

## **ENVIRONMENTAL SUPPORT SERVICES DRAFT REQUIREMENTS DOCUMENT**

### **1.0 INTRODUCTION**

It is NASA Langley Research Center (LaRC) policy to protect and enhance the quality of the environment through compliance with Federal, State, and local regulatory authorities; Executive Orders; and NASA and LaRC policies and directives. Located in the ecologically sensitive Chesapeake Bay watershed, LaRC is committed to fulfill our mission in a manner that promotes environmental stewardship, sustainability, and continual improvement, while mitigating environmentally driven mission risks.

The LaRC Environmental is managed by the Environmental Management Branch (EMB) within the Center Operations Directorate. EMB is responsible for LaRC's environmental compliance, management, conservation, and sustainability programs. These responsibilities include coordination and integration of all environmental programs, interpreting environmental regulations as they apply to LaRC's activities, providing guidance on regulatory requirements, acting as the formal point of contact with all environmental regulation agencies, development assistance and review of environmental permits, implementing cost effective energy efficiency and water conservation practices, remediation of contaminated sites, cease and desist authority for all polluting activities, and compliance monitoring and surveillance.

The Contractor shall provide the necessary management, personnel, equipment and other resources required to support EMB in the planning and accomplishment of this activity. This requires a detailed knowledge of applicable Federal statutes and regulations including the Clean Water Act (CWA), Clean Air Act (CAA), Resources Conservation and Recovery Act (RCRA), Emergency Planning and Community Right-to-Know Act (EPCRA), National Environmental Policy Act (NEPA), Endangered Species Act (ESA), National Historical Preservation Act (NHPA), Comprehensive Environmental Response Compensation and Liability Act (CERCLA), and the Superfund Amendments and Reauthorization Act (SARA) as well as a similar understanding of the Commonwealth of Virginia and local statutes and regulations governing environmental compliance.

Performance Standard: This contract shall be conducted in a manner such that LaRC receives no citations of noncompliance from regulatory agencies and is compliant with applicable Federal, State and local environmental regulations and provisions of Executive Orders and NASA and LaRC standards and policies.

Program Effectiveness: The Contractor shall maintain current metrics which include as a minimum monthly waste volume and disposal costs, number of facility assessments conducted and findings/actions by month, monthly energy and water usage data, and monthly recycling data. The contractor shall propose and generate additional metrics, as appropriate, to measure the effectiveness of Langley Research Center (henceforth referred to as "Center") environmental programs.

### **2.0 DESCRIPTION OF FACILITIES**

Facilities include on-site office space and environmental support buildings. On-site office space consists of nine offices which are approximately 90 -120 square feet each, located in Building 1195. Desks for Environmental Field Staff will be provided as well. Environmental support facilities, located on NASA LaRC include the Central Hazardous Waste (HW) Storage Area

(Building 1166) and the Center's Recycling and Reclamation Facility (Building 1181). The Central HW Storage Area is a fenced complex of approximately one-half acre. The HW storage building, constructed in 1991, has 2,124 gross square feet. It is divided into 12 storage bays that have containments meeting RCRA requirements and also houses a 5,000 gallon used oil tank. The 550 square foot polychlorinated biphenyl (PCB) Storage Building is also located in this area. The 2,400 square foot Recycling and Reclamation Building houses a cardboard baler, paper baler, oil water separator, a drum crusher, and a fluorescent tube crusher. It has an area for storing reclaimed and recycled materials.

### **3.0 ENVIRONMENTAL MANAGEMENT SYSTEM AND SUSTAINABILITY**

An Environmental Management System (EMS) is a system that does the following: (1) incorporates people, procedures, and work practices into a formal structure to ensure that the important environmental impacts of the organization are identified and addressed; (2) promotes continual improvement, including periodically evaluating environmental performance; (3) involves all members of the organization, as appropriate; and (4) actively involves management in support of the EMS. The purpose of the LaRC EMS is to have a single approach to managing environmental activities that allows for efficient, prioritized system execution. The focus of the EMS is to improve environmental performance and to maintain compliance with applicable environmental legislation and regulations, as well as with other requirements to which NASA subscribes. The Contractor shall provide support to the EMB to include the following:

