ATTACHMENT J-1

Chemical Ordnance Biological Radiological/Nuclear Training Facility (COBRATF)

Performance Work Statement

OJP-99-R-014

9/1/99

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BACKGROUND INFORMATION
COBRATF

C.1.1.1 The Center for Domestic Preparedness is located three miles north of Anniston, Alabama on State Highway 21, 90 miles west of Atlanta, Georgia; and 55 miles east of Birmingham, Alabama.

C.1.1.2 The Chemical Ordnance Biological Radiological/Nuclear Training Facility (COBRATF) is located on the CDP Enclave.

C.1.1.3 The complex consists of an administration building, an entry control point, five outdoor simulation training pads, the main training building, liquid waste holding tanks, and an incinerator and boiler system. The main training building has a medical aid station, a chemical laboratory, male and female locker rooms, a laundry, an equipment maintenance area, and a safety control room. A large training bay, and six small training bays complete the floor plan. The design philosophy for the main training building incorporates protection of the environment and safety of COBRATF personnel. To help ensure no agent is released into the environment, a building was built within the outer building. Toxic agents are stored in tornadoproof vaults in the laboratory, and used only within the interior building.

C.1.1.4 The training facility consists of several buildings and grounds. The buildings include:

Administration
Guard House
Training
Operations and Maintenance
Filter
Waste Treatment
Incinerator / Autoclave
Waste Storage Tank

C.1.2 RESPONSIBILITIES

C.1.2.1 The contractor shall provide the following services and meet all requirements as stipulated in the PWS.

C.1.2.2 Administration. The contractor shall maintain an office which shall be manned from 7:30 A.M. to 4:15 P.M. each day, Monday through Friday, to handle maintenance requests. Written procedures shall be developed that specify the action to be taken during failure of essential equipment and major utility services. The written

procedures shall include a call system for summoning essential personnel and outside assistance when necessary to meet requirements specified elsewhere in these specifications. Procedures shall be submitted to the Contracting Officer within 10 days of start of the contract, and within 24 hours of any changes after the 10 day reporting period of the contract.

C.1.2.3 Reports and correspondence. The contractor shall prepare reports and correspondence including special reports for applicable functions limited to his operation in accordance with Sections C.1.6, Control of Work;

C.1.2.3.1 Reports and Records; and C.1.11, Reports by Contractor, and where referenced in this document.

C.1.2.4 Warranties. Upon award of contract, the operation and maintenance contractor (O&M) shall be responsible for keeping records of all warranty information. During the warranty period, the O&M contractor shall be responsible for routine maintenance on the facility. In the event the O&M contractor ascertains that the repairs fall within the warranty, he shall in writing, notify the Contracting Officer. For all items purchased under this contract, the O&M contractor shall maintain warranty records indicating the effectiveperiod of the warranty. Records shall be available for Government use at alltimes.

C.1.2.5 Preventive Maintenance Program. The O&M contractor shall develop a comprehensive preventive maintenance program to be submitted with offer and up dated as required. The O&M contractor shall be responsible for routine servicing of equipment as required by the manufacturer. Included in the Preventive Maintenance Program shall be a lubrication schedule. The contractor shall determine standard oils and greases which will be compatible with equipment manufacturer's recommendations. Oils and grease application frequencies will be in writing for each applicable piece of equipment.

C.1.2.6 Physical Security Program. The contractor shall develop a detailed plan for the prevention of unauthorized access, vandalism, pilferage, larceny, sabotage and protection of property. The plan shall detail how to protect the security of all Government furnished property and equipment as well as property in the possession of the contractor. Specify procedures for reporting and correcting security deficiencies. Five copies of the Physical Security Plan shall be provided to the Contracting Officer within 60 days of the contract start date.

C.1.2.7 Energy Conservation Program. The contractor shall develop and

provide a Energy Conservation Plan as prescribed in Federal Government Regulations. The plan shall describe in detail the methods and training planned to provide the necessary information to Contractor and Government personnel as to the knowledge of energy conservation measures and procedures. Five copies of the Energy Conservation Plan shall be submitted to the Contracting Officer within 60 days of the contract start date.

C.1.3 PERFORMANCE AND ACCOMPLISHMENT OF WORK

C.1.3.1 All routine inspection, maintenance, repair overhaul and operation shall be accomplished so as not to conflict with training. All emergency work shall be accomplished whenever required and shall be carried to completion without interruption. At the completion of the task, the O&M supervisor shall inspect the work and sign the work order when completed.

C.1.3.2 Conditions may arise which will prevent the performance of certain normal maintenance work during the first work shift. Such work may be required in critical areas such as training rooms, laboratory or other sensitive areas, through access to these or other areas may not be possible due to use. In such circumstances work to be performed in these areas shall be accomplished during the nonworking hours of these locations.

C.1.3.3 In the event of a leak or spill by contractor maintained equipment, the contractor shall IMMEDIATELY notify the COBRATF designated point of contact and file an incident report within 24 hours to the Contracting Officer. In the event of an emergency the contractor shall make his resources available and immediately contact the Contracting Officer.

C.1.3.4 The contractor will develop a Fire Prevention and Protection Plan that follows the guidelines established by applicable Federal Government regulations and COBRATF SOPs. The plan shall be submitted within 30 days of contract start date.

C.1.4 CONTRACTOR MINIMUM STAFFING

C.1.4.1 The personnel employed by the contractor shall be capable employees, qualified in their respective trades. All of the contractor operating, maintenance, janitorial, clerical, and other support staff shall be located at the COBRATF and will only be designated to work within the COBRATF.

C.1.4.2 Maintenance and repair personnel shall have documented evidence, giving employer's names and telephone number, of a minimum of four years experience in their trade at the Journeyman Level. Helper status will not be acceptable as qualifications.

C.1.4.3 Incinerator Operator Personnel, Waste Water Plant Operators, and Mechanical Operators shall have documented evidence described in paragraph C 14.2 above and shall have these documents verified by the Government before contract start date.

C.1.4.4 Superintendence by contractor. The contractor shall assign an on-site Project Manager located in the COBRATF facility during normal working hours (07301615) for the purpose of supervising the contractor's employees and available for decision making process, either by telephone or personal contact outside normal working hours. The facility supervisor must have a degree in mechanical, or electrical engineering or must have held a similar position for a period of not less than six years.

C.1.4.5 Personnel surveillance and safety regulations require that all of O&M contractor's employees to be clean shaven.

C.1.4.5 Contractor will develop and maintain a Contingency Mobilization Plan that describes and details the policies and procedures to be followed in the event of a national emergency or national disaster. Plan shall specify methods for expansion of workforce, continuing operations, and compliance with Section C. Five copies of the plan shall be submitted within 30 days of contract start date to the Contracting Officer.

C.1.5 REQUIREMENTS FOR ADHERENCE

C.1.5.1 The contractor shall have an all encompassing quality control plan to include but not limited to the following: defining or stating policy, objectives and requirements; assigning responsibility; controlling utilization of resources; performance management techniques using quantifiers and metrics; comparing that performance against stated objectives and requirements; and taking appropriate action. This quality control management plan shall be submitted within 60 days of contract award. Revisions to the plan may be necessary. They should be submitted to the government

for review and acceptance by the Contracting Officer, 10 days prior to implementation.

C.1.6 CONTROL OF WORK

C.1.6.1 The contractor's internal quality work control system shall provide the Contracting Officer with sufficient information to evaluate the contractor's performance. The supervisor shall maintain a daily log book of activities.

C.1.6.2 Every other Friday, the contractor shall furnish a written report covering work accomplished for the two preceding weeks and projected work to be accomplished in the next two weeks, to the Contracting Officer.

C.1.6.3 Records shall be kept of each repair and maintenance task, and cumulative records for each major piece of equipment maintained by the contractor. The records shall be made available to the Government for examination upon request.

C.1.6.4 The contractor shall maintain essential operating data on the equipment covered by this contract. The contractor shall use standard forms, charts and logs as approved by the Contracting Officer. Examples may include:

C.1.6.4.1 Daily plant or system operating logs.
C.1.6.4.2 Monthly consolidated operating logs for the plant or system.
C.1.6.4.3 Recording charts filed chronologically and by piece of equipment.

C.1.6.5 A complete copy of all maintenance records and operating logs shall be furnished to the Contracting Officer upon termination of the contract.

C.1.6.6 The contractor shall coordinate all records and forms used in conjunction with this contract with the Government. Changes in procedures, records, and forms shall be subject to review, in advance by the Contracting 0fficer. The contractor shall reproduce/distribute all records and forms used in conjunction with this contract as directed by the Contracting Officer.

C.1.6.7 The contractor shall be required to attend weekly COBRATF safety and training scheduling meetings as well as monthly and quarterly Chemical Surety Board Meetings.

C.1.7 REPORTS AND RECORDS

C.1.7.1 The contractor shall maintain reports and records on a monthly and annual basis containing as a minimum the following:

C.1.7.2 Distribution of work order costs and budget comparisons.

C.1.7.3 Work order and craft backlog report.

C.1.7.4 Preventive maintenance schedule and status report.

C.1.7.5 Equipment repair history record.

C.1.7.6 Materials consumed description, quantity, cost, work order number, and where used.

C.1.7.7 Parts used description, quantity, cost, work order number, and where used.

C. 1.7 8 Bench stock items quantities and costs.

C.1.7.9 Outside contracted shop work supporting vouchers and work order number, where used.

C.1.7.10 The contractor shall furnish copies of these records and reports to the COBRATF Chief, or COBRATF representative monthly.

C.1.7.11 A Joint Inventory will be conducted on or before contract start date and at semiannual intervals. The spare parts and supplies on hand and on order shall be audited and a status report submitted to the Contracting Officer within 30 days after completion of the audit.

C.1.7.12 A daily report on the status of the generator, Ref C.5.6.3.3

C.1.7.13 An annual report of the Government Furnished Equipment, RefC.3.1.

C.1.7.14 A semiannual Waste Water Samples Report required by C.5.8.1.9.6

C.1.8 QUALITY CONTROL:

C.1.8.1 Contractor Quality Control (QC): The Contractor's specifically tailored Quality Control Program shall be submitted with the proposal. The program shall be constructed in such a manner that each functional area program may be extracted and used for that function only and not contain information extraneous to that function. Implementation of the Quality Control plan simplistic and methodical permitting ease of understanding and implementation. The QC program shall be updated as changes occur and submitted to the Contracting Officer for review and approval. The program shall include as a minimum the following:

C.1.8.1.1 Organizational structure and functional statement showing relationships between sections or functions which interrelate to operation, repair and maintenance.

C.1.8.1.2 A quality control inspection system covering all general and specific tasks included in the contract scope of work. It shall specify tasks or areas to be inspected on either a scheduled or unscheduled basis and the manner in which inspections are to be conducted.

C.1.8.1.3 The minimum acceptable qualifications of individual(s) tasked to perform inspections and the extent of their authority Their functional role shall be depicted on the Contractor's organizational chart.

C.1.8.1.4 Proposed test methods and testing laboratories to be used.

C.1.8.1.5 Method of identifying deficiencies in the quality of services performed before the level of performance becomes unacceptable.

C.1.8.1.6 Method of documenting and enforcing quality control operations of both prime and any subcontractor work, including inspection and testing.

C.1.8.1.7 Key control as required by C.1.13.

C.1.8.1.8 Special safety equipment/clothing required for safety purposes.

C.1.8.1.9 Detailed specifics as to how Contractor shall ensure that his personnel take required safety precautions when working with steam, chemicals, electricity, power tools, etc. and when entering or working in confined spaces.

C.1.8.2 Reports:

C.1.8.2.1 A weekly written report shall be submitted by the Contractor by 12:00

P.M. on the. first working day of each week. The report format shall list inspections conducted by the Contractor during the previous work week. As a minimum, the report shall include task, location, work document as applicable, inspection results, and name of the inspector. The report shall also identify those inspections conducted as followup to previous inspections.

C.1.8.2.2 The Contractor shall submit a written quality control report to the Contracting Officer by the 7th calendar day of the month. Based on the previous month's quality control data, the monthly report shall include the following:

C.1.8.2.2.1 Workloads for each general and specific task and number of inspections conducted in each task.

