52.219-5.

(iii) Alternate II (June 2003) of 52.219-5.

(5) (i) 52.219-6, Notice of Total Small Business Aside (June 2003) (15 U.S.C. 644).

(ii) Alternate I (Oct 1995) of 52.219-6.

(ii) Alternate II (Mar 2004) of 52.219-6.

(6) (i) 52.219-7, Notice of Partial Small Business Set-Aside (June 2003)(15 U.S.C. 644).

(ii) Alternate I (Oct 1995) of 52.219-7.

(ii) Alternate II (Mar 2004) of 52.219-7.

(7) 52.219-8, Utilization of Small Business Concerns (Oct 2000) (15 U.S.C. 637(d)(2) and (3)).

(8) (i) 52.219-9, Small Business Subcontracting Plan (Sep 2006) (15 U.S.C. 637(d)(4)).

(ii) Alternate I (Oct 2001) of 52.219-9.

(iii) Alternate II (Oct 2001) of 52.219-9.

(9) 52.219-14, Limitations on Subcontracting (Dec 1996)(15 U.S.C. 637(a)(14)).

(10) (i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (Sep 2005) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

(ii) Alternate I (June 2003) of 52.219-23.

(11) 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (Oct 1999)(Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

(12) 52.219-26, Small Disadvantaged Business Participation Program-Incentive Subcontracting (Oct 2000)(Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

(13) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004).

(14) 52.222-3, Convict Labor (June 2003)(E.O. 11755).

(15) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (Jan 2006)(E.O. 13126).

(16) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).

(17) 52.222-26, Equal Opportunity (Apr 2002)(E.O. 11246).

(18) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sep 2006)(38 U.S.C. 4212).

(19) 52.222-36, Affirmative Action for Workers with Disabilities (Jun 1998)(29 U.S.C. 793).

(20) 52.222-37, Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sep 2006)(38 U.S.C. 4212).

(21) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201).

(22) (i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Aug 2000)(42 U.S.C. 6962(c)(3)(A)(ii)).

(ii) Alternate I (Aug 2000) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).

(23) 52.225-1, Buy American Act--Supplies (June 2003)(41 U.S.C. 10a-10d).

(24) (24)(i) 52.225-3, Buy American Act--Free Trade Agreements--Israeli Trade Act (Nov 2006) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, Pub. L 108-77, 108-78, 108-286, 109-53 and 109-169).

(ii) Alternate I (Jan 2004) of 52.225-3.

(iii) Alternate II (Jan 2004) of 52.225-3.

(25) 52.225-5, Trade Agreements (Jun 2006) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301 note).

(26) 52.225-13, Restrictions on Certain Foreign Purchases (Feb 2006) (E.o.s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

(27) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (42 U.S.C. 5150).

(28) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (42 U.S.C. 5150).

(29) 52.232-29, Terms for Financing of Purchases of Commercial Items (Feb 2002)(41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

(30) 52.232.30, Installment Payments for Commercial Items (Oct 1995)(41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

(31) 52.232-33, Payment by Electronic Funds Transfer-Central Contractor Registration (Oct 2003)(31 U.S.C. 3332).

(32) 52.232-34, Payment by Electronic Funds Transfer-Other Than Central Contractor Registration (May 1999)(31 U.S.C. 3332).

(33) 52.232-36, Payment by Third Party (May 1999)(31 U.S.C. 3332).

(34) 52.239-1, Privacy or Security Safeguards (Aug 1996)(5 U.S.C. 552a).

(35) (i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006)( 46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631).

(ii) Alternate I (Apr 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items:

[Contracting Officer check as appropriate.]

(1) 52.222-41, Service Contract Act of 1965, as Amended (Jul 2005)(41 U.S.C. 351, et seq.).

(2) 52.222-42, Statement of Equivalent Rates for Federal Hires (May 1989)(29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

(3) 52.222-43, Fair Labor Standards Act and Service Contract Act -- Price Adjustment (Multiple Year and Option Contracts) (Nov 2006)(29 U.S.C.206 and 41 U.S.C. 351, et seq.).

(4) 52.222-44, Fair Labor Standards Act and Service Contract Act -- Price Adjustment (Feb 2002)(29 U.S.C. 206 and 41 U.S.C. 351, et seq.).

(5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to Predecessor Contractor Collective Bargaining Agreements (CBA) (May 1989)(41 U.S.C. 351, et seq.).

(d) Comptroller General Examination of Record . The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records -- Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)

(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c) and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in paragraphs (i) through (vii) of this

paragraph in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause--

(i) 52.219-8, Utilization of Small Business Concerns (Oct 2000)(15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (Apr 2002)(E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (Sep 2006)(38 U.S.C. 4212).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (June 1998)(29 U.S.C. 793).

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (Dec 2004) (E.O. 13201).

(vi) 52.222-41, Service Contract Act of 1965, as Amended (Jul 2005), flow down required for all subcontracts subject to the Service Contract Act of 1965 (41 U.S.C. 351, et seq.).

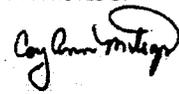
(vii) 52.247-64, Preference for Privately-Owned U.S. Flag Commercial Vessels (Feb 2006)( 46 U.S.C. Appx 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

**CONTRACT DATA REQUIREMENTS LIST  
(1 Data Item)**

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for Contract/PR No. listed in Block E.