- The Contractor shall implement and maintain the LaRC EMS in accordance with the requirements in NASA Procedural Requirements (NPR) 8553.1B. The Contractor shall prepare for and conduct periodic EMS meetings and audits (as directed by the EMS Representative, but no more than four each per year) to review/update the LaRC activities, aspects, impacts, objectives, targets, and environmental management programs. The Contractor shall maintain the EMS elements per NPR 8553.1B on the EMB website.
- The Contractor shall evaluate new and existing projects, facility and operational changes, equipment changes, and other Center modifications to ensure all environmental requirements are met and sustainable practices are recommended and implemented. This includes reviewing statements of work, project specifications, design submittals, and other project documentation. The Contractor shall participate on project teams and in project review meetings as necessary and shall effectively communicate and implement requirements and efficiency opportunities.
- The Contractor shall actively participate in the NASA RegComm Working Group, webinars, VITs, and Community of Practice meetings to stay abreast of regulatory and policy changes. The Contractor shall respond to any requests for LaRC-specific information and send to EMB for approval. The Contractor shall attend working group face-to-face meetings as necessary.
- The Contractor shall review new and/or changes in environmental regulations issued by the U.S. EPA, the Commonwealth of Virginia, local governments, and LaRC Directives to determine regulatory impact to LaRC. The Contractor shall advise the EMB of potential impacts resulting from these regulatory changes and prepare written recommendations to address and minimize these impacts. The Contractor shall work with LaRC facilities and/or project managers to develop strategies to meet regulatory requirements.
- The Contractor shall update the Environmental Management and Sustainability Plan. It shall document the status of sustainability efforts and make recommendations to meet the requirements of the applicable current Executive Orders.
- The Contractor shall ensure appropriate documentation is maintained on the EMB website, the NASA Environmental Tracking System (NETS), and EMB records system accordingly.

#### **4.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) AND PROJECT REVIEW SUPPORT**

The Contractor shall provide support to the EMB to ensure compliance with the National Environmental Policy Act (NEPA) to include the following:

- The Contractor shall ensure that employees providing the recommendations for NEPA reviews have completed acceptable training or have demonstrated work experience directly related to NEPA compliance reviews.
- The Contractor shall evaluate projects and facility operational changes submitted to EMB via Langley Form (LF) 461 for potential environmental impacts. This includes reviewing technical statements of work, project specifications, design submittals, and other project documentation. The contractor shall coordinate with appropriate personnel to ensure accurate information is obtained for evaluation. Recommendations are to be provided to EMB. The contractor shall coordinate with appropriate project personnel and verify environmental requirements are met throughout the phases of the project.
- The Contractor shall participate in project review meetings as necessary and provide timely feedback to Project Managers regarding environmental requirements and sustainable strategies for consideration.
- The Contractor shall ensure the LaRC NEPA Manager reviews and approves final environmental impact reviews and appropriate NEPA documentation.
- The Contractor shall ensure appropriate NEPA documentation is maintained in the LF 461 database, NETS, and EMB records system accordingly.

#### **5.0 RECYCLING PROGRAM**

- The Contractor shall collect and process materials suitable for recycling or reclamation. Processing materials includes, but is not limited to, baling paper and cardboard, crushing drums or lightbulbs, and/or processing oily water. Materials collected shall include white paper, mixed paper, cardboard, toner cartridges, inkjet cartridges, fluorescent tubes, aluminum cans, tyvek suits, and plastic bottles (#1 and #2). The Contractor shall conduct all recycling operations except for scrap metal. The Contractor shall deliver Government furnished containers for collection of recycled materials to locations specified by the Government. All occupied LaRC facilities shall be provided at least one recycling container. Pickup shall be upon request or according to a specified schedule.
- The Contractor shall ensure appropriate data is maintained NETS and EMB records system accordingly.

#### **6.0 SUSTAINABLE ACQUISITION**

- The Contractor shall provide information to LaRC employees and on-site Contractor personnel regarding procurement of sustainable materials, including biobased items and materials containing recycled or post-consumer content. The Contractor shall identify sources of materials containing the necessary recycled or post-consumer content and make this information available to all LaRC employees and on-site Contractor personnel via the LaRC internet website. The Contractor shall coordinate program implementation with the LaRC Procurement Office and appropriate other personnel.
- The Contractor shall evaluate technical statements of work, project specifications, design submittals, and other project documentation to ensure acquisition requirements are met. The contractor shall coordinate with appropriate personnel to ensure environmental requirements are met during acquisition.
- The Contractor shall compile information for the Center's annual data call and ensure appropriate data is maintained in NETS and the EMB records system accordingly.