C.1.8.2.2.2 Total deficiencies noted for each task, cause of deficiency, immediate corrective action taken, time required to correct deficiencies and procedures applied to preclude further occurrence.

C.1.8.3 Quality Control File: The Contractor shall maintain a file of quality control documentation to include inspection checklists, training, corrective/preventive actions, trend analyses, minutes of quality control, meetings, etc. This file shall be subject to review by authorized Government personnel during the contract term. The quality control file shall be turned ever to the Government upon completion or termination of the contract.

C.1.8.4 ISO Certification: The contractor shall support all CDP efforts to achieve and maintain ISO 9000 certification.

C.1.9 TRAINING

C.1.9.1 Initial intensive training: This training shall cover the topics below and not begin earlier than seven days prior to commencing of work under this contract. A training plan, including topics with a brief statement of content and method training, shall be provided and made available for review and approval to the Contracting Officer. No employee shall be assigned to work on this contract until initial intensive training is completed by the contractor. Initial training shall include, but not be limited to, the following topics:

Proper use and handling of supplies and equipment.
Care and maintenance of contractor and Government furnished property.
Familiarization with local fire prevention and ground safety procedures.
Familiarization with applicable facility policies/regulations and their effect on maintenance services.
Familiarization with procedural manual.

Duties and responsibilities of each employee.
Procedures for replenishing parts, supplies and obtaining equipment repair.
Techniques or methods for measuring the quality of work performance.
Spill contingency plan, spill containment, chemical accident and incident response and clean up procedures.
Operation and maintenance ICIDS, MINICAMSforklift, and backhoe.
Operation and maintenance of MINICAMS
ISO 9000
NRC Procedures

C .1.9.2 The contractor shall conduct developmental employee training sessions for all employees at a frequency of at least quarterly. Training to be conducted at the sessions, including topical outlines with a brief statement of content and approximate length of programs, shall be available for review by the Government. Developmental training shall include, but not be limited to, the following areas:

Updating the areas referred to in the subparagraphs in Section C.1.9.1 above.

Correction of deficiencies in individual's performance found as a result of the Quality Control Program.

Presentations on the contents of the subjects contained in the references listed in Technical References.

C.1.10 MISCELLANEOUS REQUIREMENTS AND INFORMATION

C.1.10.1 The contractor shall have a permanent onsite Project Manager and maintain sufficient personnel on duty to assure compliance with the provisions of the contract which require rapid response upon notification.

C.1.10.2 The contractor's employees shall not disturb papers on desks, open drawers or cabinets, or use telephones or other equipment provided for official Government use.

C.1.10.3 Contractor equipment and appliances shall be identified by stenciling or painting the contractor's name thereon.

C.1.10.4 There are no explosive requirements for the facility.

C.1.10.5 The training building mezzanine is to be used primarily as a servicing

Area, not a storage area.

C.1.10.6 Toxic chemical agents are stored in a vault in the training building.

C.1.10.7 Various monitoring stations are provided in the training building between "hot" and "cold" area interfaces.

C.1.10.8 Training building "hot" areas are maintained under negative pressure.

C.1.10.9 Leak resistant doors and electrical interlocks are provided between "hot" and "cold" areas in the training building. The O&M contractor shall maintain the leak resistant doors. The O&M contractor shall inspect them annually.

C.1.10.10 Operations of the facility involve toxic chemical agents GB & VX. Maintenance personnel must be trained in various aspects of working in this type environment. Maximum permissible limits of hazardous chemical agents GB in an unprotected environment over an 8hour period are, GB 0.0001 mg/CuM. and VX 0.00001 mg/Cu.M.

C.1.10.11 Operations of the facility will follow the guidance specified in the COBRATF Standards Document and subsequent plans and SOPs.

C.1.11 REPORTS BY CONTRACTOR

C.1.11.1 The contractor shall operate an administrative function, at the facility and shall maintain the following administrative type data at the COBRATF, and shall be made available upon request to the Contracting Officer:

C.1.11.1.1 Records of safety inspections.

C.1.11.1.2 Incident reports.

C.1.11.1.3 Written regulations governing smoking.

C.1.11.1.4 Contractor policy and procedures manual including organization chart; job descriptions; and written standard operating procedures for normal operation, emergencies, fire, and disaster. (A minimum of 8 current copies).

C.1.11.1.5 Records of preventive maintenance tests and inspections

C.1.11.1.6 Personnel records noting number and qualifications of employees.

C.1.11.1.7 OSHA records relating to occupational safety.

C.1.11.1.8 Employee Training Records.

C.1.11.1.9 Copies of Contractor inspections and corrective actions.

C.1.11.1.10 Copies of all workorders.

SAFETY RESPONSIBILITIES

C.1.12.1 The contractor shall comply with current safety requirements as specified by Federal Regulations and COBRATF SOP's and policies: 29 CFR 1902, 1910 and 1926; and COBRA Training Facility safety policies and directives, or its successor, DOJ Operations Requirements Document.

C.1.12.2 The contractor shall establish a comprehensive safety program which shall consist of identifying, education, training, and enforcement of approved safety standards. All equipment and facilities shall be maintained in accordance with approved safety practices. In general, safety involves controlling the work situation to minimize physical and health hazards.

C.1.12.3 The contractor shall establish and implement a basic safety program to include program management utilizing the above regulatory directives; accident prevention and control; safety education and promotion; accident investigation, analysis, and reporting; and coordination in support of occupational health and sanitation.

C.1.12.4 The contractor shall display accepted warning signs in all areas where cleaning or other operations could cause traffic obstruction or personnel hazard. These signs shall be approved by the Contracting Officer prior to being used.

C.1.13

KEY CONTROL

C.1.13.1

The contractor will be provided with keys to allow access to all rooms requiring maintenance services. Keys provided to the contractor shall not be removed from the facility or duplicated. Keys shall not be issued to any individual to be retained in his possession while not physically performing duties included in this specification. All keys not issued shall be retained in a locked key box. The Contracting Officer will periodically, as required, inventory all keys assigned to the contractor.

C.1.13.2 Whenever rooms or areas are locked, contractor personnel shall not permit the use of keys in their possession by other persons for the purpose of gaining

access to such locked rooms or areas; and, likewise, contractor employees shall not open locked rooms or areas to permit entrance by persons other than the contractor's employees in the fulfillment of their duties. All rooms found locked by contractor personnel performing maintenance shall not be left unattended during the maintenance process and shall be re-locked by maintenance personnel after completion of work in that room.

C.1.13.3 Upon completion of duties, maintenance personnel shall turn off all lights and unnecessary equipment in unoccupied areas. Maintenance personnel shall close and secure all open and/or unlocked windows in their respective areas of work.

C.1.13.4 The contractor shall provide a complete Key Control Plan which reflects all aspects mentioned in the paragraphs above. This plan shall be submitted to the Contracting Officer within 60 days after contract start/date.

C.1.14
CONTRACTOR/EMPLOYEE RELIABILITY PROGRAM

C.1.14.1 The Center for Domestic Preparedness (CDP) shall establish and implement a Contractor/Employee Reliability Program (CERP) at the COBRATF, which includes personnel screening and evaluation to ensure that each individual who has access to chemical agent meets and maintains the highest standards of reliability.

C.1.14.2 Reserved

C.1.14.3 Reserved

C.1.14.4 Reserved

C.1.14.5 Reserved

C.1.14.5.1 Reserved

C.1.14.5.1.1 Reserved

C.1.14.5.1.2 Reserved

C.1.14.5.1.3 Reserved

C.1.14.5.1.4 Reserved

C.1.14.5.2 Reserved

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C.1.14.5.9.2	Reserved
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C.2.1 TERMS AND DEFINITIONS

C.2.2 CUSTODIAL CLEANING TERMS

C.2 DEFINITIONS

C.21 General Definitions: As used throughout this specification, the following shall have the meaning set forth below:

C.2.1.1 Maintenance: The routine, recurring work required to keep real property in such a condition that it may be utilized continuously at its designated capacity and efficiency for the intended purpose.

C.2.1.2 Preventive maintenance: The orderly, continuous, uniform, planned and scheduled operating procedure used to prevent breakdown and to prolong the life of real property by detection and correction of deficiencies,

C.2.1.3 Emergency maintenance: Work required for real property necessary to protect the health and safety of personnel and the protection of such property from serious damage or chemical contamination. Any equipment failure which could result in personnel injury, environmental contamination or lost training time shall be treated as an emergency.

C.2.1.4 Demand Maintenance. All required work not classified as emergency maintenance or preventative maintenance shall be considered demand maintenance. This work will be scheduled and accomplished in accordance with the contractor s work order procedures.

C.2.1.4.1 Urgent Work. Work which must be initiated on a regularly scheduled work shift. This priority is assigned to those pieces of equipment or systems for which there are temporarily sufficient alternatives.

C.2.1.4.2 Necessary Work. Work to correct an unsafe condition which is not immediate hazard to personnel.

C.2.1.4.3 Routine Work. Any work to improve facility operation which can be planned for completion during normal operation periods.

C.2.15 Standing Operations. Those operations and services where specific work and manpower requirements are relatively constant and predictable in advance. Examples would be filter changing operations, routine inspections on a scheduled

basis and preventive maintenance operations.

C.2.1.6 Rapid Response: Rapid response is defined as not more than 30 minutes after notification.

C.2.1.7 Building Exterior: The exterior surfaces of a building, including all walls and roofs, attached patios, overhangs, and entrance ways.

C.2.1.8 Grounds: All real estate within the fenced area plus the parking lot. This will include all lawns, fences, sidewalks, parking lots, roads within the defined areas, 800 meter to water pump station, water tower area and immediate areas around all buildings or fences.

C.2.1.9 Major equipment: A piece of major equipment is one that is separate and distinct as well as critical and necessary to a system's functioning.

C.2.1.10 Procedural Manual: Written procedures developed to guide personnel in providing a safe, clean environment.

C.2.1.11 Facility Supervisor: The Contractor representative responsible for managing the total contract.

C.2.1.12 Public Traffic Areas: Lobbies and corridors and public latrines.

C.2.1.13 Custodial Tasks and Frequency Chart: The contract exhibit which displays the required tasks and the minimum frequencies of performance.

C.2.2 CUSTODIAL CLEANING TERMS:

C.2.2.1 The following cleaning definitions apply for areas and tasks on the custodial task and frequency charts. The Government specified frequencies are included on the task and frequency chart. The contractor is to perform the tasks at the specified frequencies.

a. Sweeping: Floor cleaning done in such a manner that no dust is raised and all nonembedded dirt is removed. Cleaning is to be done with mechanical vacuum equipment, treated Yarn mops or push brooms covered with impregnated dusting cloths. Straw brooms shall be used on]y in sweeping exterior areas. Sweeping applies only to areas that are not carpeted.

b. Vacuuming: Cleaning done in such a manner that no dust is raised, and is done with mechanical vacuum equipment.

c. Wet Mopping: Floor cleaning using cotton yarn or sponge mops,

appropriate stain removal agents, unheated water and a mild detergent/ disinfectant in correct dilution solution to remove soil. satisfactory wet mopped floor is without dirt, dust, marks, film, streaks, debris and standing water. When traffic and furnishings permit machine mopping may be used.

d. Spot Mopping: Floor cleaning to remove water and/or stains caused by spillage or soiling of small areas of floor surfaces where full wet mopping is not required. Materials used shall be the same as for wet mopping.

e. Machine Scrubbing: Cleaning done by use of a cylindrical or disc type machine or combination scrubber vacuum machine using a disinfectant detergent solution and vacuum pickup.

f. Glass Cleaning: Cleaning of all exposed glass surfaces, partitions, interior glass doors, display cases, directory boards, draft shields on windows, mirrors (including interior of mirrored cabinets) and adjacent trim. After cleaning, there shall be no traces of film, dirt, smudges, water and other foreign matter. It does not include windows covered under Window CleaningInterior and Window CleaningOutside.

g. Metal Surfaces Cleaning: Cleaning of outside surface of fire extinguishers, complete cleaning of push plates, kick plates, nameplates, escutcheons, vestibule enclosures, doors, corner covers, and stainless steel cabinets. Metal surfaces shall be cleaned and polished to present a clean streak free appearance.