|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
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| A. CONTRACT LINE ITEM NO.  |   | B. EXHIBIT   | C. CATEGORY:<br>TDP    TM    OTHER: MISC   |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| D. SYSTEM/ITEM<br><b>Molten Carbonate Fuel Cell Demonstration</b>  |   | E. CONTRACT/PR NO.   | F. CONTRACTOR  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| 1. DATA ITEM NO.<br><b>A001</b>  | 2. TITLE OF DATA ITEM<br><b>TECHNICAL REPORT - STUDY/SERVICES</b> |  | 3. SUBTITLE<br><b>Site Plan</b>  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| 4. AUTHORITY (Data Acquisition Document No.)<br><b>DI-MISC-80508A</b>  |   | 5. CONTRACT REFERENCE<br><b>SOW Para 3.2.2, 3.10, 3.11, 3.12</b> |  | 6. REQUIRING OFFICE<br><b>NAVAIRWD CODE 7J2000D</b>   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| 7. DD 250 REQ<br><b>LT</b>   | 9. DIST STATEMENT REQUIRED<br><b>SEE BLK</b>                      | 10. FREQUENCY<br><b>1TIME</b>                                    | 12. DATE OF FIRST SUBMISSION<br><b>SEE BLK 16</b>  | 14. DISTRIBUTION  |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| 8. APP CODE<br><b>A</b>  | <b>15</b>   | 11. AS OF DATE<br><b>N/A</b>                                     | 13. DATE OF SUBSEQUENT SUBMISSION<br><b>N/A</b>  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| <p><b>Block 16 Remarks</b></p> <p><b>Block 4: May be in contractor format as long as DID is used for guidance.</b></p> <p><b>Block 9: Distribution Statement shall be provided by the Government prior to 1<sup>st</sup> submittal.</b></p> <p><b>Block 12: Initial shall be delivered 60 DA contract award. Final shall be delivered 15 DA receipt of Government comments with comments incorporated.</b></p> <p><b>Block 14: Shall be delivered in an electronic format agreed upon by both Government and Contractor prior to 1<sup>st</sup> submittal.</b></p> |   |  |  | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">3. ADDRESSEE</td> <td colspan="2">b. COPIES</td> </tr> <tr> <td rowspan="2"></td> <td rowspan="2">Draft</td> <td colspan="2">Final</td> </tr> <tr> <td>Reg</td> <td>Repro</td> </tr> <tr> <td><b>Code 7J2000D</b></td> <td align="center"><b>0</b></td> <td align="center"><b>1</b></td> <td align="center"><b>0</b></td> </tr> <tr> <td><b>Code 254000D</b></td> <td></td> <td align="center"><b>LTR</b></td> <td align="center"><b>ONLY</b></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr> <td colspan="2">15. TOTAL →</td> <td align="center"><b>0</b></td> <td align="center"><b>1</b></td> <td align="center"><b>0</b></td> </tr> </table> | 3. ADDRESSEE |            | b. COPIES   |  |  | Draft | Final |  | Reg | Repro | <b>Code 7J2000D</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>Code 254000D</b> |  | <b>LTR</b> | <b>ONLY</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 15. TOTAL → |  | <b>0</b> | <b>1</b> | <b>0</b> |
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|  |   |  |  | <b>Code 254000D</b>   |              | <b>LTR</b> | <b>ONLY</b> |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
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|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
|  |   |  |  |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| 15. TOTAL →  |   | <b>0</b>   | <b>1</b>   | <b>0</b>  |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
| G. PREPARED BY<br><b>Naval Air Warfare Center,<br/>Weapons Division, China Lake, CA<br/>93555-6100</b>   |   | H. DATE<br><b>070108</b>   | I. APPROVED BY<br><br><b>DRRB Chairperson</b> |   |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |
|  |   |  |  | J. DATE<br><b>070111</b>  |              |            |             |  |  |       |       |  |     |       |                     |          |          |          |                     |  |            |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |             |  |          |          |          |









**CONTRACT DATA REQUIREMENTS LIST  
(1 Data Item)**

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA, 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.      B. EXHIBIT      C. CATEGORY:  
TDP    TM    OTHER: MISC

D. SYSTEM/ITEM  
**Molten Carbonate Fuel Cell Demonstration**      E. CONTRACT/PR NO.      F. CONTRACTOR

1. DATA ITEM NO.      2. TITLE OF DATA ITEM      3. SUBTITLE  
**A006      TRAINING MATERIALS**

4. AUTHORITY (Data Acquisition Document No.)      5. CONTRACT REFERENCE      6. REQUIRING OFFICE  
**DI-ILSS-80872      SOW Para 3.5, 3.10, 3.11, 3.12      NAVAIRWD CODE 7J2000D**

|                            |   |  |   |                     |           |                    |
|----------------------------|---|--|---|---------------------|-----------|--------------------|
| 7. DD 250 REQ<br><b>LT</b> | 9. DIST STATEMENT REQUIRED<br><b>SEE BLK 16</b> | 10. FREQUENCY<br><b>ONE/R</b>                          | 12. DATE OF FIRST SUBMISSION<br><b>SEE BLK 16</b> | 14. DISTRIBUTION    | b. COPIES |                    |
| 8. APP CODE<br><b>N/A</b>  | 11. AS OF DATE<br><b>N/A</b>                    | 13. DATE OF SUBSEQUENT SUBMISSION<br><b>SEE BLK 16</b> | a. ADDRESSEE                                      |                     | Draft     | Final              |
|                            |   |  |   |                     | reg       | Reps               |
|                            |   |  |   | <b>Code 7J2000D</b> | <b>0</b>  | <b>1</b>           |
|                            |   |  |   | <b>Code 254000D</b> |           | <b>LTR    ONLY</b> |

**Block 16 Remarks**

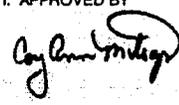
**Block 4:** May be in contractor format as long as DID is used for guidance.

**Block 9:** Distribution Statement shall be provided by the Government prior to 1<sup>st</sup> submittal.

**Block 12:** Shall be delivered concurrent with training.

**Block 14:** Shall be delivered in an electronic format agreed upon by both Government and Contractor prior to 1<sup>st</sup> submittal.

|           |          |          |          |
|-----------|----------|----------|----------|
| 15. TOTAL | <b>0</b> | <b>1</b> | <b>0</b> |
|-----------|----------|----------|----------|

|  |                          |  |                          |
|--|--------------------------|--|--------------------------|
| G. PREPARED BY<br><b>Naval Air Warfare Center,<br/>Weapons Division, China Lake, CA<br/>93555-6100</b> | H. DATE<br><b>070108</b> | I. APPROVED BY<br><br><b>DRRB Chairperson</b> | J. DATE<br><b>070111</b> |
|--|--------------------------|--|--------------------------|



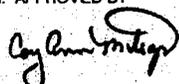




**CONTRACT DATA REQUIREMENTS LIST**  
**(1 Data Item)**

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA. 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government Issuing Contracting Officer for Contract/PR No. listed in Block E.