## **7.0 WASTE MANAGEMENT**

The Contractor shall collect, transport, inventory, package, label, dispose of and record all transactions for the hazardous and regulated non-hazardous wastes generated at LaRC in accordance with applicable regulations. Work includes, but is not limited to, the following requirements:

- The Contractor shall ensure all employees providing support to the waste management program maintains the following licenses/training: 40 hour OSHA HAZWOPER in accordance with 29 CFR 1910.120(e), Class C Virginia Commercial Driver License with a Hazardous Endorsement, DOT Hazmat Employees Training in accordance with 49 CFR 172.700; 173.1(b), RCRA Hazardous Waste Management Training in accordance with 40 CFR 262.34(a)(4), 246.16 and 265.16.
- The Contractor shall evaluate new projects, facility and operational changes, equipment changes, and other Center modifications to ensure waste management requirements are met. This includes reviewing statements of work, project specifications, design submittals, and other project documentation. The Contractor shall participate on project teams and in project review meetings as necessary and shall effectively communicate environmental requirements to ensure project compliance with applicable regulatory requirements.
- The Contractor shall manage the Center's 90-day Central Hazardous Waste Storage Facility in accordance with applicable Federal, State and local environmental laws, and hazardous waste regulations.
- The Contractor shall transport wastes from the Center hazardous waste Satellite Accumulation Areas (SAAs) and the generation points to the 90-day Central Hazardous Waste Storage Facility within 72 hours of receipt of written or electronic notification from the waste generator. Transportation from the SAAs and generation points to the 90-day central Hazardous Waste Storage Facility does not require use of public roads. The Contractor shall properly characterize, label and package waste in accordance with all applicable EPA, OSHA, DOT regulations prior to off-site disposal. The Contractor shall furnish labels and packaging materials. A maximum of 25 pickups per week is required. The contractor shall maintain a master list of all SAA's. The master list shall be maintained electronically in Excel or other format approved by the Government. The contractor shall submit the updated master list of SAA's to the Government by the 5th of each month.
- The Contractor shall transport and dispose of hazardous waste generated at LaRC using Government approved Treatment, Storage and Disposal Facilities (TSDF) in accordance with the Resource Conservation and Recovery Act (RCRA), Toxic Substance Control Act (TSCA), and the DOT regulations. The Contractor shall transport and dispose of asbestos, used oil and other regulated non-RCRA and non-TCSA wastes generated by the Center. Disposal shall be in accordance with applicable Federal, State and local regulations.
- The Contractor shall prepare hazardous waste manifests and land ban forms and present them to the EMB representative for approval a minimum of three (3) days prior to hazardous waste shipments. The Contractor shall prepare hazardous waste discrepancy reports and submit them to the EMB within one (1) day of the discrepancy.
- The Contractor shall provide an annual hazardous waste generation report to the EMB by January 31. The report shall consist of hazardous labpacks and hazardous bulk materials generated in the prior year. The report shall include identification, quantity and disposal information.
- The Contractor shall submit TSDF audit information to the EMB. Only Government approved TSDFs shall be used to dispose of LaRC hazardous waste. The Contractor shall maintain a list of approved TSDFs and provide a copy to the EMB when changes are made. The Contractor shall update the list at least biennially by submitting current compliance histories of listed TSDFs to the EMB.

- The Contractor shall issue properly labeled Government furnished containers that identify the waste to be accumulated. The Contractor shall maintain records of all containers issued identifying proper contents, date of issue and location.
- The Contractor shall maintain the Center's Waste Disposal Tracking System (WDTS) which is accessible through the LaRC Internet Website. The Contractor shall provide database and application management, and identify technology to optimize system functionality. The Contractor shall incorporate training into the annual hazardous waste training classes and provide a help desk capability. The Contractor shall maintain user accounts.
- The Contractor shall provide laboratory services and analyses to perform the Toxicity Characteristic Leaching Procedure (TCLP) as described in 40 CFR 261, Appendix II, and the following additional test for hazardous waste characteristics: reactivity, corrosiveness, and ignitability. All methods shall be as in USEPA Publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods."
- The Contractor shall develop and maintain a waste disposal log for all waste disposed under the contract. The log shall consist of each category of material disposed, both regulated and unregulated, to include the weight and cost of each category. The log shall be maintained electronically in Excel or other format approved by the Government. The Contractor shall submit the waste disposal log to the Government by the 5th of each month.
- The Contractor shall ensure appropriate data is maintained in NETS and EMB records system accordingly.