h. Lamp Fixtures Cleaning: Cleaning of desk, table, and floor lamps. All fixtures shall be cleaned to remove dust and stains.

i. Light Fixtures Cleaning: Cleaning of ceiling lights, emergency exit lights, patio lights, outside entrance and loading dock lights, interior lighted signs, canopy lights and any other light fixture not defined as lamp fixtures. All fixtures shall be cleaned to remove dust and stains.

j. Furniture/Counters/Cabinets Cleaning: Cleaning of furniture, counters and cabinets to remove dust, soil, stain and grease. All miscellaneous pencil, ink and other markings shall be removed from vinyl, plastic and fabric upholstered areas. Appropriate cleaning products shall be used to prevent damage to the furniture. All desk and table tops and sides, chairs, divans, and all other furniture, includingthe legs thereof shall be cleaned. Builtin counters and cabinets shall be cleaned on outside only; except bathroom cabinets which shall be cleaned inside and outside.

k. Utility Fixtures Cleaning: Cleaning of commodes, urinals, wash basin, showers, sinks, and lavatory partitions. Cleaning shall be done to remove all stains, deposits and foreign matter including those under fixture edges, lips and on all exposed

surfaces. All brass and chrome fittings shall be wiped clean to remove all foreign matter and to prevent the accumulation of dirt.

l. Trash Containers Cleaning: Cleaning of waste receptacles, ashtrays, wall mounted urns, and smoking urns. All containers shall he emptied and completely cleaned. Urns shall he refilled with the appropriate substance water or sand. Waste receptacles which contain wet or dry administrative refuse shall he cleaned inside and out as necessary to remove soil and stains.

m. Dispenser Supply: Supply sanitary materials such as paper towels, toilet paper, deodorant spray and hand soap. All paper towels, toilet paper, deodorant and hand soap dispensers shall be adequately supplied at all times by the Contractor. Stocking of refill supplies in the area of the dispenser is not permitted.

n. Drapes and Curtains Cleaning: Cleaning of drapes and curtains using mechanical vacuum equipment designed for use on fabric. Cleaning shall be done to remove all surface dust, dirt, lint, and foreign objects.. Drapes and curtains shall be rehung and straightened anytime they have become unhooked or placed in disarray.

o. Blinds, Windows Cleaning: Cleaning of window blinds to remove all surface dust, dirt, lint, and foreign objects. (This task does not include waxing of blinds.)

p. Duct/Louver/Door Grilles/Radiators (D/L/G/R) Cleaning: Cleaning of all intake and exhaust duct grilles, radiator vents, airway louvers, and radiator interiors where access panels permit entry. All shall be vacuumed to remove all dirt, lint, dust and other foreign matter. Cleaning of interior ductways or conduit is not included.

q. Spray Buffing: Floor care using application of a buffing solution and a buffing machine to bring the floor surface to,a uniform luster. After spray buffing floors shall be free of all residual dirt, dust and soil spots and have a uniform polished appearance when dry.

r. Buffing: Equipment, procedures and results are the same as spray buffing, except no buffing solution is used.

s. Carpet Maintenance Shampooing: Carpet cleaning done with a shampoo machine. Proper shampooing shall result in a carpet that is free of all types of airborne soil, dry dirt, water soluble soils, and petroleum soluble soils. A clean carpet shall be uniform in appearance, when dry and vacuumed. Following the completion *of* the carpet shampooing process the Contractor shall thoroughly clean all walls and bases above the floor.

t. Stripping: The use of a floor finish film remover solution for the removal of floor finish from all surfaces down to the flooring material. Appropriate grade synthetic nylon abrasive floor maintenance pads or brushes shall be used on all resilient floors. Floors shall be left free of all dirt, stains, deposits, cleaning solutions, standing water and have a uniform appearance when dry. Procedures and equipment shall be used to prevent a safety hazard. Following the completion of the floor stripping process the Contractor shall thoroughly clean all walls and bases above the floor of streaks and smears caused by the floor stripping.

u. Artificial Plant Cleaning: Cleaning of artificial plants and flowers to remove all dust and foreign materials and to present a clean appearance. This includes removal of any foreign materials or debris found in the plant container.

v. Drinking Fountains Cleaning: Cleaning of drinking fountains to remove all stains, rust and scale. No abrasive, acid or bowl cleaner shall be used.

w. Wall Cleaning: Cleaning of all walls except shower walls to be free *of* all dust, streaks, lint, and cobwebs except embedded dirt.

x. Wall Washing: Cleaning Of walls to remove all embedded dirt, marks and streaks.

y. Window CleaningInterior: Includes the cleaning of the inner surface of those windows, which are an integral part of the outer surface of the building. It does not include those areas covered under the definition entitled 'Glass Cleaning'. Clean windows shall be free of detergent streaks, smears, and no residue shall remain.

z. Window CleaningOutside: Includes the outer surface of windows, frames and the areas immediately adjacent to the frame, transoms, structural glass and ledges which are an integral part of the outer surface of the building. All screens shall be removed, cleaned and replaced. Clean windows shall be free of detergent streaks, smears, and no residue shall remain. It does not include those areas covered under the definition entitled Glass Cleaning.

(aa) Ceiling Cleaning: Vacuuming, dusting, spot wiping or washing the ceilings to insure all dust, dirt, streaks, and cobwebs are removed.. The immediate vicinity of air ducts in acoustical tile ceilings shall be kept clean using an approved ceiling tile cleaner.

(bb) Entrances Cleaning: Cleaning of the entire area outside the door to the point where a vehicle can approach. If canopy covered, it is that area thereunder.

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C.3.3 GOVERNMENTFURNISHED SUPPLIES AND MATERIALS

C.3.4 CONTROL OF MATERIALS

C.3.1 EQUIPMENT

C.3.1.1 The Government shall provide equipment described in the attachment to the PWS. Equipment is for use by contractor personnel in the operation and maintenance of the COBRATF.

C.3.1.2 The contractor shall furnish the Contracting Officer a Utilization Report annually on GFE equipment. Report to include deficiencies of equipment operation, equipment repairs, and complete inventory.

C.3.1.3 IDENTIFICATION BADGES.

C.3.1.3.1 All contractor employees will be issued identification badges by the Government, and shall be worn in addition to contractor furnished badge. If a badge is lost, it will be immediately reported to the COBRATFSecurity Specialist. These badges shall be collected by the contractor and returned to the Government from terminated employees prior to their departure.

C.3.2 FACILITIES, UTILITIES AND SERVICES:

C.3.2.1 DOJ will furnish all required Government forms, regulations, and directives for the performance of this contract on the contract start date.

C.3.2.1.1 The Government shall provide the space as needed, for the contractor's use as office, supply, and equipment storage.

C.3.2.2 Telephone service will be provided by the Government. (The contractor shall be responsible for any contractor dedicated offpost service, if desired)

C.3.2.3 Existing utilities such as electricity, water, natural gas, and sanitary sewer will be made available.

C.3.2.3.1 Fuel oil, pre-filters and the filters or approved reconditioned filters in the filter banks are all provided by the Contractor.

C.3.2.4 Reserved.

C.3.2.5 Reserved.

C.3.2.6 Reserved.

C.3.2.7 Reserved.

C.3.2.8 Reserved.

C.3.2.9 Reserved.

C.3.2.10 GOVERNMENT PROVIDED TRAINING

C.3.2.10.1 The following types of Government furnished employee training are required in order to perform under this contract:

C.3.2.10.2 The Government will provide agent related training as necessary.

C.3.2.10.3 Government training will also include but not be limited to the following training:

C.3.2.10.3.1 General indoctrination on chemical warfare agents

C.3.2.10.3.2 Physiological effects on the body and recognition of chemical warfare agents.

C.3.2.10.3.3 The wear and use of chemical warfare protective equipment.

C.3.2.10.3.4 Self aid and first aid for agent poisoning.

C.3.2.10.3.5 Chemical accident and incident procedures.

C.3.2.10.3.6 Additional training requirements that may be required from time to time as deemed necessary by the Government under this contract, will be furnished by the Government.

C.3.2.10.3.7 Training completion records of all employee training shall be maintained by the Facility Supervisor and made available to the Government.

C.3.2.10.3.8 ICIDS Training

C.3.3 SUPPLIES AND SERVICES

C.3.3.1 Key lock box.

C.3.3.2 Keys (initial set).

C.3.3.3 Personnel surveillance regulations require the O&M contractor employees to conform to the following services provided by the Government:

C.3.3.3.1 Wear protective clothing and masks which may include: canister, cover-all, hood, boots, rubber gloves, apron, and any other protective equipment as necessary.

C.3.3.3.2 When maintenance is required in the "Hot" area, the O&M contractor shall notify the COBRATF representative. The O&M contractor personnel will be supplied protective clothing by the Government.

C3.3.3.3 The Government will provide, as available, operations and maintenance manuals to be used by the contractor in performance under this contract.

C.3.4 CONTROL OF MATERIALS

C.3.4.1 Within 15 days after award of contract, the O&M contractor shall submit for approval a list of required spare parts with their cost.

C.3.4.2 The contractor shall requisition and have available parts and materials necessary for the continued operation and maintenance of the equipment or systems specified by the contract. The contractor's maintenance and operating procedures shall be such that the stock of material requisitioned by the contractor will be adequate for operation and maintenance needs. Requisition lists stockage levels shall be subject to the approval and periodic review of the Government. The contractor shall use a material requisition system which provides a means of allocating material charges to specific tasks and pieces of equipment.

C.3.4.3 Lost, Damaged, or Destroyed Property. The contractor shall comply with Federal Government reporting provisions when Government furnished property is lost, damaged or destroyed while in the possession of the contractor. The Contracting Officer will determine the appointing and approving authority for reports of survey initiated by the contractor. All adjustment documents initiated by the contractor shall be forwarded to the Contracting Officer.

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C.4.1 GENERAL REQUIREMENTS
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C.4.3 EQUIPMENT
C.4.4 STORAGE

C.4.1 GENERAL REQUIREMENTS

C.4.1.1 The contractor shall provide all necessary supplies, parts and materials required to perform all maintenance and repair operations as specified.

C.4.1.2 The contractor shall maintain records of required supplies and any other items consumed during normal operations such as bottled gas, fuel oil, caustic soda, etc. Contractor shall utilize materials in inventory before ordering for additional requirements.

C.4.1.3 All contractor employees, including facilities supervisor, while on duty, shall wear a standard plastic laminated ID badge with employee's picture and standard ID data.

C.4.2 PARTS AND MATERIALS

C.4.2.1 All contractor furnished supplies, parts and materials shall be standard products of manufacturers regularly engaged in the production of such supplies, parts or materials. The contractor shall have available parts and assemblies in sufficient quantity to perform under this contract with minimum shutdowns. All parts and materials shall be the same size, design and quality as those replaced. Any failure on the part of the contractor to provide sufficient quantities of, and quality, supplies and materials within the specifications of the contract shall not be cause for reduction in any service or performance.

C.4.2.2 The contractor shall submit with original proposal a copy of Contractor PurchasingSystem Review (CPSR) approval.

C.4.2.3 If the contractor uses or stores any flammable material in the facility, written permission of the Contracting Officer must first be obtained and procedures followed shall be in strict accordance withCOBRATF SOPs.

C.4.3 Equipment: The contractor shall furnish all vehicles and equipment to accomplish performance of the contract except for those items as stipulated in C.3.

C.4.3.1 Equipment Acquisition Plan: The contractor shall provide an Equipment Acquisition Plan (EAP) with original proposal. The EAP will include an hourly rate table for equipment that he intends to furnish. The contractor's hourly rate shall include: Acquisition Cost, rate for operation, maintenance and depreciation and methodology for computations.

C.4.3.2 Any additional equipment proposed to be acquired by the contractor and not contained in the EAP shall require prior review and coordination of the Contracting Officer and a written justification; including an economic analysis showing the use benefits to the Government, the need for the equipment, and a cost comparison between purchase and leasing or rental.