| A. CONTRACT LINE ITEM NO.   |   | B. EXHIBIT                                      | C. CATEGORY:<br>TDP    TM    OTHER: MGMT   |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
|---|---|---|--|--|-------|-----------|--|-------|--|--|-----|------|---|---|---|---|---|---|---|---|
| D. SYSTEM/ITEM<br><b>Molten Carbonate Fuel Cell Demonstration</b>   |   | E. CONTRACT/PR NO.                              | F. CONTRACTOR  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| 1. DATA ITEM NO.<br><b>A00A</b>   | 2. TITLE OF DATA ITEM<br><b>PROGRESS REPORT</b> |   | 3. SUBTITLE  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| 4. AUTHORITY (Data Acquisition Document No.)<br><b>DI-MGMT-8055A</b>  |   | 5. CONTRACT REFERENCE<br><b>SOW Para 4.2.1</b>  |  | 6. REQUIRING OFFICE<br><b>NAVAIRWD CODE 7J2000D</b>                                    |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| 7. DD 250 REQ<br><b>LT</b>  | 9. DIST STATEMENT REQUIRED<br><b>SEE BLK</b>    | 10. FREQUENCY<br><b>QTRLY</b>                   | 12. DATE OF FIRST SUBMISSION<br><b>90 DAC</b>  | 14. DISTRIBUTION<br><br>a. ADDRESSEE<br><br><b>Code 7J2000D</b><br><b>Code 254000D</b> |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| 8. APP CODE<br><b>N/A</b>   | 11. AS OF DATE<br><b>16</b>                     | 13. DATE OF SUBSEQUENT SUBMISSION<br><b>EOQ</b> | 15. TOTAL  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| <p><b>Block 16 Remarks</b></p> <p><b>Block 4: May be in contractor format as long as DID is used for guidance.</b></p> <p><b>Block 9: Distribution Statement shall be provided by the Government prior to 1<sup>st</sup> submittal.</b></p> <p><b>Block 14: Shall be delivered in an electronic format agreed upon by both Government and Contractor prior to 1<sup>st</sup> submittal.</b></p> |   |   | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Draft</th> <th colspan="2">b. COPIES</th> </tr> <tr> <th>Final</th> <th></th> </tr> <tr> <td></td> <td>Rev</td> <td>Comm</td> </tr> </thead> <tbody> <tr> <td align="center">0</td> <td align="center">1</td> <td align="center">0</td> </tr> <tr> <td align="center">0</td> <td align="center">1</td> <td align="center">0</td> </tr> <tr> <td align="center">0</td> <td align="center">2</td> <td align="center">0</td> </tr> </tbody> </table> |  | Draft | b. COPIES |  | Final |  |  | Rev | Comm | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| Draft   | b. COPIES                                       |   |  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
|   | Final   |   |  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
|   | Rev   | Comm  |  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| 0   | 1   | 0   |  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| 0   | 1   | 0   |  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| 0   | 2   | 0   |  |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
| G. PREPARED BY<br><b>Naval Air Warfare Center,<br/>Weapons Division, China Lake, CA<br/>93555-6100</b>  |   | H. DATE<br><b>070108</b>                        | I. APPROVED BY<br><br><b>DRRB Chairperson</b>   |  |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |
|   |   |   |  | J. DATE<br><b>070111</b>   |       |           |  |       |  |  |     |      |   |   |   |   |   |   |   |   |







DEPARTMENT OF THE NAVY

COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
PEARL HARBOR HI 96860-5101

5090  
Ser N45/ 00180  
05 JUL 2006

*cy-Staff* JUL 12 09:10

State of Hawaii  
Department of Health  
Environmental Management Division  
Safe Drinking Water Branch  
919 Ala Moana Boulevard Room 308  
Honolulu HI 96814

Dear Sir or Madam:

SUBJECT: DISINFECTANT RESIDUAL MONITORING FOR THE PMRF WATER SYSTEM (PWS No. 430)

As required by the Hawaii Administrative Rules Chapter 11-20-45.1, we are forwarding the disinfectant residual results for the Pacific Missile Range Facility (PMRF), PWS No. 430. These results represent three months of monitoring from April to June 2006.

Enclosure (1) provides a summary of the monthly results and required averages. The laboratory analyses were conducted by your laboratory and have not been provided in this submittal. We will gladly provide the laboratory reports if required. The results show that the maximum residual disinfectant level was not exceeded.

Enclosure: 1. Summary of Monthly Disinfectant Residual Level:



LINDA LINGLE  
GOVERNOR OF HAWAII



File 11330.8

CHIYOME I. FUKINO, M.D.  
DIRECTOR OF HEALTH

Dileep G. Bal, M.D., M.S., M.P.H.  
Kauai District Health Officer

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
3040 UMI STREET  
LIHUE, HAWAII 96766



**SAFE DRINKING WATER BRANCH**

**January 17, 2006**

Enclosed are copies of chemical analysis reports for samples collected from your drinking water system.

As a reminder, Section 11-20-19 of Hawaii Administrative Rules, Title 11, Chapter 20, Rules Relating to Potable Water Systems, requires that these chemical analyses be kept as part of your records for not less than 10 years.

If you have any questions regarding these sample results, please call at 241-3323.

Sincerely,

A handwritten signature in dark ink, appearing to be "D. Bal".

DNIC



| Contaminants          | MCL (ug/L) | Result (ug/L) | Date Analyzed | Analyst |            |
|-----------------------|------------|---------------|---------------|---------|------------|
| Total Haloacetic Acid | 60         | <1.0          | 10/26/05      | Pat     | P10-05-220 |
| †                     |            |               |               |         |            |
| Monochloroacetic acid |            | <1.0          |               |         |            |
| Monobromoacetic acid  |            | <1.0          |               |         |            |
| Dichloroacetic acid   |            | <1.0          |               |         |            |
| Trichloroacetic acid  |            | <1.0          |               |         |            |
| Dibromoacetic acid    |            | <1.0          |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |
|                       |            |               |               |         |            |

MCL = Maximum Contaminant Level

Meth

Rep

For

# SAFE DRINKING WATER BRANCH CHAIN OF CUSTODY & TRIHALOMETHANE RESULT REPORT

Water System Name: PMRF

Number 430

Sample Point No: 430-901

Sample Location: 1201 Regulus Drive (back site 430-003)

Type of Sample: Routine:  Special:

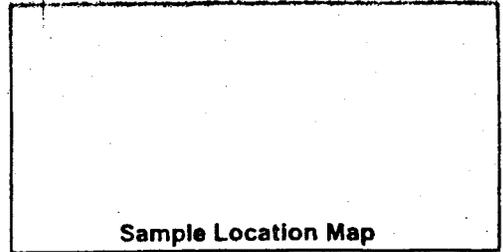
Cl<sub>2</sub> Reading: 0.42 mg/l

Collection Remarks \_\_\_\_\_

Sampler(s) JL 56-100

Date: 10/25/03

Time: 7:45



| Administration Only                     |                                      |
|---|--------------------------------------|
| <input type="checkbox"/> Copies Done    | <input type="checkbox"/> Pos. Result |
| <input type="checkbox"/> Sent System    | <input type="checkbox"/> Chem Pos.   |
| <input type="checkbox"/> Sent NI Office | <input type="checkbox"/> Inor. Mon.  |
| <input type="checkbox"/> Data Entered   | <input type="checkbox"/> Violation   |
| <input type="checkbox"/> SDWB Data      | <input type="checkbox"/> Neg. Result |
| <input type="checkbox"/> GIS Data       | <input type="checkbox"/> Reduce Mon. |

|                        |                  |                    |                  |
|------------------------|------------------|--------------------|------------------|
| Relinquished by: _____ | Date/Time: _____ | Received by: _____ | Date/Time: _____ |
| Relinquished by: _____ | Date/Time: _____ | Received by: _____ | Date/Time: _____ |

De \_\_\_\_\_

35

no: 005 940

PI0-05-21A

Method of Shipment: Hand Carried  Hawaiian Air  Island Air  Other (specify): \_\_\_\_\_

Custody Seal Intact? Yes  No  Not Used

|  |                  |                                |                  |
|--|------------------|--------------------------------|------------------|
| Sample Lab No. Locked in Refrig. by: _____ | Date/Time: _____ | Removed from Refrig. by: _____ | Date/Time: _____ |
|--|------------------|--------------------------------|------------------|