#### **8.0 LABORATORY SUPPORT**

The Contractor shall provide laboratory services and analyses required by the Center's environmental permits and other environmental sampling requirements as directed by the EMB. The Contractor shall conduct field sampling and analyses (temperature, pH), and laboratory analyses in accordance with Virginia Department of Environmental Quality (VDEQ), Hampton Roads Sanitation District (HRSD), and Environmental Protection Agency (EPA) approved methods, procedures and certification. Laboratories utilized shall be certified as appropriate, by the applicable regulatory agency. Laboratory support includes, but is not limited to, the following:

- The Contractor shall develop appropriate sampling plans, conduct sampling, ensure quality assurance/quality control, confirm laboratory results and provide appropriate recommendations and reports.
- The Contractor shall prepare all reports required by permits and submit to the EMB for review.
- The Contractor shall ensure appropriate data is maintained in the EMB records system accordingly.

#### **9.0 AIR QUALITY PROGRAM**

The contractor shall review LaRC facility operations to gather air emissions data, provide recommendations to minimize or eliminate emissions, and compile and maintain the records required by the LaRC Air Permit. Records include, but are not limited to, operational usage, product usage, fuel consumption, and equipment lists. The contractor shall calculate 12-month rolling sum totals as required by the LaRC Air Permit and shall review the data to evaluate compliance with applicable permit requirements and limits. The contractor shall calculate air emissions for LaRC and shall review the data to evaluate compliance with applicable VDEQ and EPA air pollution control regulations. The contractor shall assess air emission levels, evaluate potential risks of noncompliance, and provide EMB with written recommendations to maintain compliance.

- Contractor shall maintain certification as a qualified observer in EPA Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources).
- Contractor shall assist EMB in coordinating any required emissions (stack) testing. This includes defining testing requirements and protocols and working with emission testing contractor to ensure required data is obtained.
- The Contractor shall prepare air program regulatory correspondence, permit amendment requests, permit applications and required reports as necessary and submit to the EMB. The Contractor shall submit permit applications to EMB 30 days prior to the permit or regulatory due date and five (5) days prior to the due date for other correspondence.
- The Contractor shall evaluate new projects, facility and operational changes, equipment changes, and other Center modifications for air permitting applicability. This includes reviewing statements of work, project specifications, design submittals, and other project documentation. The Contractor shall participate on project teams and in project review meetings as necessary and shall effectively communicate environmental requirements to ensure project compliance with applicable regulatory requirements.
- The Contractor shall assist the Center Utilities Manager and Logistics Management Branch with procurement contract for distillate fuels. This includes providing technical specifications and requirements for fuels. When necessary, the Contractor shall communicate with the fuel oil supplier to obtain fuel supplier certifications that are required with each delivery of fuel oil for compliance with LaRC Air Permit.
- The Contractor shall periodically inspect permitted air emission sources and associated air pollution control equipment (ex: paint booth filters, manometers) to ensure proper installation and operation. Where deficiencies exist, Contractor shall initiate maintenance/repair requests as necessary.
- The Contractor shall review Standard Operating Procedures (SOPs) and, in cases where deficiencies are noted, work with facility personnel to revise SOPs as necessary to ensure compliance with LaRC Air Permit and regulatory requirements.
- The Contractor shall recommend air pollution control technology to include cost considerations, effectiveness and regulatory requirements.
- Through field audits and any other observations, the Contractor shall keep abreast of operations at LaRC applicable to requirements requiring a Risk Management Plan. The Contractor shall develop and submit a Risk Management Plan to meet regulatory requirements, if needed.
- The Contractor shall prepare an updated list of all Conventional Combustion Units, emergency generators and fire pump engines, operational paint booths, and cold cleaners, including Material Safety Data Sheet (MSDS) for each solvent used, no later than February 15 of each year.
- The Contractor shall ensure appropriate data is maintained in NETS and EMB records system accordingly.