C.4.3.3 Reimbursement will be made only for the equipment that is in actual use in the performance of this contract. No depreciation charge shall be allowed on contractor owned and operated equipment, fully depreciated by the contractor. However, a reasonable charge for using fully depreciated equipment may be agreed upon and allowed by the Contracting Officer. In determining the charge, consideration will be given to cost, total estimated useful life at the time of negotiation, effect of any increased maintenance or decreased efficiency due to age, and the amount of depreciation previously charged to Government contracts.

C.4.3.4 The contractor shall be responsible for hand tools, shop tools, special tools, and testing equipment, except as specified as GovernmentFurnished in C.3.

C.4.4 STORAGE

C.4.4.1 All equipment and supplies stored on Government property shall be maintained in a neat and orderly manner. Contractor will provide storage bins, cabinets,
etc., sufficient to maintain operations in the Government furnished space.

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C.5.26 PHYSICAL SECURITY

C.5.1 EXTERIOR BUILDING MAINTENANCE.

C.5.1.1 General Information.

C.5.1.1.1 The contractor shall be responsible for the exterior maintenance of all buildings within the fenced area plus the water booster pump building and water storage tank. The contractor shall provide the Contracting Officer with the reports and records specified.

C.5.1.1.2 Exterior building maintenance shall include, but not be limited to, painting, tuckpointing, parapet repair, roof, maintenance, glass replacement, exterior lighting, and similar aspects of work.

C.5.1.2 Painting.

C.5.1.2.1 The contractor shall only be responsible for touchup painting and painting required because of repairs to or replacement of equipment or facilities performed by the contractor.

C.5.1.2.2 Metal surfaces. Outside metal surfaces such as metal windows, frames, screens and ladders shall be inspected annually. Touchup painting shall be performed as required. Any damaged metal surfaces shall be touched-up within 24 hours. Galvanized metal shall be touched up with zinC.rich primer and finish coat.

C.5.1.2.7.1 Prior to painting, all exterior metal work shall be properly prepared and be free of dirt and grime. All loose scales and rust shall be removed by scraping, wire brushing, or both. Visual standards for surface cleanliness shall comply with Steel Structures Painting Council specifications SSPC.Vis. 167.

C.5.1.2.2.2 All exterior metal surfaces shall be painted using a coating system consisting of a rust-inhibitive primer and a weatherresistant coating. For maintenance painting the primer shall be used only for touchup requirements where the base material has been exposed. For painting of new and unpainted surfaces, the specified primer shall be the first full coat of paint, followed by the finish coat or coats. The total dry film thickness for all coating systems applied to base metal shall be a minimum of 2.0 mils.

C.5.1.2.2.3 Frequency. Touchup painting shall be accomplished as required to protect existing equipment or building components.

C.5.1.3 Tuckpointing, caulking and puttying.

C.5.1.3.2 All loose and deteriorated joints shall be repaired as required to protect facilities. The joints shall be raked out onehalf inch to an inch. The new mortar shall be inspected after hardening to assure proper bonding of the new joint.

C.5.1.3.2 All loose and deteriorated caulked joints shall be repaired. Before re-caulking all loose and deteriorated caulking material shall be removed and all cracks cut out to assure proper bonding of the caulking material. A high grade caulking compounding shall be used. The caulking compound shall be applied with a force type caulking gun that places the compound well into the joints, not just on the surface.

C.5.1.3.3 Re-puttying windows shall be accomplished whenever putty is missing,
loose, or deteriorated. Before new putty is installed, all loose and deteriorated putty shall be removed, the sash shill be scraped clean, and a prime coat of paint shall be applied. After the new putty has set, it shall be painted to match the rest of the sash. A highgrade putty compound shall always be used.

C.5.1.4 Parapet wall repair.

C.5.1.4.1 All parapet walls shall be carefully checked and inspected annually. Repairs shall be made as needed.

C.5.1.5 Roof maintenance.

C.5.1.5.1 The contractor shall be responsible for roof maintenance. Roof maintenance includes repair of roof leaks, f lashing, edge strips, gravel stops, drains, drain strainers, gutter, downspouts, closure strips and decks. Replacement of roofing is not considered roof maintenance.

C.5.1.5.2 Twice yearly (spring and fall) roofs shall be cleaned of all debris and accumulation. Gutters and downspouts shall also be cleaned of all debris and accumulation.

C.5.1.5.3 All roofs shall be inspected for damage or faults at least once per year. Special attention shall be focused on roof projections, vent lines, parapets, and skylights.

C.5.1.5.3.1 Inspect gutters for ponding or water stains indicating inadequate slope.

C.5.1.5.3.2 Inspect for damaged or scratched finishes, dented surfaces, holes, rust, open caps, loose or unsealed closure strips.

C.5.1.5.3.3 Inspect all roof units to insure water is flowing around unit, flashing is

sealed and not showing any signs of movement.

C.5.1.5.3.4 Inspect peak flashing to insure it is secure and properly capped and sealed to the metal roof.

C.5.1.5.3.5 Examine all end caps for water accumulation and debris or caps opening up.

C.5.1.5.3.6 Inspect eave closures and make sure they are properly secured and there is no indication of unwanted movement.

C.5.1.5.3.7 Examine bottom side of roof for water penetration and sagging indicating a roof problem.

C.51.5.3.8 Inspect concrete brick sills for securement.

C.5.1.5.3.9 Examine knee joint trim for securement.

C.5.1.5.3.10 Check securement of metal flashing into metal reglet. Check joint sealant along face of reglet for voids, splits and securement.

C.5.1.5.3.11 Check neoprene closures for bonding and sealing to both metal deck and metal flashing.

C.5.1.5.3.12 Examine coping making sure the coping is secured to metal cleats, transverse coping joints are closed and sealed, and coping hold down plates are secure.

C.5.1.5.3.13 Examine attachment and seal of metal roof to the standard eaves trim and fascia trim. Make sure rake closure is sealed and attached to metal roof and fascia.

C.5.1.5.3.14 Inspect for water seepage along masonry walls and below metal roof eaves.

C.5.1.5.3.15 Inspect curb flashing back pan and side flashing. Examine seal on side flashing and back pan to metal roof.

C.5.1.5.3.16. At all penetrations inspect base and counter flashing for movement.

C.5.1.5.4.17 Inspect for indication of corrosion on metal roof.

C.5.1.5.3.18 Check all exposed mechanical fasteners. Inspect for rust, securement and seal. If they need replacing, use next larger size fastener.

C.5.1.5.3.19 Examine sealant in standing seams to make sure sealant is not being extruded out.

C.5.1.5.3.20 When damage or faults are discovered, they shall be repaired within 24 hours in accordance with manufacturer's written recommendations, ASTM, and Federal specifications specified herein before. If major repairs are required the contractor shall notify the Contracting Officer.

C.5.1.4 All materials used to repair roofing shall conform to ASTM, federal specifications.

C.5.1.5 Only authorized personnel shall be allowed access to the roof. After anyone goes on roof, it shall be inspected.

C.5.1.6 Glass Replacement

C.5.1.6.1 The contractor shall replace all cracked or broken glass. All broken glass shall be replaced within 24 hours. Cracked glass shall be replaced within 14 days

except where it is deemed a safety hazard by the Safety Officer. Cracked glass causing a safety hazard shall be replaced within 24 hours.

C.5.1.7 Exterior Lighting

C.5.1.7.1 The contractor shall maintain all exterior lighting. Exterior lighting shall include building exterior lights, area lights and security light systems.

C.5.1.7.2 All equipment shall be operated and maintained in accordance with manufacturer's instructions. Damaged or defective equipment shall be replaced with like units.

C.5.1.7.3 The contractor shall perform a quarterly inspection of all lights for proper operation. Malfunctioning security lights shall be repaired or replaced within 24 hours of discovery. All other lights shall be repaired or replaced within 48 hours of discovery. If complete security lights system malfunctions, it shall be repaired during the next scheduled work shift.

C.5.1.7.4 The contractor shall replace defective parts and clean all reflectors and glassware as required.

C.5.1.7.5 Defective lighting contacts, switches or photoelectric control devices shall be repaired or replaced within 24 hours.

C.5.1.8 Cathodic Protection Systems

C.5.1.8.1 The contractor shall maintain all cathodic protection systems. Cathodic protection systems include but are not limited to rectifiers, anodes, wiring test stations and insulating material.

C.5.1.8.2 All equipment shall be operated and maintained in accordance with manufacturer's instructions. Damaged or defective equipment shall be replaced with like units.

C.5.1.8.3 The contractor shall perform quarterly tests of cathodic protection systems. A system which is not operating properly shall be repaired within 5 working days of discovery. Records shall be kept on all tests of cathodic protection systems. Copy of test results shall be furnished to Contracting Officer.

C.5.2 INTERIOR BUILDING MAINTENANCE

C.5.2.1 General Information

C.5.2.1.1 The intent of this part of the specification is to accomplish only that work within the facility needed to maintain the systems to the standard required for proper operation and to assure full life expectancy.

C.5.2.1.2 The contractor shall accomplish interior building maintenance utilizing the necessary tools, equipment, materials, and parts called for within the contract.

C.5.2.1.3 The contractor shall be thoroughly familiar with current practices in all aspects of interior building maintenance and repair. The contractor shall have knowledge and experience with the materials and applications best suited for specific interior building maintenance requirements, compliance of materials with applicable codes, approved and appropriate techniques and methods of using these materials, and compatibility of these materials with existing materials.

C.5.2.1.4 The contractor shall familiarize himself and drill his staff so that they are familiar with existing floor plans of the facility; the types of materials installed on all the interior building surfaces; operational systems ad procedures; the points of access to valves located above a suspended ceiling or other nonprominent locations; special

features such as fire walls, sealed walls and ceilings prefabricated audio chambers, movable partitions, etc; fire ratings of all doors; and conformance of the interior building finishes and installations with codes, standards and regulations.

C.5.2.1.4.1 Any work such as minor modification to sealed rooms or in common walls in adjacent rooms shall he accomplished in such a manner as to avoid degradation of sealing effectiveness. If any damage to the sealing results from such work, retesting of the affected area shall be performed to insure sealing integrity.

C.5.2.2 Painting, wall finishes, and glazing.

C.5.2.2.1 General

C.5.2.2.1.1 The contractor shall be familiar with interior building painting, wall finishes, and glazing. He will be knowledgeable of advances in paint technology that have produced coating formulations to meet specific requirements and conditions, whether by paint systems, monolithic glazed surfaces, wall coverings, methods of surface preparation and treatment, methods of application, and choice of equipment.

C.5.2.2.1.2 The contractor shall be familiar with the materials, tools and techniques for returning the surfaces or fixtures to a condition satisfactory for painting, including the use of conditioners, sealers, and fillers. The contractor shall be familiar with the materials, tools, and techniques for caulking, puttying, glazing, patching, and glass cutting.

C.5.2.2.2 Painting

C.5.2.2.2.1 The contractor shall be responsible for all paintings of the interior surfaces of the building to include chemical resistant paint used in toxic training areas, partitions, ceilings where appro6riate, floors where appropriate, doors, equipment where appropriate, and on surfaces not specifically mentioned. This shall include all phases and areas described in this paragraph as well as all new painting requirements in all areas.

C.5.2.2.2.2 The contractor shall restore surfaces to good conditions before painting. He shall patch all holes or cracks, drive exposed nail heads below the surface replace broken windows and loose putty or glazing compound.

C.5.2.2.3 Preparation of surfaces. All surfaces to be painted shall be prepared according to the paint manufacturer's recommendations.

C.5.2.2.4 Materials.

C.5.2.2.4.1 The fire hazard classification of the selected coating shall NOT exceed the following factors when tested in accordance with ASTM ER4, latest edition, on the typical substrata over which the coating is applied.

Flame Spread Rate	25
Fuel Contributed Factor	5
Smoke Developed Factor	10

C.5.2.2.4.2 Paint used in touchup shall match existing.

C.5.2.3 Structural.

C.5.2.3.1 General. The contractor shall furnish to the contracting officer, when requested, recommendations on the maintenance and repair of the interior elements of the building.

C.5.2.3.2 Maintenance responsibilities.

