ATTACHMENT J-16

GOVERNMENT-FURNISHED LEGACY IT SYSTEMS

FOR

KENNEDY ENVIRONMENTAL AND MEDICAL CONTRACT (KEMCON)

Note: The items listed in this table are Government-provided Legacy IT systems for use by the KEMCON Contractor. With the exception of the Earth Systems Modeling and Data Management System (ESMDMS), the sustaining of the software systems, including modifications approved by the Government, will be provided by the Government.

Application Name	Description	Software/Version
Health Unit Management System (HUMS) - Medical Module	Desktop application used by Occupational Health Facility personnel to maintain medical records of KSC workforce. HUMS has many modules for various medical procedures, including Physicals for certifications, Cardio Assessment, Hearing, Lab, Workman's Comp, Rehab Works, Fitness Center, and is used to provide Contract related Metrics. HUMS, also, provides a mechanism to electronically request Lab Results and receive the results electronically. HUMS also connects to the Training Certification Record System (TCRS) to electronically transmit employee certifications. In FY14, HUMS was modified to accomodate the Federal Motors Carrier Safety Act for employees possessing a Commercial Driver's License and to electronically send medical information to the NASA Agency Electronic Health Record System. (See Page 6 for additional capabilities).	.net - Front End SQL 2013 - Database
Occupational Medicine and Environmental Health System (OMEHS)	Environmental Health, Environmental Services, Aerospace Medicine, Medication, and Administrative Information. OMEHS has multiple modules including administrative tracking, industrial hygiene, sanitation and food safety, health physics, Safety Data Sheets, asbestos air management and engineering design reviews, and construction audit tracking. (See Page 6 for additional capabilities).	Access/2010* - Front End SQL 2013 - Database *Being converted to and tested in Access/2013. Estimated Completion Date (ECD) end of FY2015.

Application Name	Description	Software/Version
KSC Environmental Checklist Database	Tool used to evaluate and store KSC Environmental Checklist data and create a Record of Environmental Consideration for all checklists submitted to the Environmental Management Branch per PWS 4.4.3.	Access/2010* *Being converted to and tested in Access/2013. ECD end of FY2015.
Earth Systems Modeling and Data Management System	KSC's Earth Systems Modeling and Data Management System (ESMDMS) provides services for managing and integrating natural resource, environmental, and ecosystem sciences data into information and knowledge in support of the mission. To support ecological research and environmental management, the Lab provides (1) the electronic warehousing and documentation of all ecological work performed at KSC since 1981 accessible via a web portal, and (2) utilization of newest technologies for the analysis, synthesis, and visualization of data. The applications provide managers and scientists with the capability to create the science based, data driven products and information needed to answer questions related to a variety of topics associated with current and future activities at KSC. ESMDMS builds and maintains Geographical Information System (GIS) databases and map layers. Some of the primary tools include: Environmental System Research Institute (ESRI), ArcGIS Desktop, Earth Resource Data Analysis (ERDAS), and Geographic Resource Analysis Support System (GRASS). All data is maintained in an Oracle database that is part the Environmental Database Management System (EDMS). (See bidder's library for additional information).	.net/Oracle DB
The Picture Archiving and Communication System (PACS)	A Commercial Off The Shelf application to electronically send and receive Digital X-Ray images and personal health information radiology analysis results.	COTS

Application Name	Description	Software/Version
Workers Health at a Glance (WHAAG)	Workers Health At a Glance (WHAAG) is a .net application with a SQL database provides NASA, OHF Physicians, and Contractor Safety Managers with a web-based interface for managing air monitoring and noise exposure data. WHAAG provides work control oversight for EH managers to assign survey tasks and track survey status through survey report generation and delivery to customers. A task tracker tool notifies customer safety and health managers of report findings and provides customer-direct entry of corrective actions for tracking closure. (See Page 7 for additional capabilities).	.net/SQL Server
Waste Management System (WMS)	The web-based Waste Management System (WMS) provides a secure, user friendly data management environment wherein interactive and real-time information flows between Waste Management customers and MESC Waste Evaluation and Planning teams. (See Page 7 for additional capabilities).	.net/SQL Server
The Big Access Database - Spill Module	Used by Waste Management Non-Emergency Spill Clean-up Team for the tracking of spills and documenting spill clean-up actions at KSC. This data is being migrated to the WMS system and will no longer be used once migration is complete.	Access 2010** **Being migrated into the WMS system. ECD end of FY2015.
Caseware 20/20 Midcomp software	Desktop application COTS software used by the Employee Assistance Program. On standalone PCs	COTS
Heat Stress	Collects data from heat stress monitoring stations to provide real time heat index on Environmental Health website for Centerwide use.	HTML/.net