Method: EPA 502.2

Dechlorination: Approx. 3 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>

Lab NOK: Sm bubble in sample JRL. 10/25/03 WJ



File 11330.8

Laboratory  
Data Report  
#151946

Samples Received  
07/13/05

| Prepared | Analyzed | QC Ref# | Method | Analyte | Result | Units | MRL | Dilution |
|----------|----------|---------|--------|---------|--------|-------|-----|----------|
|----------|----------|---------|--------|---------|--------|-------|-----|----------|

BS-335 PMRF (2507130125)      Sampled on 07/12/05 07:15

Haloacetic Acids

|          |                |        |                 |                               |     |       |     |   |
|----------|----------------|--------|-----------------|-------------------------------|-----|-------|-----|---|
| 07/14/05 | 07/15/05 17:45 | 279220 | ( ML/S6251B )   | Bromochloroacetic acid        | ND  | ug/l  | 1.0 | 1 |
| 07/14/05 | 07/15/05 17:45 | 279220 | ( ML/S6251B )   | Dibromoacetic acid            | ND  | ug/l  | 1.0 | 1 |
| 07/14/05 | 07/15/05 17:45 | 279220 | ( ML/S6251B )   | Dichloroacetic acid           | ND  | ug/l  | 1.0 | 1 |
| 07/14/05 | 07/15/05 17:45 | 279220 | ( ML/S6251B )   | Monobromoacetic acid          | ND  | ug/l  | 1.0 | 1 |
| 07/14/05 | 07/15/05 17:45 | 279220 | ( ML/S6251B )   | Monochloroacetic acid         | ND  | ug/l  | 2.0 | 1 |
| 07/14/05 | 07/15/05 17:45 | 279220 | ( ML/S6251B )   | Trichloroacetic acid          | ND  | ug/l  | 1.0 | 1 |
| 07/14/05 | 07/15/05 17:45 | 279220 | ( ML/S6251B )   | D/DBP Haloacetic Acids (HAA5) | ND  | ug/l  | 1.0 | 1 |
|          |                |        | ( ML/SM 6251B ) | 1.2.3-TCP(80-120)             | 99  | † Rec |     |   |
|          |                |        | ( ML/SM 6251B ) | 2.3-Dibrom Acid(70-130)       | 105 | † Rec |     |   |

BS-335 PMRF (2507130127)      Sampled on 07/12/05 07:25

Trihalomethanes by EPA 551.1

|          |                |        |                  |                             |     |       |      |   |
|----------|----------------|--------|------------------|-----------------------------|-----|-------|------|---|
| 07/15/05 | 07/17/05 02:31 | 279210 | ( ML/EPA 551.1 ) | Bromoform                   | 2.3 | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 02:31 | 279210 | ( ML/EPA 551.1 ) | Chloroform                  | ND  | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 02:31 | 279210 | ( ML/EPA 551.1 ) | Dibromochloromethane        | 0.5 | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 02:31 | 279210 | ( ML/EPA 551.1 ) | Bromodichloromethane        | ND  | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 02:31 | 279210 | ( ML/EPA 551.1 ) | Total Trihalomethanes       | 2.8 | ug/l  | 0.50 | 1 |
|          |                |        | ( ML/EPA 551.1 ) | 1.2-Dibromopropane (80-120) | 98  | † Rec |      |   |

TRAVEL BLANK-ANALYZE (2507130187)      Sampled on 07/12/05 00:00

Trihalomethanes by EPA 551.1

|          |                |        |                  |                             |    |       |      |   |
|----------|----------------|--------|------------------|-----------------------------|----|-------|------|---|
| 07/15/05 | 07/17/05 07:55 | 279210 | ( ML/EPA 551.1 ) | Bromoform                   | ND | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 07:55 | 279210 | ( ML/EPA 551.1 ) | Chloroform                  | ND | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 07:55 | 279210 | ( ML/EPA 551.1 ) | Dibromochloromethane        | ND | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 07:55 | 279210 | ( ML/EPA 551.1 ) | Bromodichloromethane        | ND | ug/l  | 0.50 | 1 |
| 07/15/05 | 07/17/05 07:55 | 279210 | ( ML/EPA 551.1 ) | Total Trihalomethanes       | ND | ug/l  | 0.50 | 1 |
|          |                |        | ( ML/EPA 551.1 ) | 1.2-Dibromopropane (80-120) | 96 | † Rec |      |   |

---

QC Ref #279210 - Trihalomethanes by EPA 551.1 Analysis Date: 07/17/2005

2507130127  
2507130187

BS-335 PMRF  
TRAVEL BLANK-ANALYZE

Analyzed by: mad  
Analyzed by: mad

QC Ref #279220 - Haloacetic Acids

Analysis Date: 07/15/2005

2507130125

BS-335 PMRF

Analyzed by: dym

QC Ref #279210

Trihalomethanes by EPA 551.1

| QC   | Analyte                   | Spiked   | Recovered | Units | Yield (%) | Limits (%) | RPD (%) |
|------|---------------------------|----------|-----------|-------|-----------|------------|---------|
| DUP  | Spiked sample             | Lab # 25 | 07130180  | NONE  |           | ( 0-0 )    |         |
| DUP2 | Spiked sample             | Lab # 25 | 07130183  | NONE  |           | ( 0-0 )    |         |
| MS1  | Spiked sample             | Lab # 25 | 07120281  | NONE  |           | ( 0-0 )    |         |
| MS2  | Spiked sample             | Lab # 25 | 07130182  | NONE  |           | ( 0-0 )    |         |
| DUP  | Bromoform                 | 0.8      | 0.8       | UGL   |           | ( 0-20 )   | 0.0     |
| DUP2 | Bromoform                 | 1.9      | 1.8       | UGL   |           | ( 0-20 )   | 5.4     |
| LCS2 | Bromoform                 | 20       | 21        | UGL   | 105.0     | ( 80-120 ) |         |
| LCS3 | Bromoform                 | 40       | 43        | UGL   | 107.5     | ( 80-120 ) |         |
| MBLK | Bromoform                 | ND       | <0.50     | UGL   |           |            |         |
| MS1  | Bromoform                 | 20       | 22        | UGL   | 110.0     | ( 80-120 ) |         |
| MS2  | Bromoform                 | 40       | 40        | UGL   | 100.0     | ( 80-120 ) |         |
| DUP  | Chloroform                | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| DUP2 | Chloroform                | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| LCS2 | Chloroform                | 20       | 19        | UGL   | 95.0      | ( 80-120 ) |         |
| LCS3 | Chloroform                | 40       | 40        | UGL   | 100.0     | ( 80-120 ) |         |
| MBLK | Chloroform                | ND       | <0.50     | UGL   |           |            |         |
| MS1  | Chloroform                | 20       | 21        | UGL   | 105.0     | ( 80-120 ) |         |
| MS2  | Chloroform                | 40       | 38        | UGL   | 95.0      | ( 80-120 ) |         |
| DUP  | Dibromochloromethane      | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| DUP2 | Dibromochloromethane      | 1.4      | 1.3       | UGL   |           | ( 0-20 )   | 7.4     |
| LCS2 | Dibromochloromethane      | 20       | 20        | UGL   | 100.0     | ( 80-120 ) |         |
| LCS3 | Dibromochloromethane      | 40       | 42        | UGL   | 105.0     | ( 80-120 ) |         |
| MBLK | Dibromochloromethane      | ND       | <0.50     | UGL   |           |            |         |
| MS1  | Dibromochloromethane      | 20       | 21        | UGL   | 105.0     | ( 80-120 ) |         |
| MS2  | Dibromochloromethane      | 40       | 35        | UGL   | 97.5      | ( 80-120 ) |         |
| DUP  | Bromodichloromethane      | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| DUP2 | Bromodichloromethane      | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| LCS2 | Bromodichloromethane      | 20       | 20        | UGL   | 100.0     | ( 80-120 ) |         |
| LCS3 | Bromodichloromethane      | 40       | 41        | UGL   | 102.5     | ( 80-120 ) |         |
| MBLK | Bromodichloromethane      | ND       | <0.50     | UGL   |           |            |         |
| MS1  | Bromodichloromethane      | 20       | 21        | UGL   | 105.0     | ( 80-120 ) |         |
| MS2  | Bromodichloromethane      | 40       | 38        | UGL   | 95.0      | ( 80-120 ) |         |
| CCCL | 1,2-Dibromopropane (surr) | 100      | 99        | NR    | 99.0      | ( 80-120 ) |         |