The building interiors shall be maintained in a condition to perform the required functions at all times; to prevent deterioration in value and usability; and to provide repairs or replacements that shall be of a quality at least equal to or better than the original in workmanship and material.

C.5.2.3.2.2 Areas shall be inspected by the contractor at six-month intervals. The inspector shall observe the conditions with reference to type and stage of deterioration and make recommendations for spot repairs or renovation.

C.5.2.3.2.3 The following inspection and repair check list for building interiors is provided as a guide to the contractor and shall be included as a portion of his maintenance routines.

C.5.2.3.2.3.1 Tile floors. Check tile floors for missing or loose tiles, breaks, cracks, or other faults. Repair as required.

C.5.2.3.2.3.2 Wall, floor, and stair coverings. Check vinyl asbestos tile, vinyl plastic tile, linoleum, rubber stair treads, or other floor and wall coverings for deterioration of material, condition of adhesive, loose areas or edges, tears, breaks, indentations, burns, or other defects. Repair as required.

C.5.2.3.2.3.3 Interior walls, ceilings and corner guards.

C.5.2.3.2.3.3.1 Check for cracks, holes, stains indicating leaks, condition of interior trim

and paint. Repair as required.

C.5.2.3.2.3.3.2 Interior door frames, sills and lintels shall be checked and repaired.

C.5.2.3.2.3.3.3 Installed or builtin fixtures such as cabinets shall be checked for proper fitting of doors, drawer, condition of hardware and paint. Check countertops for condition and leakage around sink. Repair as required.

C.5.2.3.2.3.3.4 Closets shall be checked for hooks, garment rods and shelves. Repair as required.

C.5.2.3.2.3.3.5 Any crawl spaces shall be investigated for debris and any evidence of insect infestation.

C.5.2.3.2.3.3.6 Evidence of any insect infestation such as termites, powder beetles, etc., shall be promptly reported to the Contracting Officer.

C.5.2.3.2.3.4 Acoustical ceilings. Check for broken or missing panels, damage to hanger wires and grid. Repair as required.

C.5.2.3.2.3.5 Windows and window closers.

C.5.2.3.2.3.5.1 Check operation, maintain, clean and oil closers or replace as necessary.

C.5.2.3,2.3.5.2 Check and maintain by replacement of glass where necessary.

C.5.2.3.2.3.5.3 Check caulking and repair as necessary.

C.5.2.3.2.3.6 Window shades. Check for condition and repair or replace as required.

C.5.2.3.2.3.7 Storage areas for flammable and nonflammable gases and liquids. Check for compliance with code requirements.

C.5.2.3.2.3.8 Locksmith operations. Repair, maintain, rebuild, replace and install all locks panic hardware, and door closers throughout the facility.

C.5.2.3.2.3.9 Metal work. Check and repair all ducts, handrails, security bars and screen, louvers, metal enclosures, metal doors and installations involving metals such as galvanized and ungalvanized metal, steel, aluminum, copper, brass, and cast iron.

C.5.2.3.2.4 Miscellaneous Services.

C.5.2.3.2.4.1 The contractor shall provide for miscellaneous services such as bulletin boards, pictures, etc.

C.5.3 PLUMBING

C.5.3.1 General Information.

C.5.3.1.1 The plumbing systems shall be maintained in a condition to perform the required functions at all times; to prevent the systems from deteriorating in value and usability; and to provide replacements that shall be of a quality at least equal to the original in workmanship and material.

C.5.3.2 Work Requirements.

C.5.3.2.1 The contractor shall furnish to the contracting officer or his authorized representative(s), advice on plumbing extensions, replacements, repairs and conduct of work upon request.

C.5.3.2.2 Plumbing systems shall include, but not be limited to, cold water, hot water, recirculating hot water, sanitary waste and vent, hazardous waste, storm drainage, compressed air, fire protection standpipe, fire protection sprinklers, fire extinguishers, all fixtures and appurtances and all equipment listed on the equipment maintenance chart.

C.5.3.3 Demand maintenance plumbing systems. The contractor shall repair or replace all systems and/or components of systems which in the course of use became broken, fail to work properly, fail to work efficiently or require work to minimize the possibility of failure.

C.5.3.4 Emergency maintenance plumbing systems. The contractor shall repair or replace all systems and/or components of systems which the contracting officer identifies as critical to the operation of the facility.

C.5.3.5 Preventive maintenance plumbing systems. The contractor shall prepare preventive maintenance routines for all plumbing systems and enforce them. The following schedule for preventive maintenance applies generally to plumbing systems and shall be considered minimum requirements. These shall be used to form the basis on which the contractor shall prepare his own routines, which shall also include equipment manufacturers' recommendations, good practice, and whatever routines are required to maintain the facility in a constant state of operability. As part of the preventive maintenance routines, Contractor shall develop lubrication program. Program shall include all equipment and shall coordinate manufacturers individual requirements.

C.5.3.5.1 Weekly;

C.5.3.5.1.1 Observe operation of domestic hot water heater. Check for unusual noises, vibration, steam pressure, and water temperature.

C.5.3.5.2 Weekly/Monthly:

C.5.3.5.2.1 Check oil levels in air compressors (weekly).

C.5.3.5.2.2 Lubricate all motors (monthly).

C.5.3.5.2.3 Check alignment and belt tension of all belt driven machinery (monthly).

C.5.1.5.2.4 Check sprinkler system pressure readings on alarm check valve. Outlet reading should be higher than inlet because of pressure surges. If both readings

are the same, the valve is probably leaking and shall be repaired. (weekly)

C.5.3.5.2.5 Check charge on all fire extinguishers and report low readings to Fire Department. (monthly)

C.5.3.5.3 Quarterly:

C.5.3.5.3.1 Inspect all plumbing fixtures and plumbing equipment for proper operation, leaks, loose parts, damaged parts, missing parts, improper adjustment and clogged drains. Repair as required.

C.53.5.3.2 Check fire protection hose cabinets for nozzle damage and hose deterioration.

C.5.3.5.3.3 Check all air vents and relief valves.

C.5.3.5.4 Yearly:

C.5.3.5.4.1 Open fire protection hydrants and flush system.

C.5.3.5.4.2 Test backflow preventers for proper operation and leakage.

C.53.5.4.3 Test backup pumps and controls for proper operation.

C.5.4 HEAT ENERGY SYSTEMS

C.5.4.1 General Information

C.5.4.1.1 The heating systems shall be maintained in a condition to perform the required functions at all times; to prevent the systems from deteriorating in value and usability; and to provide replacements that will be of a quality at least equal to the original workmanship and material.

C.5.4.2 Work Requirements

C.5.4.2.1 The contractor shall be thoroughly familiar with the theory of heat energy systems and the products currently avail able for those systems.

C.5.4.2.2 The contractor shall ascertain the operation requirements for the heat energy systems from manufacturer's recommendations, operational design specifications, COBRATF operating policies and procedures and communication with training facility administration. The contractor shall adhere to these parameters and operate the systems in the most economical manner possible.

C.5.4.2.3 The contractor shall study the characteristics of the installed equipment and systems, the location of all system components, the controls and regulating points, and manufacturer's operation, maintenance and trouble shooting instructions.

C.5.4.3 Heat Energy System Description

C.5.4.3.1 The heat energy system consists of a waste heat recovery system coupled with the waste incinerator which supplies the main source of medium pressure steam for both heating and cooling for the facility. (See Section C.5.10 for additional information). A backup packaged steam boiler provides medium pressure steam whenever the facility requires heating and/or cooling during periods when the incinerator is not operating. The steam boiler is provided with a forced draft fan and natural gas burner with a fuel oil backup capability. The steam is then used as a heat source for the absorption chiller system, domestic hot water for the Training Building, heating water for the Administrative Building, and for use in heating coils in the air handling units.

C.5.4.3.1.1 The incinerator also supplies steam for the two BDO autoclaves during the processing cycle. Any effluents from the processing are vented back into the incinerator.

C.5.4.3.2 The following groups of components in the heating system will require

maintenance.

C~5.4.3.2.l Hot water heat exchanger

C.5.4.3.2.2 Steam Unit Heaters

C.5.4.3.2.3 Condensate Return Units

C.5.4.3.1.4 Hot Water Expansion Tank

C.5.4.3.2.5 Steam Traps

C.5.4.3.2.6 Steam Strainers

C.5.4.3.2.7 Surge Tank

C.5.4.3.2.8 Aerator

C.5.4.3.2.9 Package Boiler and Accessories

C.5.4.3.2.10 #2 Fuel Storage Tanks

C.5.4.3.2.11 Blowdown Tank

C.5.4.3.2.12 Boiler Feedwater System

C.5.4.3.2.13 Recirculation Tank

C.5.4.3.2.14 Pressure Reducing Station

C.5.4.3.2.15 Hot Water Pumps

C.5.4.3.2.16 Shot Type Chemical Feeder

C.5.4.3.2.17 Temperature Control System

C.5.4.3.2.18 Boiler Stack

C.5.4.4 Demand Maintenance Heat Energy Systems. The contractor shall repair or replace all systems and/or components or systems which in the course of use become broken, fail to work properly, fail to work efficiently or require work to minimize the possibility of failure.

C.5.4.5 Emergency Maintenance Heat Energy Systems. The contractor shall repair or replace all systems and/or components of systems which the Contracting

Officer or his representative identifies as critical to the operation of the facility.

C.5.4.6 Preventive Maintenance Heat Energy Systems. The contractor shall prepare preventive maintenance routines for all heat energy systems and enforce them. The following schedule for preventive maintenance applies generally to heat energy systems and are to be considered minimum requirements. These shall be used to form the basis on which the contractor shall prepare his own routines, which shall also include equipment manufacturer's recommendations, good practice, and whatever routines are required to maintain the facility in a constant state of operability. Revisions to this plan may be made to minimize downtime and overall maintenance cost. The revisions shall be based upon equipment history and breakdown records and shall be subject to the approval of the Contracting Officer.

C.5.4.6.1 Daily:

C.5.4.6.1.1 Observe and record operation of packaged steam boiler. Inspect relief valve for leakage. Check and record boiler temperature and pressure.

C.5.4.6.1.2 Observe and record operation of all boiler support systems for proper operation.

C.5.4.6.1.3 Observe and record operation of all system pumps. Check for unusual noise, vibration and leakage.

C.5.4.6.2 Monthly:

C.5.4.6.2.1 Observe and record packaged steam boiler operation. Check boiler temperature and pressure control settings. Check all burner linkages to be sure that there has been no change from its original marked positions. Check belt drives on boiler burner and replace as required.

C.5.4.6.2.2 Observe surge tank operation. Check for leakage and temperature and pressure of condensate.

C.5.4.6.2.3 Observe and record deaerator operation. Check for proper operation.

C.5.4.6.2.4 Observe and record boiler system blowdown for proper flow and operation.

C.5.4.6.2.5 Observe and record boiler feedback system for proper flow and operation.

C.5.4.6.2.6 Grease bearings on all pumps and check Vbelt driven for belt tension

and alignment.
C.5.4.6.2.7 Check domestic water heater for proper operation.

C.5.4.6.3 Quarterly:

C.5.4.6.3.1 Check and record all pressure, temperature, and flow instruments/gauges to maintain accuracy of calibration.

C.5.4.6.4 SemiAnnually:

C.5.4.6.4.1 Observe unit heaters for proper operation.

C.5.4.6.4.2 Chemically analyze water samples from the heating systems and treat as required.

C.5.4.6.4.3 Remove, clean, and replace all strainers.

C.5.4.6.4.4 Observe all condensate return systems for proper operation.

C.5.4.6.4.5 Observe and record control valves for proper operation and leakage.

C.5.4.6.5 Annually:

C.5.4.6.5.1 Check steam traps for proper operation.

C.5.4.6.5.2 Pressure vessels and lifting equipment shall be hydrotested and pressure tested as necessary for safe operation, recorded and certified. Pressure vessels include boiler, deareator and any items which meet the ASME definition of pressure vessels. (Contractor is to hydrotest and pressure test vessels as necessary).

C.5.5 AIR CONDITIONING, WATER COOLING AND FILTER PAD SYSTEMS

C.5.5.1 General Information

C.5.5.1.1 The air conditioning, water cooling and filter pad systems shall be maintained in a condition to perform the required functions a t all times; to prevent the systems from deteriorating in value and usability; and to provide replacements that shall be of a quality at least equal to the original in workmanship and material.