Application Name	Description	Software/Version
MSDS Online	Safety Data Sheets (SDS) web based system to satisfy the requirements of PWS 3.5(c).	COTS
Spill Prevention Countermeasures and Controls (SPCC) Database	Database of SPCC site specific plans for each KSC Contractor (reference PWS 4.4.4(n)). Database is used to prepare the KSC Site Specific Plan (KSC-PLN-1920). Expansion of the capabilities is being done in FY14 to make the capability web-based.	.net/SQL Server
Environmental Lab Database	System to record environmental laboratory sampling results.	Microsoft Outlook/ .net/SQL Server
Surveillance Database	Database application used by contractor inspectors to record surveillance inspections, document findings, and track corrective actions (reference PWS 4.4.1).	Access 2010*** ***Being re-written as a .net/SQL Server Application. ECD end of FY2015.
Air Database	MS Access application used to house data for Title V Operation Permit and Clean Air Act compliance. Holds boiler and engine fuel usage data. Holds engine operating hour and use data. Holds paint booth and scrubber material usage. Performs emission calculations. Used to prepare compliance reports. (Reference PWS 4.4.4(l)).	Access 2010*** ***Being re-written as a .net/SQL Server Application. ECD end of FY2015.

Application Name	Description	Software/Version
Rocket Exhaust Effluent Diffusion Model (REEDM)	This software is used to prepare acid deposition models for NASA launches from LC-39. The U.S. Air Force provides the software and launch day weather data for the contractor to run the software on NASA-provided computers to produce acid ground deposition projections.	Fortran 77 with ArcGIS Python for output and maps
Note: The Government anticipates being able to export the Government-provided data from the current system(s) in an electronic format suitable for transition to the Contractor-provided MIS(s) if necessary. Since the scenario will be different for each unique situation, the only information the Government can provide is the software used for each of the Legacy Systems. The Government does not anticipate the need for the transition of data in any systems not listed in Attachment J-16.		

Health Unit Management System (HUMS) Capabilities cont.

- Medical Certification uploading to Training Certification Record System (TCRS)
- Online Physical Exam web request (Form 13-116)
- Generate Medical Certification card
- Bulk appointment notices and reminders
- Records Management for 70,000 plus medical records
- CCAFS DRD Reporting
- Modules for Fitness Center, Cardiovascular and Diabetes, RehabWorks and Workers Comp
- Smoking Cessation Program
- Medications Dispensed
- Summary of Care (KSC 28-936) on every patient and updated yearly
- Document button links to Medication Information and Patient Instructions for dispensed medication/narcotics.
- Clinic Visit/Forms link allows printing of various required forms – (e.g. Notification to the County Health Department)
- OSHA Surveillance letters print with demographics
- Blood pressure statistical tracking
- Standard of Care forms for auditing
- Real time charting
- Privacy Act disclosure Authorization and Accounting Record as required by 14CFR Part 1212
- Clinical laboratory interface and reconciliation

Occupational Medicine Environmental Health System (OMEHS) Capabilities cont.

General purpose MS Access desktop application:

- The Administrative module is used to track accomplishments and recognition, Customers, Survey information, property management, over time management, material requests, quality management, training and competency management, trouble ticket tracking, and
- The Environmental Services Section provides Lab data and EPB Surveillance.
- The Engineering Section provides access to the Construction Audit Tracking System, Engineering Design Reviews, and Regulatory
- The Industrial Hygiene Section provides modules for tracking work and collecting survey data, including Lab Hood Management, Emergency Response, Industrial Incidents, Breathing Air, Complaint Investigations, etc.
- The IT Section provides for Change Request submittal and tracking.
- The Occupational Medicine Section includes Medical Supplies, Medicine Reconciliation, and Metrics.
- The Safety Section includes links to various items related to Safety and VPP such as Safety Forms, Chemical Inventories, SDSs, and
- The Sanitation and Public Health Section is for submitting/tracking work requests related to 911 Response and Complaint

- The Task Tracking Section includes create and track new tasks from the customer base and provides metric reports. The Task Tracker is interconnected to the Worker's Health At A Glance (WHAAG) for personnel exposure monitoring data.
- The Waste Management Section is used to track Chemicals used in various KSC facilities and produces the Tier II Report.

Waste Management System Capabilities cont.

Web-based system:

- Storage of waste characterization and pickup records.
- Designed for accessibility through NAMS.
- Customers assigned to limited access user groups.
- Process Waste Questionnaire and Waste Support Request submittals
- Unused Chemical Product Questionnaire
- Documentation can be attached to records (e.g., analyses, SDS, product brochures)
- Technical Response Package (TRP) information provided in WM-assigned fields
- Good for one year, then recertification is required.
- Provides status of PWQs (e.g., saved, submitted, evaluated, completed, recertification)
- Customer dashboard.
- Print hard copies of PWQ/TRPs and attachments
- Completed Controlled Waste Manifests
- Waste stream listing by facility number
- Waste generation reports

Workers Health at a Glance (WHAAG) cont.

- Demographic data are imported from the HUMS database.
- Data hierarchy supports multiple employer demographics
- Extensive use of pull-down tables for easy data entry
- Task tracking provides work status overview
- Customized similar exposure group profiles
- Health Hazard Rating report
- Segregated data access for contractor S&H managers
- Automatic integration of offsite lab data (in development)
- Health Physics data module (in development)
- Ergonomics data module (in development)
- Survey data tables generated for customer reports
- Direct data feed to Agency Medgate records system