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
Criteria for MS and DUP are advisory only, batch control is based on LCS. Criteria for duplicates  
are advisory only, unless otherwise specified in the method.

|      |                           |     |     |    |       |            |
|------|---------------------------|-----|-----|----|-------|------------|
| DUP  | 1,2-Dibromopropane (surr) | 100 | 87  | NR | 87.0  | ( 80-120 ) |
| DUP2 | 1,2-Dibromopropane (surr) | 100 | 102 | NR | 102.0 | ( 80-120 ) |
| LCS2 | 1,2-Dibromopropane (surr) | 100 | 99  | NR | 99.0  | ( 80-120 ) |
| LCS3 | 1,2-Dibromopropane (surr) | 100 | 103 | NR | 103.0 | ( 80-120 ) |
| MBLK | 1,2-Dibromopropane (surr) | 100 | 104 | NR | 104.0 |            |
| MS1  | 1,2-Dibromopropane (surr) | 100 | 95  | NR | 95.0  | ( 80-120 ) |
| MS2  | 1,2-Dibromopropane (surr) | 100 | 97  | NR | 97.0  | ( 80-120 ) |

QC Ref #279220

Haloacetic Acids

| QC   | Analyte                | Spiked   | Recovered | Units | Yield (%) | Limits (%) | RPD (%) |
|------|------------------------|----------|-----------|-------|-----------|------------|---------|
| DUP  | Spiked sample          | Lab # 25 | 07120274  | NONE  |           | ( 0-0 )    |         |
| DUP2 | Spiked sample          | Lab # 25 | 07120276  | NONE  |           | ( 0-0 )    |         |
| MS   | Spiked sample          | Lab # 25 | 07120273  | NONE  |           | ( 0-0 )    |         |
| MS2  | Spiked sample          | Lab # 25 | 07120275  | NONE  |           | ( 0-0 )    |         |
| DUP  | Bromochloroacetic acid | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| DUP2 | Bromochloroacetic acid | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| LCS1 | Bromochloroacetic acid | 1.0      | 1.23      | UGL   | 123.0     | ( 70-152 ) |         |
| LCS2 | Bromochloroacetic acid | 20       | 19        | UGL   | 95.0      | ( 85-115 ) |         |
| LCS3 | Bromochloroacetic acid | 32       | 33        | UGL   | 103.1     | ( 85-115 ) |         |
| MBLK | Bromochloroacetic acid | ND       | <1.0      | UGL   |           |            |         |
| MS   | Bromochloroacetic acid | 20       | 20        | UGL   | 100.0     | ( 78-117 ) |         |
| MS2  | Bromochloroacetic acid | 32       | 32        | UGL   | 100.0     | ( 78-117 ) |         |
| DUP  | Dibromoacetic acid     | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| DUP2 | Dibromoacetic acid     | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| LCS1 | Dibromoacetic acid     | 1.0      | 1.30      | UGL   | 130.0     | ( 70-155 ) |         |
| LCS2 | Dibromoacetic acid     | 20       | 20        | UGL   | 100.0     | ( 85-115 ) |         |
| LCS3 | Dibromoacetic acid     | 32       | 33        | UGL   | 103.1     | ( 85-115 ) |         |
| MBLK | Dibromoacetic acid     | ND       | <1.0      | UGL   |           |            |         |
| MS   | Dibromoacetic acid     | 20       | 21        | UGL   | 105.0     | ( 79-119 ) |         |
| MS2  | Dibromoacetic acid     | 32       | 33        | UGL   | 103.1     | ( 79-119 ) |         |
| DUP  | Dichloroacetic acid    | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| DUP2 | Dichloroacetic acid    | ND       | ND        | UGL   |           | ( 0-20 )   |         |
| LCS1 | Dichloroacetic acid    | 1.0      | 0.98      | UGL   | 98.0      | ( 61-147 ) |         |
| LCS2 | Dichloroacetic acid    | 20       | 20        | UGL   | 100.0     | ( 85-115 ) |         |

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Laboratory  
QC Report  
#151946