C.5.5.2 Work Requirements
C.5.5.2.1 The contractor shall be thoroughly familiar with the theory of the air conditioning, water cooling and filter pad systems and the products currently available for those systems.

C.5.5.2.2 The contractor shall ascertain the operation requirements for the air conditioning, water cooling and filter pad systems from manufacturer's recommendations, operational design specifications, Chemical Defense Training Facility operating policies and procedures, and communication with training facility administration. The contractor shall adhere to these parameters and operate the systems in the most economical manner available.

C.5.5.2.3 The contractor. shall study the characteristics of the installed equipment and systems, the location of all system components, the controls and regulating points, and manufacturer's operation, maintenance and troubleshooting instructions.

C.5.5.3 Air Conditioning, Water Cooling and Filter Pad System Descriptions.

C.5.5.3.1 The air conditioning systems consist of air handling units with chilled water cooling coils and steam/hot water heating coils, thruwall air conditioning units, general exhaust/ventilation systems and associated controls.

C.5.5.3.2 The water cooling systems consists of a steam absorption chiller, chilled water pumps, forced draft cooling tower, cooling water pumps, piping systems and associated controls.

C.5.5.3.3 The Filter Pad System consists of HEPA and Carbon Filters in stainless steel bagout housings, exhaust fans, discharge stack, and connecting ductwork. U.S. Government will prepurchase all system related filters except prefilters; the Contractor shall furnish the prefilters (roughing). The O&M contractor shall conduct a freon challenge of each filter bank every 12 months. Filters indicating agent breakthrough shall be replaced by the contractor. Contractor shall be responsible for the operation and maintenance of all air filter systems.

C.5.5.3.4 The following groups of components in the air conditioning, water cooling and filter pad systems will require maintenance.

C.5.5.3.4.1 Air Handling Units
C.5.5.3.4.2 Supply/Return/Exhaust Fans
C.5.5.3.4.3 Filter Housings
C.5.5.3.4.4 HVAC Controls and Control Valves
C.5.5.3.4.5 Exhaust Stack for Air Filter System
C.5.5.3.4.6 HeatPumps
C.5.5.3.4.7 Water Pumps
C.5.5.3.4.8 MakeUp Air Units

C.5.5.3.4.9 Air Conditioning Units
C.5.5.3.4.10 Forced Draft Cooling Tower
C.5.5.3.4.11 Steam Absorption Chiller and Accessories
C.5.5.3.4.12 Chemical Feed System(s)
C.5.5.3.4.13 Emergency Generator Fuel Oil Tanks, Pumps and Accessories
C.5.5.3.4.14 Water Strainers
C.5.5.3.4.15 Reheat Coils
C.5.5.3.4.16 Piping Systems
C.5.5.3.4.17 Ductwork and Accessories
C.5.5.3.4.18 25 kw Emergency Generator and (motor for ID fan system)

C.5.5.4 Demand Maintenance Air Conditioning, Water Cooling and Filter Pad Systems. The contractor shall repair or replace all systems and/or components of systems which in the course of use become broken, fail to work properly, fail to work efficiently or require work to minimize the possibility of failure.

C.5.5.5 Emergency Maintenance Air Conditioning, Water Cooling, Emergency Generators and Filter Pad Systems. The contractor shall repair or replace all systems and/or components of systems which the Contracting Officer or his representative identifies as critical to the operation of the facility.

C.5.5.6 Preventive Maintenance Air Conditioning, Water Cooling, Emergency Generators and Filter Pad Systems. The contractor shall prepare preventive maintenance routines for air conditioning, water cooling, emergency generators and filter pad systems and associated equipment and enforce adherence to those. The following groups of schedules for preventive maintenance shall be considered minimum procedures to be followed. The contractor shall in the preparation of his own routines, supplement them based uponhis best judgement and experience with specific units of equipment. Additionally, manufacturer's recommendations regarding preventive maintenance of specific units of equipment shall be adhered to. Revisions of this plan may be made to minimize downtime and overall maintenance cost. These revisions shall be based upon equipment history and breakdown records and shall be subject to the approval of the Contracting Officer.

C.5.5.6.1 Weekly:

C.5.5.6.1.1 Observe operation of water chillers. Record operating pressures and temperatures. Check for unusual noise and vibration.
C.5.5.6.2 To Be Performed Weekly:

C.5.5.6.2.1 Observe operation of chilled water and condenser water pumps. Check for unusual noise, vibration and leakage.

C.5.5.6.2.2 Observe operation of control air compressor. Check for unusual noise and vibration. Check oil level.

C.5.5.6.3 Monthly:

C.5.5.6.3.1 Check cooling tower gear reducers. Sample oil and check for water and dirt. Chemically analyze water, cooling tower, and treat as required.

C.5.5.6.3.2 Observe operation of air handling units. Check for unusual noise, vibration and excessive motor heat.

C.5.5.6.3.4 Inspect roughing filters in air handling units and change as necessary.

C.5.5.6.3.4 Contractor to observe and record ventilation pad differential pressure gauges (Daily).

C.5.5.6.4 Quarterly:

C.5.5.6.4.1 Service cooling tower. 6rease drive motor bearings on fan drive motors. Check float valve on cooling tower for proper operation or leakage.

C.5.5.6.4.2 Service condenser water and chilled water pumps. Check drive motor shaft couplings, grease bearings, and tighten all mounting bolts.

C.5.5.6.4.1 Service air handling units. Check mountings of fan wheel bearings for tightness. Check fan belts for excessive wear. Apply belt dressing. Check drive and driven sheaves for excessive groove wear and check motor mounting bolts for tightness. Inspect coils and clean with hose and brush.

C.5.5.6.4.4 Service control air compressor. Check Vbelt for proper tension, cracking and excessive wear. Inspect drive and driven sheave grooves for wear. Apply belt dressing.

C.5.5.6.4.5 Check air filter stack. Clean base area. Change HEPA Filters and Carbon Filters only if directed by Contracting Officer. The contractor shall transport and store filters for incineration.

C.5.5.6.4.6 Clean strainers in chilled water and condenser water systems.
C.5.5.6.4.7 Chemically analyze a water sample from condenser water system and treat system water as indicated.

C.5.5.6.5 SemiAnnually:

C.5.5.6.5.1 Service absorption chillers. Check all Joints, seams and seals.

C.5.5.6.6.2 Service cooling tower. Check fan blade pitch settings and tighten each blade clamp. Check fan shaft nuts for tightness. Change oil in gear reducer and clean breather vent. Check gear reducer mounting bolts for tightness. Inspect drive shaft and

drive motor, for, loose or broken parts. Generally inspect cooling tower for condition of structural members, debris, andbuildup of algae.

C.5.5.6.5.3 Service exhaust fans, return fans, outside air fans, filter pad fans and supply fans. Check condition of Vbelt drives. Check belts for cracks and excessive wear. Check drive and driven sheaves for groove wear and tighten set screws. Apply belt dressing. Tighten motor mounting bolts. Tighten mounting bolts on fan shaft bearings. Clean fan wheels with brush and vacuum. Grease fan shaft bearings.

C.5.5.6.5.4 Check all fire dampers.

C.5.5.6.5.5 Rebalance air flow to each training room and lab to maintain specified pressurization. Rebalance air flow in all hoods to provide specified velocities.

C.5.5.65.6 Check and record all Filter Pad fans for proper air balance.

C.5.5.6.6 Annually:

C.5.5.6.6.1 Service cooling tower. Clean fan blades. Remove inspection plug on gear reducers and check gear wear pattern. Check gear lash on gear reducers. Conduct insulation resistance test on drive motors.

C.5.5.6.6.2 Service condenser water pumps. 6onduct drive motor insulation resistance test.

C.5.5.6.6.3 Inspect all parts of each condenser water chemical treatment system. Perform all maintenance recommended by manufacturer.

C.5.5.6.6.4 Service air handling units. Check alignment of drive and driven sheaves. Conduct drive motor insulation resistance test. Clean fan wheel and fan shaft. Inspect drain pan for sludge and corrosion and clean as necessary. Check damper linkage adjustment for full close and open settings and check all set screws for tightness.

C.5.5.6.6.5 Pressure vessels and lifting equipment shall be hydrotested and tested as necessary for safe operation, recorded and certified. Pressure vessels include boiler, deareator and any items which meet the ASME definition of pressure vessels. (Contractor is to hydrotest and pressure test as necessary).

C.5.6 ELECTRICAL

C.5.6.1 General Information:

C.5.6.1.1 The contractor and his maintenance electricians shall be thoroughly familiar with the maintenance and repair of the electrical, lighting and alarm systems found in the COBRATF, and circuit theory.

C.5.6.2 Maintenance Responsibility:

C.5.6.2.1 The contractor shall maintain the electrical, safety, lighting and alarm systems to a standard where they will perform the required functions at all times and to provide repairs and replacement that will be of a quality at least equal to the original in workmanship and materials.

C.5.6.2.2 The contractor shall prepare and perform preventive maintenance routines for the electrical systems, from fused cutouts on the service drop pole, the alarm systems, the safety systems, lighting systems, the entire emergency power installation and other systems listed. Preventive maintenance shall assure that normal life expectance will be obtained from all system components and shall include periodic testing, and operating of systems and checking voltage, amperes and ground resistance. The preventive maintenance as stated herein shall be a minimum. Where power interruption or system downtime are required for maintenance purposes, they shall not be performed between 0730 and 1330 and must be coordinated with the Chief, COBRATF and the Contracting Officer or his authorized representative.

C.5.6.2.3 All recognized safety practices such as those contained in the National Electrical Code, OSHA, and other safety regulations shall be followed during maintenance.

C.5.6.3. System components:

C.5.6.3.1 Main switch gear

C.5.63.1.1 Annually:

C.5.6.3.1.1.1Drawout circuit breakers

C.5.6.3.1.1.1.1 Operate each breaker in the test positions and check all functions.

C.5.6.3.1.1.1.2 Remove the breakers to a clean work area. Perform all maintenance operations stated in the manufacturer maintenance manual including the check for pitted contacts and damaged arc chutes. Oil all moving parts and check the calibration

of the trip setting.

C.5.6.3.1.1.1.2.1 Check instrument transformers and relays.

C.5.6.3.1.1.1.2.2 Check all devices for proper operation.

C.5.6.3.1.1.1.2.3 Tighten all electrical connections and mounting brackets.

C.5.6.3.1.1.1.2.4 Check the calibration of the ground fault relay.

C.5.6.3.1.1.1.2.5 Clean the disconnecting contacts with a lintfree cloth.

C.5.6.3.1.1.3 Bus compartments

C.5.6.3.1.1.3.1
Inspect the buses and connections carefully for evidence of overheating or weakening of the bus supports.

C.5.6.3.1.1.3.2
Tighten all bolts on the buses and bus bracing.

C.5.6.3.1.1.3.3
Wipe and vacuum clean all buses and supports.

C.5.6.3.1.1.3.4
Visually check all bus insulations.

C.5.6.3.1.1.3.5
After cleaning the bus compartments, measure the resistance to ground, and the resistance between phases on all insulated buses. Measure the resistance of all connections of the buses. Keep records of the resistance measurements and compare with recordings of previous measurements. Make sure instruments are disconnected before taking resistance measurements. Record the humidity and temperature at time measurements were taken.

C.5.6.3.1.1.4 Breaker compartment interiors

C.5.6.3.1.1.4.1
Clean the interior of the breaker and instrument compartments using a vacuum cleaner and clean rags.

C.5.6.3.1.1.4.2
Check indicating devices, and mechanical and key interlocks.

C.5.6.3.1.1.4.3 Inspect and clean disconnecting device contacts by wiping with a

lintfree cloth.

C.5.6.3.1.1.4.4 Check the alignment of the breaker contacts with the compartment contacts. Apply a thin coat of contact lubricant to the house studs and fingers and to the primary disconnects on the breakers.

C.5.6.3.1.1.5 Overall switchgear

C.5.6.3.1.1.5.1 Tighten all bolts including anchor bolts.