#### **10.0 WATER QUALITY PROGRAM**

The Contractor shall review LaRC facility operations, sample and analyze wastewater, as required by permits or directed by EMB. The Contractor shall review the data to evaluate compliance with HRSD, VDEQ, VDCR and EPA water pollution control regulations, evaluate potential risks of noncompliance, and provide written recommendations to EMB to maintain compliance, as appropriate.

- The contractor shall be a Certified Combined Administrator in accordance with Erosion and Sediment Controls regulations from the State of Virginia.
- The Contractor shall prepare permit regulatory correspondence, modifications and applications and required reports as necessary for the VPDES, MS4 and HRSD permits.

Deliverables for these permits include: (1) VPDES permit applications, (2) VPDES eDMRS, (3) MS4 Permit Application including Program Plan generation and updates, (4) MS4 Annual Reports, (5) HRSD Permit applications, and (6) HRSD reports. The Contractor shall submit permit applications and permit annual reports to the EMB 30 days prior to the permit or regulatory due date and five (5) days prior to the due date for other correspondence.

- The contractor shall assist in implementing the best management practices (BMP) approved by DCR in the MS4 Program Plan. The contractors shall make recommendations on BMP implementation or suggest changes to the MS4 Program Plan to ensure a quality program. The contractor shall assist in keeping quality records on BMP implementation to ensure that sufficient MS4 Annual Reports can be generated.
- The contractor shall assist with erosion and sediment control (ESC) management for land-disturbing activities at LaRC. This includes assistance in determining construction site stormwater permitting applicability, reviewing and commenting on Stormwater Pollution Prevention Plans (SWPPPs), site inspection for permit compliance, and record keeping for stormwater compliance.
- The Contractor shall recommend water pollution control technology to include cost considerations, effectiveness and regulatory requirements whenever the Contractor observes conditions which warrant such action. Methods shall conform to procedures specified by Federal, applicable State and local regulations.
- The Contractor shall ensure appropriate data is maintained in NETS and EMB records system accordingly.

#### **11.0 TANK PROGRAM SUPPORT**

The contractor shall oversee the Center's underground storage tank (UST) and aboveground storage tank (AST) regulatory compliance program. The Center currently has 6 USTs ranging in capacity from 6,000 gallons to 50,000 gallons and 16 ASTs ranging in capacity from 500 gallons to 8,000 gallons. The contractor shall be responsible for maintaining an up-to-date storage tank inventory, preparing updated registration forms when necessary, providing training for tank operators and ensuring that all tanks located on the Center are in compliance with all State and Federal regulatory requirements.

- The Contractor shall be certified as Class A and Class B Operator in accordance with UST regulations.
- The Contractor shall maintain an up to date inventory of USTs in service at LaRC.
- The Contractor shall maintain an up to date inventory of ASTs in service at LaRC. This inventory will include all "bulk storage containers" as defined in the SPCC Regulations (40 CFR Part 112.2) with the exception of mobile and portable containers. This inventory will not include oil-filled operational equipment (ex: lube system reservoirs, hydraulic system reservoirs, heat transfer systems), oil-filled electrical equipment (oil-filled transformers, circuit breakers, capacitors), or oil/water separator tanks.
- The Contractor will provide EMB with an electronic copy of the current USTs and ASTs by December 31st of each year.
- The Contractor shall perform monthly inspections of up to 30 ASTs, as designated by EMB, using LaRC's Monthly Inspection Checklist (Langley Form 410, NASA Langley Research Center Monthly AST Inspection Checklist). All tank deficiencies (either performed by the contractor or by Center facility personnel) should be tracked and resolved by the contractor. The contractor shall initiate the action required to resolve the deficiency, or coordinate with appropriate personnel to ensure that suitable action is initiated to resolve the deficiency. If the contractor does not have the authority to initiate the action required to resolve the deficiency (e.g. a contractual issue) EMB will be responsible for initiating the action. The contractor

shall follow up to determine if the deficiency has been resolved and report any issues to EMB.