|      |                           |     |      |     |       |               |
|------|---------------------------|-----|------|-----|-------|---------------|
| LCS3 | Dichloroacetic acid       | 32  | 33   | UGL | 103.1 | ( 85-115 )    |
| MBLK | Dichloroacetic acid       | ND  | <1.0 | UGL |       |               |
| MS   | Dichloroacetic acid       | 20  | 20   | UGL | 100.0 | ( 78-117 )    |
| MS2  | Dichloroacetic acid       | 32  | 33   | UGL | 103.1 | ( 78-117 )    |
| DUP  | Monobromoacetic acid      | ND  | ND   | UGL |       | ( 0-23 )      |
| DUP2 | Monobromoacetic acid      | ND  | ND   | UGL |       | ( 0-23 )      |
| LCS1 | Monobromoacetic acid      | 1.0 | 1.11 | UGL | 111.0 | ( 90-148 )    |
| LCS2 | Monobromoacetic acid      | 20  | 20   | UGL | 100.0 | ( 85-115 )    |
| LCS3 | Monobromoacetic acid      | 32  | 32   | UGL | 100.0 | ( 85-115 )    |
| MBLK | Monobromoacetic acid      | ND  | <1.0 | UGL |       |               |
| MS   | Monobromoacetic acid      | 20  | 20   | UGL | 100.0 | ( 79-117 )    |
| MS2  | Monobromoacetic acid      | 32  | 34   | UGL | 106.2 | ( 79-117 )    |
| DUP  | Monochloroacetic acid     | ND  | ND   | UGL |       | ( 0-20 )      |
| DUP2 | Monochloroacetic acid     | ND  | ND   | UGL |       | ( 0-20 )      |
| LCS1 | Monochloroacetic acid     | 2.0 | 1.80 | UGL | 90.3  | ( 78-141 )    |
| LCS2 | Monochloroacetic acid     | 20  | 20   | UGL | 100.0 | ( 85-115 )    |
| LCS3 | Monochloroacetic acid     | 32  | 33   | UGL | 103.1 | ( 85-115 )    |
| MBLK | Monochloroacetic acid     | ND  | <2.0 | UGL |       |               |
| MS   | Monochloroacetic acid     | 20  | 19   | UGL | 95.0  | ( 70-130 )    |
| MS2  | Monochloroacetic acid     | 32  | 33   | UGL | 103.1 | ( 70-130 )    |
| DUP  | 2,3-Dibromopropionic acid | 100 | 108  | VR  | 108.0 | ( 70-130 )    |
| DUP2 | 2,3-Dibromopropionic acid | 100 | 104  | VR  | 104.0 | ( 70-130 )    |
| LCS1 | 2,3-Dibromopropionic acid | 100 | 92   | VR  | 92.0  | ( 70-130 )    |
| LCS2 | 2,3-Dibromopropionic acid | 100 | 103  | VR  | 103.0 | ( 70-130 ) 11 |
| LCS3 | 2,3-Dibromopropionic acid | 100 | 102  | VR  | 102.0 | ( 70-130 )    |
| MBLK | 2,3-Dibromopropionic acid | 100 | 98   | VR  | 98.0  |               |
| MS   | 2,3-Dibromopropionic acid | 100 | 111  | VR  | 111.0 | ( 70-130 )    |
| MS2  | 2,3-Dibromopropionic acid | 100 | 111  | VR  | 111.0 | ( 70-130 )    |
| DUP  | Trichloroacetic acid      | ND  | ND   | UGL |       | ( 0-20 )      |
| DUP2 | Trichloroacetic acid      | ND  | ND   | UGL |       | ( 0-20 )      |
| LCS1 | Trichloroacetic acid      | 1.0 | 1.08 | UGL | 108.0 | ( 72-141 )    |
| LCS2 | Trichloroacetic acid      | 20  | 21   | UGL | 105.0 | ( 85-115 )    |
| LCS3 | Trichloroacetic acid      | 32  | 33   | UGL | 103.1 | ( 85-115 )    |
| MBLK | Trichloroacetic acid      | ND  | <1.0 | UGL |       |               |
| MS   | Trichloroacetic acid      | 20  | 21   | UGL | 105.0 | ( 77-121 )    |
| MS2  | Trichloroacetic acid      | 32  | 33   | UGL | 103.1 | ( 77-121 )    |

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are advisory only, unless otherwise specified in the method.

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Criteria for MS and DUP are advisory only, batch control is based on LCS. Criteria for duplicates  
are advisory only, unless otherwise specified in the method.