C.5.6.3.1.1.5.2 Clean and visually inspect all painted surfaces. Touchup paint where necessary.

C.5.6.3.1.1.5.3 Operate all compartment door latches to assure proper operations.

C.5.6.3.1.1.5.4 Check the operation, of all protective relays in accordance with the Manufacturer's Relay Instruction Book.

C.5.6.3.2 Motor Control Centers

C.5.6.3.2.1 Annually:

C.5.6.3.2.1.1 Inspect the buses and connections for evidence of overheating or weakening of the supports.

C.5.6.3.2.1.2 Check for contact arcing and coil clatter by operating each starter.

C.5.6.3.2.1.3 Check starter contacts for wear or pitting. Tighten all terminal lugs and connections.

C.5.6.3.2.1.4 Check door open safety interlock lever for proper operations.

C.5.6.3.2.1.5 Clean starter compartments with a vacuum cleaner.

C.5.6.3.2.1.6 Replace all burned out lamps.

C.5.6.3.2.1.7 Tighten all bolts including anchor, structural connection, mounting and bracing bolts.

C.5.6.3.2.1.8 Clean and inspect all painted surfaces. Touchup paint where necessary.

C.5.6.3.3 Generators, 600 kw, 100 kw and 25 kw.

C.5.6.3.3.1 Daily:

C.5.6.3.3.1.1 Visually inspect engine, generator, transfer switch and switch gear for indications of failure or damage.

C.5.6.3.3.1.2 Visually inspect area for fuel spillage, waste storage and/or debris.

C.5.6.3.3.1.3 Check daytank fuel level.

C.5.6.3.3.1.4 Correct all defects, identified during the daily inspection.

C.5.6.3.3.2 Weekly

C.5.6.3.3.2.1 Inspect the engines cooling system for coolant level.

C.5.5.3.3.2.2 Inspect condition of fan, fan belts and pulley, alternator belts and pulley, and coolant hoses.

C.5.6.3.3.2.3 Check lubricating oil level, crankcase breather and check for oil leaks.

C.5.6.3.3.2.4 Clean and tighten battery terminals if necessary. Check battery electrolyte level and charge on batteries.

C.5.6.3.3.2.5 Check engine exhaust system for leaks; drain condensate trap, check exhaust port clearance and exhaust connections for tightness.

C.5.6.3.3.2.6 Inspect transfer switch for dirt, dust or foreign matter on internal surfaces; scorching or discolorations of terminals and connectors; frayed or burned areas on wiring; and secure closing of all covers.

C.5.6.3.3.2.7 Test the generators by simulating a power outage and run generator for at least 30 minutes under load. Record time required for cold start and initial voltage level to load. Monitor the system at all times. Check particularly for unusual vibrations, fuel, oil and coolant leakage, high surface temperature and noise (chatter) from the transfer switch. To be performed so as not to conflict with Training Schedule.

C.5.6.3.3.2.8 After 30 minutes record the engine oil pressure, coolant temperature and a meter reading.

C.5.6.3.3.2.9 Restore system to normal power and generator to automatic start and transfer.

C.5.6.3.3.2.10 Correct all defects, secure area and file report with the Contracting Officer or his representative. (monthly)

C.5.6.3.3.3 Daily:

C.5.6.3.3.3.1 Change oil using correct grade and type as specified by the manufacturer. Check oil level and leaks.

C.5.6.3.3.3.2 Drain water from fuel filters, day tanks and main fuel tanks. Check main fuel tank vents, gauges and pumps.

C.5.6.3.3.4 SemiAnnually:

C.5.6.3.3.4.1 Inspect thecomplete electrical system; test battery electrolyte specific gravity; check battery vent caps; inspect terminals and cabling and test battery's charge.

C.5.6.3.3.4.2 Change fuel and air filters.

C.5.6.3.3.4.3 Inspect generator, replace brushes; clean slip rings and lubricate bearing surfaces.

C.5.6.3.3.4.4 Check operation of all engine operating alarms and safety shutdown devices.

C.5.6.3.3.5 Annually:

C.5.6.3.3.5.1 Inspect the engine's cooling system; check condition and rodout heat exchanger, drain coolant, backflush system and replace coolant, antifreeze and rust inhibitor; clean exterior of radiator; clean water pumps; clean and check radiator louvers, and clean fresh air ducts.

C.5.6.3.3.5.2 Inspect ignition system; replace glow plugs. Check ignition timing and wiring.

C.5.6.3.3.5.3 Check conditions of muffler, exhaust line, supports and connections.

C.5.6.3.3.5.4 Inspect generator, clean generator windings, check and lubricate bearings and measure resistance of generator winding with a megger.

C.5.6.3.3.5.5 Change oil using correct grade and type as specified by the manufacturer.

C.5.6.3.4 Panel Boards

C.5.6.3.4.1 Annually:

C.5.6.3.4.1.1 Inspect panel boards while under load for overheating. If overheating, determine cause and correct.

C.5.6.3.4.1.2 Clean panelboard enclosure.

C.5.6.3.4.1.3 Tighten all lugs and joints. Replace all faulty circuit breakers.

C.5.6.3.5 Dry Type Transformers

C.5.6.3.6.1 Annually:

C.5.6.3.5.1.1 Inspect under load to check for overheating. If overheating determine cause and correct.

C.5.6.3.5.1.2 Clean all vents with vacuum cleaner and rags; clean interiors of transformer enclosure.

C.5.6.3.5.1.2 Tighten all bolts, lugs and joints.

C.5.6.3.5.1.3 Clean and inspect all painted surfaces. Touchup paint as necessary.

C.5.6.3.6 Fire Alarm System

C.5.6.3.6.1 Tests and repairs to the fire alarm system shall be performed only by personnel trained and experienced in fire alarm systems. All tests and repairs shall be coordinated with the local Fire Department. Tests shall be made in accordance with the requirements of NFPA 72D and 72E standards.

C.5.6.3.6.1.1 Weekly:

C.5.6.3.6.1.2 Conduct test of system. Check and record all alarm sounding devices to insure, they are operating and are audible throughout facilities. Insure the proper code is received at the local Fire Department. Check that shut down circuits are operating properly after by passing the circuits to prevent actual shutdown. Tests alarm and trouble lamps. Check to insure batteries are fully charged.

C.5.6.3.6.2 Monthly:

C.5.6.3.6.2.1 Check the level of the electrolyte in the batteries.

C.5.6.3.6.3 Semiannually:

C.5.6.3.6.3.1 Clean all smoke detectors.

C.5.6.3.6.A Annually:

C.5.6.3.6.4.1 Check all indicating devices in a random manner throughout the year so that each device will be checked by the end of the year.

C.5.6.3.6.4.2 Check the entire control system in accordance with the manufacturer's maintenance manual.

C.5.6.3.7 Intercom System

C.5.6.3.7.1 The Intercom system shall be maintained in accordance with the manufacturer's maintenance manuals. All preventative maintenance and cleaning shall be performed as recommended in the maintenance manuals.

C.5.6.3.8 Door Position Indicator System.

C.5.6.3.8.1 The system shall be maintained and tested only by personnel trained and experienced in intrusion alarm systems. Maintenance shall be in accordance with manufacturers maintenance manual.

C.5.6.3.8.2 The system shall be tested annually to insure proper operation. Each door magnetic switch shall be tested by inserting an insulating material between the magnetic switch to simulate the opening of the door. Assure proper alarm is transmitted.

C.5.6.3.9 Electric Gate Operator

C.5.6.3.9.1 Maintenance shall be in accordance with manufacturer's maintenance manuals.

C.5.6.3.9.1.1 Semiannually:

C.5.6.3.9.1.1.1 Check for proper alignment of operating devices.

C.5.6.3.9.1.1.2 Check belt and chain for excessive wear.

C.5.6.3.9.1.1.3 Check limit switches for proper adjustment.

C.5.6.3.9.1.1.4 Adjust friction clutch to assure proper operation.

C.5.6.3.10 Motors on Mechanical Equipment

C.5.6.3.10.1 Motors on mechanical equipment shall be maintained in accordance

with manufacturer's maintenance manuals. Oil and grease, where applicable, semi annually.

C.5.6.3.11 Battery Chargers

C.5.6.3.11.1 The battery chargers shall be maintained in accordance with manufacturer's maintenance manuals.

C.5.6.3.11.2 SemiAnnually:

C.5.6.3.11.2.1 Check battery charger to verify the charging current is correct.

C.5.6.3.11.2.2 Tighten all connections to charge and battery.

C.5.6.3.12 Emergency Lights

C.5.6.3.12.1 Monthly:

C.5.6.3.12.1.1 Test fixtures to verify that it operates properly.

C.5.6.3.12.1.2 Check level of electrolyte in batteries. Add electrolyte if required.

C.5.6.3.1.3 Exit Light

C.5.6.3.13.1 Monthly:

C.5.6.3.13.1.1 Test exit light units to verify they operate properly. Replace any burned out bulbs.

C.5.6.3.13.1.2 Check level of electrolyte in batteries. Add electrolyte as necessary.

C.5.6.3.14 Variable Frequency Drives

C.5.6.3.14.1 The Variable Frequency Drives shall be operated and maintained in accordance with the manufacturer's maintenance manuals.

C.5.6.3.15 Interior Lighting

C.5.6.3.15.1 As Required:

C.5.6.3.15.1.1 Replace Florescent lamps that are darkened at the end, which flicker during operation, or which are burned.

C.5.6.3.15.1.2 Replace noisy ballast.

C.5.6.3.15.1.3 Replace broken or cracked lenses.

C.5.6.3.16 Lighting Contacts
SemiAnnually:

C.5.6.3.16.1.1 Check lighting contacts for proper operation.

C.5.6.3.16.1.2 Check for pitted contacts and chattering coils.

C.5.5.3.16.1.3 Replace as necessary.

C.5.6.3.17 Receptacles

C.5.6.3.17.1 Receptacles shall be tested for correct polarity after replacement.

C.5.6.3.17.2 Ground fault receptacles shall be tested for correct operation annually.

C.5.6.3.18 Disconnect Switches

C.5.6.3.18.1 Annually:

C.5.6.3.18.1.1 Check and clean contacts.

C.5.6.3.18.1.2 Check door interlock to insure door will not open while power is on.

C.5.6.3.19 Panic Alarm System

C.5.6.3.19.1 Annually:

C.5.6.3.19.1.1 Test all indicating devices and systemspr to assure they are operating properly. Repair as necessary.

C.5.6.3.20 Ground System

C.5.6.3.20.1 SemiAnnually:

C.5.6.3.20.1.1 All ground points shall be tested. If the value measured exceeds 25 ohms, determine the cause and correct.

C.5.6.3.20.1.2 Tighten all ground connections to equipment.

C.5.6.3.21 12.4KV480/277V Transformer Oil Filled

C.5.6.3.21.1 All maintenance of the transformer shall he in accordance with

manufacturer's maintenance manuals.

C.5.6.3.21.2 Annually:

C.5.6.3.21.2.1 Clean and examine tank and radiators for signs of deterioration. Touchtip as required.

C.5.6.3.21.2.2 Tighten all connections and anchor bolts.

C.5.6.3.21.2.3 Sample and test transformer oil for dielectric strength in accordance with ASTM 877 or 01816; and moisture content in accordance with ASTM D1533. The oil shall be reconditioned or replaced if dielectric strength is below 28KV and/or moisture content is in excess of 35PPM.

C.5.6.3.21.2.4 Perform insulation resistance test on the winding using a megohm meter. Record and compare with previous readings.

C.5.6.3.21.2.5 Check oil level. Add new clean oil if required, after determining cause of low oil.

C.5.6.3.22. High Voltage Switchgear

C.5.6.3.22.1 All maintenanceof the high voltage switchgear shall be in accordance with manufacturer's maintenance manual.

C.5.6.3.22.2 Annually:

C.5.6.3.22.2.1 Inspect and clean all bus bars, contacts and fuse holders.

C.5.6.3.22.3.2 Tighten all connections and anchor bolts.

C.5.6.3.22.3.3 Operate switchgear to assure proper operation.