- For ASTs regulated under 9 VAC 25-91-10 et seq., the Contractor will prepare correspondence for AST registrations, notifications, and closure operations. Draft correspondence will be submitted to the Government. The contractor shall review changes to the ASTs quarterly. The next AST registration renewal is due in March 2013.
- The Contractor shall update the Langley Procedural Requirements (LPR) 8715.12, LaRC Integrated Spill Contingency Plan as necessary to reflect changes in Center operations and environmental regulations. If a change at the Center impacts the Plan, the update must occur within 6 months of the change. At a minimum, the Plan shall be updated once every 5 years.
- To meet the requirements of the Virginia AST regulations, the Contractor will prepare and conduct an AST inspection training program for facility personnel conducting AST inspections on the Virginia-regulated ASTs.
- The Contractor will be responsible for monitoring and documenting compliance with applicable regulatory requirements related to UST and AST systems and reporting deviations to the Government.
- The Contractor shall provide technical guidance on secondary containment requirements for new equipment installations, improvements to secondary containment at the Center, and notify EMB if deficiencies are observed.
- The Contractor shall provide environmental consultation services to the EMB including emergency response via Internet, fax and/or telephone.
- The Contractor shall ensure appropriate data is maintained in NETS and EMB records system accordingly.

## **12.0 CULTURAL RESOURCE MANAGEMENT SUPPORT**

The Contractor shall provide cultural resource support to the LaRC EMB and the Historic Preservation Officer (HPO) to ensure compliance with the National Historic Preservation Act (NHPA). The support shall include, but is not limited to, the following:

- The Contractor shall ensure that employees providing the recommendations for NHPA compliance have completed acceptable training in Sections 106, 110, and 111 or have demonstrated work experience directly related to NHPA compliance.
- The Contractor shall prepare regulatory correspondence and reports for EMB to ensure compliance with the Programmatic Agreement (PA) among NASA, the Virginia State Historic Preservation Office, and the Advisory Council on Historic Preservation for Management of Facilities, Infrastructure and Sites at NASA LaRC (dated 2010).
- The Contractor shall provide technical guidance to ensure compliance with the NHPA and the 2010 PA, as well as the 1989 Programmatic Agreement among NASA, the National Conference of Historic Preservation Officers, and the Advisory Council on Historic Preservation for Management of NASA's National Historic Landmark properties.
- The Contractor shall participate in regulatory consultation meetings either on site or at the VDHR office.
- The Contractor shall utilize the VHDR's Data Sharing System (DSS) database to update NASA LaRC's DSS information as needed.
- The Contractor shall assist the HPO in maintaining and supplementing information on the LaRC Cultural Resource Management public website. The Contractor shall support public education and outreach activities.
- The Contractor shall ensure appropriate data is maintained in NETS and EMB records system accordingly.

### **13.0 ENERGY AND WATER CONSERVATION SUPPORT**

The Contractor shall provide energy and water conservation support to LaRC EMB to ensure compliance with applicable laws, policies, and Executive Orders, and facilitate meeting the Center's energy and water goals. The support shall include, but is not limited to, the following:

- Assist with the identification, development, and implementation of energy/water projects and initiatives at LaRC.
- Develop and maintain energy/water metrics, documentation, reports, policy documents, presentations, and plans, including the "Energy Efficiency and Water Conservation 5-Year Plan."
- Assist with LaRC's Energy and Water Efficiency Committee, including facilitating meetings, developing agendas/presentations, and recording meeting minutes.
- Conduct Comprehensive Energy Audits (as defined by NPR 8570.1, Energy Efficiency and Water Conservation) for 25% of LaRC buildings (approximately 42) per year.
- The Contractor shall ensure appropriate data is maintained in NETS and EMB records system accordingly.

### **14.0 REMEDIATION SERVICES**

The contractor shall provide remediation support services to LaRC EMB in compliance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

- Employees providing support to the remediation program shall maintain the following licenses / training: 40 hour OSHA HAZWOPER in accordance with 29 CFR 1910.120(e), DOT Hazmat Employee training in accordance with 49 CFR 172.700; 173.1(b), RCRA Hazardous Waste Management Training in accordance with 40 CFR 262.34(a)(4), 246.16 and 265.16.
- The Construction Debris Landfill (CDL) will require annual sampling of the 22 monitoring wells. These wells shall be sampled and analyzed for Target Compound List (TCL), Volatile Organic Compounds (VOCs), Semi Volatile Organic Compounds (SVOCs), and Target Analyte List (TAL) metals, using USEPA Region 3 low-flow (low-stress) purging and sampling techniques. Field parameters, including pH, specific conductance, turbidity, dissolved oxygen, and temperature shall be recorded during low-flow purging and sampling activities. A minimum of three monitoring well screen volumes shall be removed. All data shall be validated and a data report shall be submitted to the Government for submission to the EPA and VDEQ.
- The contractor shall prepare a data report of the results of the annual sampling and submit to Government for review at least 5 working days prior to submittal to EPA and VDEQ. The contractor shall respond to comments received by EPA and VDEQ to finalize the document.
- The contractor shall appropriately dispose of the Investigative Derived Waste from the sampling event.
- The Contractor shall ensure appropriate data is maintained in the EMB records system accordingly.