The Gas Company  
Stream G/C Analysis Report

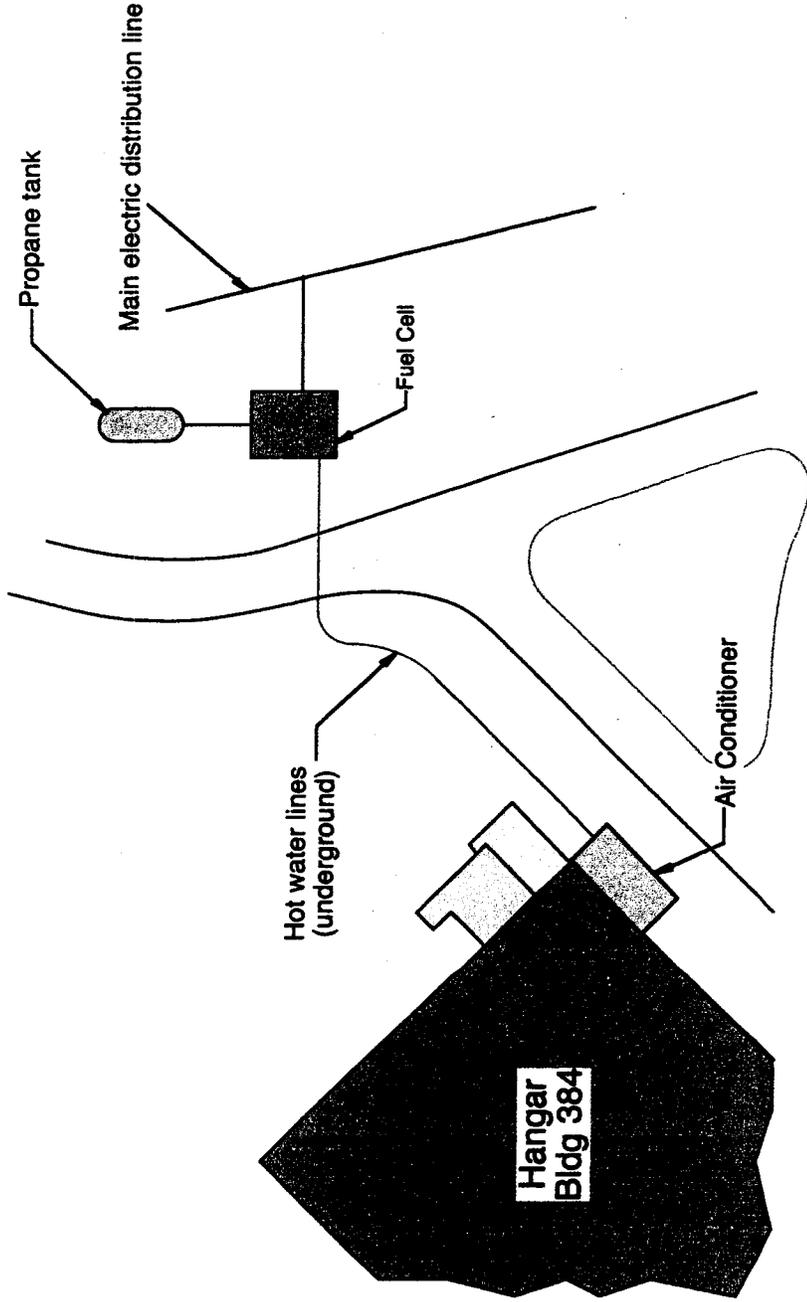
| Date<br>Components   | Typical Analysis |                     |                     |                       |                 |                 |                 |                       |                     |                         |
|--|------------------|---------------------|---------------------|-----------------------|-----------------|-----------------|-----------------|-----------------------|---------------------|-------------------------|
|  | Apr-2005<br>SNG  | May-2001<br>LPG Air | May-2001<br>LPG Air | Mar-2005<br>HI Octane | May-2003<br>LPG | Apr-2005<br>SNG | May-2003<br>LPG | Mar-2005<br>HI Octane | May-2001<br>LPG Air | May-2001<br>LPG Air SNG |
| O2   | -                | 4.12                | 8.40                | -                     | -               | 18.41           | 43.98           | 44.63                 | 38.24               | 28.41                   |
| N2   | -                | 15.51               | 31.60               | -                     | -               | 1.00            | 0.98            | 0.98                  | 0.99                | 1.00                    |
| CO   | 0.32             | 0.16                | -                   | -                     | -               | NA              | 4.34            | 4.23                  | NA                  | NA                      |
| CO2  | 4.25             | 2.45                | -                   | -                     | -               | NA              | 0.52            | 0.51                  | NA                  | NA                      |
| H2   | 9.38             | 4.22                | -                   | -                     | -               | NA              | 139.57          | 146.50                | NA                  | NA                      |
| C1   | 80.20            | 41.01               | -                   | -                     | -               | 3.05            | 5.37            | 5.85                  | 8.82                | 4.06                    |
| C2   | 0.03             | 0.04                | 0.07                | 0.95                  | 0.80            | 0.64            | 1.55            | 1.57                  | 1.33                | 0.99                    |
| -C3  | -                | 15.29               | 31.20               | 0.46                  | 65.19           | 20.14           | 8.37            | 8.24                  | 9.73                | 13.13                   |
| C3   | 0.32             | 11.19               | 22.71               | 93.76                 | 25.75           | NA              | 36.69           | 35.07                 | NA                  | NA                      |
| IC4  | 2.07             | 1.55                | 0.63                | 4.83                  | 3.85            | 1.017.65        | 2,487.37        | 2,553.16              | 1,488.71            | 1,254.39                |
| NC4  | 3.12             | 3.91                | 5.17                | -                     | 4.25            | 1,045.79        | 2,535.59        | 2,623.75              | 1,529.87            | 1,289.08                |
| IC5  | 0.29             | 0.46                | 0.20                | -                     | 0.15            | 21,248.58       | 21,233.74       | 21,828.30             | 14,878.95           | 16,930.63               |
| NC5  | 0.01             | 0.08                | 0.00                | -                     | 0.01            | NA              | 92,229.12       | 91,580.89             | NA                  | NA                      |
| EC5  | 0.01             | 0.02                | 0.02                | -                     | 0.20            | 926.90          | 903.60          | 919.56                | 916.16              | 921.90                  |
| NC6  | -                | -                   | -                   | -                     | 0.20            | 1,276.35        | 1,985.25        | 2,038.14              | 1,280.85            | 1,283.97                |
| NC7  | -                | -                   | -                   | -                     | -               | 12.28           | 24.57           | 16.08                 | 22.11               | 17.02                   |
| NC8  | -                | -                   | -                   | -                     | -               | 350.14          | 668.68          | 667.95                | 497.67              | 425.38                  |
| NC9  | -                | -                   | -                   | -                     | -               | 643.25          | 644.50          | 613.24                | 598.73              | 624.59                  |
| C10  | -                | -                   | -                   | -                     | -               | 3,990.30        | 188.34          | 172.26                | 101.93              | 2,085.48                |
| Total  | 100.00           | 100.00              | 100.00              | 100.00                | 100.00          | 1,033.92        | 2,504.18        | 2,591.47              | 1,510.95            | 1,273.67                |
| <p>Net Heating Value 932.62 2,326.35 2,384.75 1,401.89 1,168.20 76.14</p> <p>Lb/mol Dry @ 30°HG+4°H2O, 60°F 49.22 119.41 121.31 102.82</p> |                  |                     |                     |                       |                 |                 |                 |                       |                     |                         |
| <p><b>Typical Ranges</b></p>   |                  |                     |                     |                       |                 |                 |                 |                       |                     |                         |
| Components   | SNG              | LPG                 | HI Octane           | LPG Air               | LPG Air         | LPG Air SNG     |                 |                       |                     |                         |
| CO   | 0.25-0.4%        | #/A                 | #/A                 | #/A                   | #/A             |                 |                 |                       |                     |                         |
| CO2  | 3-5%             | #/A                 | #/A                 | #/A                   | #/A             |                 |                 |                       |                     |                         |
| H2   | 9-10%            | #/A                 | #/A                 | #/A                   | #/A             |                 |                 |                       |                     |                         |
| C1   | 78-84%           | #/A                 | #/A                 | #/A                   | #/A             |                 |                 |                       |                     |                         |
| C2   | 0-0.05%          | 0-0.5%              | 0.25-1.5%           | 0-0.5%                | 0-0.5%          |                 |                 |                       |                     |                         |
| -C3  | 0%               | 40-70%              | 5% max.             | 5% max.               | 5% max.         |                 |                 |                       |                     |                         |
| C3   | 0.03-0.5%        | 25-60%              | 80-97%              | 80-97%                | 80-97%          |                 |                 |                       |                     |                         |
| IC4  | 1.5-3%           | 0.5-2%              | 10% max.            | 10% max.              | 10% max.        |                 |                 |                       |                     |                         |
| NC4  | 1.5-4%           | 0.5-8%              | 10% max.            | 10% max.              | 10% max.        |                 |                 |                       |                     |                         |
| IC5  | 0.5-1%           | 0-1%                | 0-1%                | 0-1%                  | 0-1%            |                 |                 |                       |                     |                         |
| NC5  | 0.25-0.75%       | 0-0.5%              | 0-0.5%              | 0-0.5%                | 0-0.5%          |                 |                 |                       |                     |                         |
| EC5  | 0-0.05%          | #/A                 | #/A                 | #/A                   | #/A             |                 |                 |                       |                     |                         |
| C8+  | 0-0.1%           | 0-0.5%              | 0%                  | 0%                    | 0%              |                 |                 |                       |                     |                         |