### **15.0 OTHER SERVICES**

- The Contractor shall maintain the Center's chemical inventory using the Chemical Material Tracking System (CMTS) and the Hazardous Materials Purchase approval databases. The Contractor shall provide database and application management, and identify technology to optimize system functionality. The Contractor shall maintain user accounts and backup applications. To facilitate data entry, the Contractor shall provide facility personnel with

training, guidance and other assistance including Material Safety Data Sheet entry and a help desk capability. The Contractor shall conduct field audits to verify the accuracy and completeness of facility chemical inventory data submitted by facility personnel. The Contractor shall compile CMTS inventory certification data quarterly and provide results to EMB and the Safety and Facility Assurance Branch (SFAB).

- The Contractor shall maintain and ensure the functionality of the two databases on the Environmental Management Information System (EMIS): the Chemical Material Tracking System and Waste Disposal Tracking System.
- The contractor shall maintain and ensure the functionality of the Environmental Management Branch website. As requested by NASA, the contractor shall make updates and minor improvements to the web pages, such as updates to documents, text, and graphics; as well as the creation of new web pages using existing templates (not more than 5 new pages per year). The Contractor shall attend configuration management meetings for change requests associated with updating the environmental website, and CMTS and WDTS databases within EMIS. This includes defining the configuration baseline, maintaining the configuration baseline, submittal of change requests, notification of change requests, and implementation of change requests. The Contractor shall comply with all required processes of the officials responsible for the server administration of EMIS.
- The Contractor shall review LaRC operations and provide recommendations for preserving/improving LaRC's natural resources. The Contractor shall review the Endangered Species Act (ESA) and associated regulations and make recommendations to minimize impacts to Center activities resulting from changes in the regulations.
- The Contractor shall update the Center's Environmental Resources Document as necessary to reflect changes in Center operations and environmental regulations. The Contractor shall address concerns including floodplains, wetlands, endangered species, cultural resources and sensitive wildlife areas. Updates shall be submitted to EMB for approval.
- The Contractor shall suggest updates and necessary revisions to LPR 8500.1, Environmental and Energy Program Manual (EPPM) and provide the suggestions to EMB annually.
- The Contractor shall compile and review the necessary data to report the storage, use, and release of certain hazardous chemicals as required by all sections of the Emergency Planning and Community Right-to-Know Act (EPCRA). The Contractor shall prepare EPCRA Emergency and Hazardous Chemical Inventory (Tier II) and Toxic Release Inventory reports. The Contractor shall prepare Hazardous Chemical Inventory (Tier II) and Toxic Release Inventory support documentation. The Contractor shall evaluate new projects and modifications for EPCRA reporting applicability.
- The Contractor shall update, as necessary, the Facility Environmental Coordinator (FEC) information and maintain the Center's FEC database. The Contractor shall develop and maintain information for the FECs via the LaRC Internet website. The Contractor shall coordinate with the Office of Safety and Mission Assurance to obtain Facility Safety Head (FSH) information.
- The Contractor shall provide training to the LaRC staff and on-site Contractor personnel on environmental regulations, policies, and pollution prevention concepts. The Contractor shall develop materials as required, for topics including the major Federal environmental requirements, pollution prevention concepts, Executive Orders, and State and Federal environmental requirements. The Contractor shall prepare suitable environmental materials for the Office of Safety and Mission Assurance to use as needed for their training where such materials would be relevant. The Contractor shall provide training for LaRC's FECs on an annual basis. This training shall emphasize FEC responsibilities as described in the EPPM. The Contractor shall maintain information on those participating in the training via a training database and ensure training attendance records are forwarded to the Center's Office of

Human Capital Management (OHCM) to be documented in System for Administration, Training, and Educational Resources for NASA (SATERN). The Contractor shall provide Waste Management training for all appropriate LaRC personnel on an annual basis. This training shall emphasize RCRA regulations, policies and responsibilities as described in the EEPM. The Contractor shall maintain participant information in the training database and ensure training attendance records are forwarded to the Center's OHCM. The Contractor shall provide at least 15 training sessions per year.