Source: SNG Plant

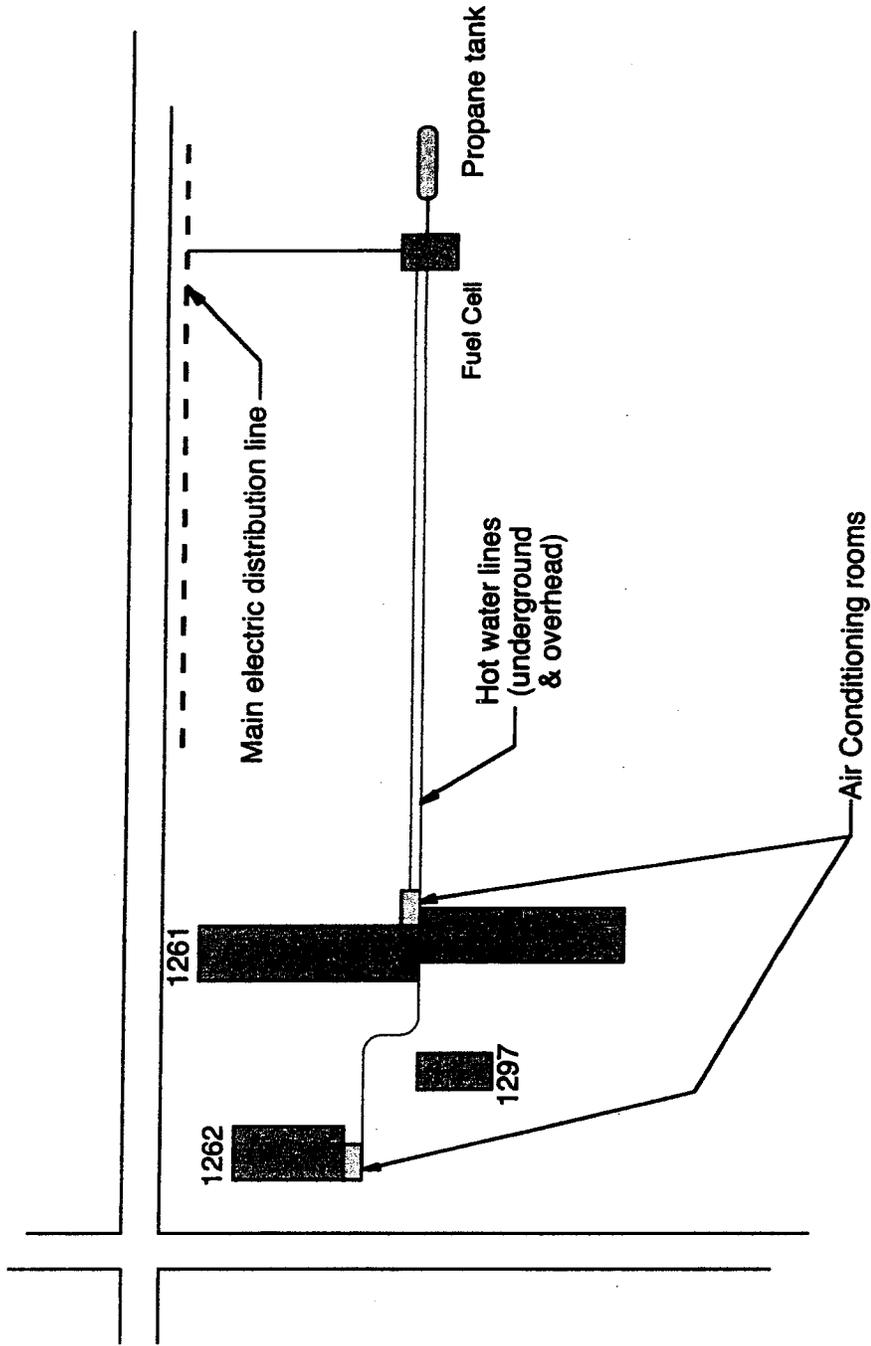
**NOTES:**

Typical product profile. Variances occur in the make-up of these products:  
 SNG: Typical profile of SNG manufactured at the SNG Plant.  
 LPG: Typical profile of commercial propane received from the Chevron refinery.  
 HI-Octane Propane: Typical profile of motor propane received from the Tesoro refinery.  
 LPG Air: Propane & Air that may be fed into the SNG system.  
 LPG Air SNG: Sample of Propane Air mixed with SNG at a ratio of 31/49 SNG/Propane Air with a specific gravity of .985.  
 HI-Octane Propane: IC4 & NC4 10% Max for Butanes are combined maximum levels.  
 Typical Ranges are not provided for LPG Air and LPG Air-SNG because the blend could range from 100% SNG to 31/49 SNG/Propane Air depending on how the propane air unit is running.

Primary site for Molten Carbonate Fuel Cell Combined Heat and Power System (MCFC CHP)



Secondary site for Molten Carbonate Fuel Cell Combined Heat and Power (MCFC CHP) system



CONTRACTOR PERFORMANCE EVALUATION SURVEY

NAME, ADDRESS, TELEPHONE NUMBER AND EMAIL ADDRESS OF PERSON ANSWERING THE FOLLOWING QUESTIONS ABOUT PAST PERFORMANCE OF CONTRACTOR.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CONTRACT NUMBER: \_\_\_\_\_

CONTRACTOR NAME: \_\_\_\_\_

TYPE OF CONTRACT: Negotiated/Sealed Bid (circle one)

KIND OF SERVICE PROVIDED: \_\_\_\_\_

CONTRACT VALUE: \$ \_\_\_\_\_

STATUS: Active/Complete (circle one)

\_\_\_\_\_

| <u>Performance Elements</u>  | <u>Ratings</u> |      |          |     |          |         |
|--|----------------|------|----------|-----|----------|---------|
| 1. Quality of Product or Service   | Very High      | High | Moderate | Low | Very Low | Unknown |
| a. The Contractor provided a product or service that conformed to contract requirements, specifications, standards of good workmanship, and technical excellence   |                |      |          |     |          |         |
| b. The Contractor submitted accurate reports.  |                |      |          |     |          |         |
| c. The Contractor utilized personnel who were appropriate to the effort performed  |                |      |          |     |          |         |
| Comments:  |                |      |          |     |          |         |
| _____  |                |      |          |     |          |         |
| 2. Timeliness of Performance   |                |      |          |     |          |         |
| a. The tasks required under this effort, included wrap-up and contract administration, were performed in a timely manner, met interim milestones, and were in accordance with the period of performance of the contract. |                |      |          |     |          |         |
| b. The Contractor was responsive to technical and /or contractual directions.  |                |      |          |     |          |         |

Comments:

---

3. Business Practices

- a. The Contractor demonstrated effective management over the effort performed.
- b. The Contractor maintained an open line of communication so that the COR/and /or Technical Point of Contact were appraised of technical, cost, and schedule issues.
- c. The Contractor presented information and correspondence in a clear, concise, and business like manner.
- d. The Contractor promptly notified the COR, Technical Point of contact, and/or Contracting Officer in a timely manner regarding urgent Issues.
- e. The Contractor cooperated with the Government providing flexible, proactive, and effective recommended solutions to critical program issues.
- f. The Contractor made timely award to, and demonstrated effective management of its subcontractors.

Comments:

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4. Customer Satisfaction

- a. The products/services provided adequately the needs of the program.
- b. As an end user of the services provided, I was satisfied with the performance of the Contractor under this effort.

Comments:

6. Would you select this Contractor again? Please explain Yes/ No. (circle one)

7. Do you have any other comments about the Contractor that might be helpful in our decision? \_\_\_\_\_

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