- The Contractor shall assist with environmental outreach efforts such as
  - ✓ Earth Day/Arbor Day – The contractor shall prepare suitable materials for presentation and participate in Earth Day/Arbor Day activities to be held at LaRC. Materials should be sufficient to also meet Tree City USA requirements.
  - ✓ Annual Tree City USA recertification
  - ✓ Monthly @LaRCs newsletter postings
  - ✓ Internal and external environmental awards packages. The Contractor shall submit at least two external award packages annually. This could include, but is not limited to, the NASA Blue Marble Award, the VEEP Governors Award, or the HRSD P2 Award.
  - ✓ Virginia Environmental Excellence Program (VEEP) report and preparation of the renewal application per VEEP requirements.
- The Contractor shall conduct a minimum of 40 comprehensive Multi Media Environmental Audits designated by the EMB annually. Audit reports shall be reviewed and approved by the EMB prior to submittal to Center personnel. Findings shall be tracked to closure in accordance with Langley Management System Center Procedures (LMS-CP) 8530, LARC Environmental Management Team Facility Multi-Media Environmental Audit Process.
- The contractor shall participate in compliance audits, inspections, and external audits as they occur at Langley. The Contractor shall perform pre-inspections prior to scheduled regulatory inspections or NASA HQ Environmental and Energy Functional Review (EEFR) to identify and correct any deficiencies. The Contractor shall assist EMB with resolving findings identified during regulatory inspections and the NASA HQ EEFR. The contractor shall be responsible for entering and maintaining EEFR data in the NETS system relating to the corrective actions and closures activities resulting from the EEFR.

#### **16.0 INDEFINITE DELIVERY/INDEFINITE QUANTITY ORDERS**

The Contractor shall provide specialized environmental support services in a broad range of areas based on specific Center requirements. This may involve, but not be limited to, information technology system development, GIS data collection and development, tidal and non-tidal wetland research, underground and aboveground storage tank studies, natural resource management studies or surveys, cultural resource management studies or surveys, NEPA actions including environmental assessments and impact statements, and CERCLA studies in support of activities related to all stages of environmental restoration. Major activities supported include conducting or reviewing remedial investigations, remedial designs, feasibility studies, remedial actions, long-term maintenance operations, and long-term monitoring. Interim remedial actions may be infrequently required to reduce or limit an immediate threat to human health and the environment. In addition, support includes technical oversight of environmental programs, laboratory quality assurance assessments, document reviews, and assistance in selecting remediation technologies.

**Required certifications, training, and experience for appropriate media areas.**

<b>Functional Area</b>	<b>Training/Certification Requirements</b>		
Energy Management	Certified Energy Manager (CEM) or CEM in Training (requires 3 yrs experience before CEM)		
Waste Management	40 hour OSHA HAZWOPER in accordance with 29 CFR 1910.120(e), Class C Virginia Commercial Driver License with a Hazardous Endorsement, DOT Hazmat Employee training in accordance with 49 CFR 172.700; 173.1(b), RCRA Hazardous Waste Management training in accordance with 40 CFR 262.34(a)(4); 246.16 and 265.16.		
Remediation	40 hour OSHA HAZWOPER in accordance with 29 CFR 1910.120(e), DOT Hazmat Employee training in accordance with 49 CFR 172.700; 173.1(b), RCRA Hazardous Waste Management training in accordance with 40 CFR 262.34(a)(4); 246.16 and 265.16.		
Underground Storage Tank (UST) / Above-Ground Storage Tank (AST) Programs	Certified as Class A and Class B Operator in accordance with UST regulations.		
Water Management	Certified Combined Administrator in accordance with Erosion and Sediment Controls regulations from the State of Virginia.		
National Environmental Policy Act (NEPA)	Completed acceptable training in NEPA or have demonstrated work experience directly related to NEPA compliance.		
National Historic Preservation Act (NHPA)	Completed acceptable training in Sections 106, 110, and 111 or have demonstrated work experience directly related to NHPA compliance.		
Air	Maintain certification as a qualified observer in EPA Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources).		