C.5.6.3.22.3.4 Perform an insulation resistance test using a megohm meter. Record and compare with previous test readings.

C.5.6.3.23 Intrusion Detection System

C.5.6.3.23.1 The Intrusion Detection System shall be maintained only by personnel trained and experienced in the maintenance of intrusion detection systems. The personnel who work on the Intrusion Detection System shall be required to obtain a Department of Justice confidential security clearance.

C.5.6.3.23.2 Quarterly:

C.5.6.3.23.2.1 A complete test of the system shall be performed. Detection devices shall be checked to assure proper operation and alarm.

C.5.6.3.23.2.2 All maintenance, repairs and tests shall be coordinated with the site security.

C.5.6.3.24 Quartz Medical Light

C.5.6.3.24.1 Semiannually:

C.5.6.3.24.1.1 Check complete operations of medical light. Insure light has freedom of movement in all directions required.

C.5.6.3.24.1.2 Inspect wiring for frayed or broken insulations.

C.5.6.3.24.1.3 Replace ballast if noisy.

C.5.6.3.24.1.4 Clean lens.

C.5.6.3.25 Heat Tracing Tape

C.5.6.3.25.1 Annually (in fall):

C.5.6.3.25.1.1 Test Heat Tracing Tape to insure it is operating properly
Check thermostat for proper operation. Check neon light. Replace if burned out.

C.5.6.3.25.1.2 Visually inspect heat tape for broken insulation.

C.5.5.3.26 High Voltage Line

C.5.6.3.26.1 Annually:

C.5.6.3.26.1.1 Perform an insulation resistance test of all items with a megohm meter. Record results and compare with previous test to determine if there is a breakdown of insulation.

C.5.7 GROUNDS MAINTENANCE

C.5.7.1 General Information: The O&M contractor shall maintain all the COBRATF grounds within the fenced area, plus the parking lot and access walk to the water storage tank.

C.5.7.2 Definition of Area

C.5.7.2.1 The contractor shall maintain and care for the COBRATF grounds. These responsibilities shall include the following:

C.5.7.2.1.1 Mowing and trimming grass.

C.5.7.2.1.2 Fertilizing grassed areas, trees and shrubs.

C.5.7.2.1.3 Erosion control.

C.5.7.2.1.4 Maintenance and repair of roads, parking lots, and sidewalks

C.5.7.2.1.5 Prune vegetation

C.5.7.3 Maintenance Responsibilities

C.5.7.3.1 Mowing and Trimming The contractor shall perform all mowing and trimming as required to maintain grass between 11/2 inches and three inches.

C.5.7.4 Care of Grassed Areas.

C.5.7.4.1 Fertilizer, provided by the Government, shall be applied as required to maintain healthy, vigorous growth. Irrespective of the analysis of the fertilizer materials used. Facility grassed areas shall receive annual applications at rates sufficient to provide 50 to 60 pounds of elemental nitrogen per acre. The fertilizer shall be applied early in the growing season. The fertilizer shall be spread uniformly over the surface area to prevent a spotty response or uneven growth. Seed shall, be considered to be a maintenance and repair item in this contract. Trees and shrubs shall be pruned
as necessary to maintain proper growth pattern and appearance.

C.5.7.5 Erosion control procedures shall be preventive rather than remedial in nature. The priority of treatments shall be outlined in an erosion control plan based on the established priority of grounds use and the susceptibility of grounds to wind or water erosion. All unpaved grounds in the vicinity of the facility shall he protected by vegetative cover or other means to prevent dust formation which is harmful to occupants.

C.5.7.6 Tree and shrub care. Fertilizer shall be applied to all trees and shrubs through the use of punchholes. The punchholes shall have a minimum depth of 18 inches. The holes shall be approximately three-feet apart in two or more concentric rings between the trunk and the outermost line of coverage by the canopy of top growth. The total fertilizer allotment for each tree shall be distributed evenly among the holes. The holes shall then be filled with sandy loam soil. The type of fertilizer suitable for trees and shrubs shall be one with a high analysis such as 1086 or 1064. The amount of fertilizer to be applied per plant shall he determined on the basis of the area of the root zone. This may be assumed to be the same as the area under the leaf canopy. The application rate shall he 2.5 pounds of 10% nitrogen fertilizer per 100 square feet. Fertilizer shall be applied at the beginning of the growing season and at the end of the growing season.

C.5.8 WASTEWATER TREATMENT

C.5.8.1 General Information

C.5.8.1.1 The contractor shall operate, repair and maintain the complete wastewater treatment system of the Chemical Defense Training Facility at COBRA Training Facility.

C.5.8.1.1.2 The contractor shall obtain the wastewater treatment operation and maintenance manuals from the Government. The contractor shall read and closely follow the instructions of the operations and maintenance manuals.

C.5.8.1.1.3 The contractor shall be thoroughly familiar with the wastewater treatment logic, controls and equipment manufacturer's maintenance and troubleshooting instructions.

C.5.8.1.1.4 The contractor shall not alter operations or equipment without first obtaining written permission from the Contracting Officer.

C.5.8.1.2 Waste Water Treatment System

C.5.8.1.21 The principle function of the wastewater treatment system is to adjust the pH of the contaminated wastewater as necessary and check for agent levels prior to incineration.

C.5.8.1.2.2 Caustic is used to raise the pH in the waste water tank. These chemicals will be utilized if any agents are detected in the wastewater or if the wastewater is outside the 2.5 12.5 pH range. After the influent tank pH meets the above specifications, portions of the wastewater shall be pumped to the incinerator.

C.5.8.1.3 Operating Responsibilities

C.5.8.1.3.1 The contractor shall provide labor, parts, supplies and materials for the continuous operation of the wastewater treatment system. The contractor shall ensure that caustic is always in ample supply.

C.5.8.1.3.2 The contractor shall be responsible for the proper operation of this facility. The contractor shall maintain required pH limits and incinerator requirements.

C.5.8.1.3.3 The contractor shall maintain a daily operating log for all important operating parameters such as pH, flows, tank levels and pressures while the facility is in operation.

C.5.8.1.3.4 The contractors personnel shall he thoroughly knowledgeable with applicable spill contingency plans. and procedures. These personnel shall be trained in spill prevention, containment neutralization, safety and emergency notification procedures. Major potential spill sources are as follows:

C.5.8.1.3.4.1 Influent Tank

C.5.8.1.3.4.2 Caustic Tank

C.5.8.1.3.4.3 Piping associated with the above tanks

C.5.8.1.3.4.4 Tanker trucks unloading

C.5.8.1.3.5 The contractor shall be familiar with and comply with all applicable environmental laws and regulations.

C.5.8.1.3.6 The contractor shall maintain a clean and safe work environment.

C.5.8.1.3.7 The contractor shall insure that his personnel are properly trained and prepared for a safe and efficient operation of the wastewater treatment system and all of its related processes, equipment and procedures.

C.5.8.1.4 Maintenance Responsibilities

C.5.8.1.4.1 The contractor shall provide, labor, parts, and materials for complete maintenance and repair of the entire wastewater treatment system.

C.5.8.1.4.2 The contractor shall provide wastewater holding tank samples for the COBRATF laboratory to perform analysis. Samples shall be drawn when the wastewater holding tank reaches 80% of capacity or prior to that point as needed. If the wastewater samples are within drinking water standards for nerve agent levels, and

the pH is within normal range, the Chief, COBRATF or his designated representative will authorize incineration of t he wastewater tank contents.

C.5.8.1.4.3 The contractor's maintenance responsibilities include but are not limited to the following:

C.5.8.1.4.3.1 Demand Maintenance. The contractor shall repair or replace all systems, associated systems, and/or components or systems which in the course of use become broken, fail to work properly, fail to work efficiently, require painting or require work to minimize the possibility of failure. Minor remodeling or alterations may be required by the Contracting Officer or his representative. These hours are estimated to average six hours/month.

C.5.8.1.4.3.2 Emergency Maintenance. The contractor shall repair or replace all systems and/or components of systems which the Contracting Officer or his representative identifies as critical to the operation of the facility.

C.5.8.1.4.3.3 Preventive Maintenance. The contractor shall prepare preventive maintenance routines for all wastewater treatment related systems and enforce them. The following schedule for preventative maintenance shall be considered minimum requirements. These shall be used to form the basis on which the contractor shall prepare his own routines, which shall also include equipment manufacturer's recommendations, good practice, and whatever routines are required to maintain the facility in a constant state of operability.

C.5.8.1.5 Operation and Maintenance Frequencies

C.5.8.1.5.1 Weekly:

C.5.8.1.5.1.1 Observe and record the pH of the wastewater being pumped to the incinerator and recycled to the influent tank. If the pH is out of limits, take prompt corrective actions to bring the pH within limits.

C.5.8.1.5.1.2 Inspect influent tank for leakage, liquid levels, and required maintenance and correct any deficiencies. (Monthly)

C.5.8.1.5.1.3 Inspect all pumps for leakage, unusual noise, vibration and discharge pressures and correct any deficiencies. (Monthly)

C.5.8.1.5.1.4 Inspect pipes for leakage, proper valves open and required maintenance. (Monthly)

C.5.8.1.5.1.5 Inspect dike sump liquid level. Dispose of liquids in the sump as required by Government regulations. (Monthly)

C.5.8.1.5.1.6 Perform maintenance and preventive maintenance as required by manufacturer and operation and maintenance manual.

C.5.8.1.5.1.7 Especially during cold weather observe fluctuations in pump pressures for indication of pipes beginning to freeze. Should pipes freeze thaw them out and/or replace ruptured piping, heat tracing and insulation where applicable. (Monthly)

C.5.8.1.6 Weekly:

C.5.8.1.6.1 Perform required maintenanceand preventive maintenance.

C.5.8.1.6.2
During cold weather inspect piping and tank insulation, and heating systems.
Repair and maintain as needed.

C.5.8.1.6.3
Record operation, maintenance and preventive maintenance actions taken.
Maintain record and logs in a neat and organized notebook(s) and/or files.

C.5.8.1.6.4
Inspect all pumps for leakage, unusual noise, vibration and discharge pressures.

C.5.8.1.7 Monthly:

C.5.8.1.7.1
Inspect all operations and maintenance logs and update them as required.
If any items were over looked take corrective actions.

C.5.8.1.7.2
Insure that all operations and maintenance logs have been compiled in a
notebook(s) and/or files.

C.5.8.1.8 PreWinter:

C.5.8.1.8.1 Inspect piping insulation and heat tracing. Repair defects.

C.5.8.1.8.2 Inspect tanks insulation and steam heating system. Clean and repair as needed.

C.5.8.1.9 SemiAnnually:

C.5.8.1.9.1 Check and tighten loose bolts in fans and pumps.

C.5.8.1.9.2 Oil and grease where applicable.

C.5.8.1.9.3 Check pump alignment and realign where necessary.

C.5.8.1.9.4 Check pump balance.

C.5.8.1.9.5 Check belt tension on Vbelt drives.

C.5.8.1.9.6 Contractor shall take two samples of waste water and send them to be analyzed for all EPA Toxicity using standard EPA procedures. Metal analyzed shall be given in parts per million for silver (AG), arsenic (AS), barium (Ba), cadmium (Cd), chromium (Cr), mercury (HG), lead (Pb), selenium (Se), cobalt, cyanide, iron, nickel, tin, zinc, aluminum, and total metals.

C.5.8.1.9.7 Contractor shall furnish five (5) copies of result of analysis to the Contracting Officer.

C.5.8.1.10 Annual:

C.5.8.1.10.1 Inspect interior and exterior of tanks for corrosion.

C.5.8.1.10.2 Compile all logs and records for storage.

C.5.9 WATER TREATMENT

C.5.9.1 General Information

C.5.9.1.1 The contractor shall operate, repair, and maintain complete water treatment and distribution systems of the COBRATF.

C.5.9.1.2 The contractor shall obtain the water treatment operation and maintenance manuals from the Government. The contractor shall operate the water treatment system in accordance with the chemical vendor recommendations, equipment vendors recommendations and the operation and maintenance manual.

C.5.9.1.3 The contractor shall be thoroughly familiar with the water treatment

logic, controls and equipment manufacturer's maintenance and troubleshooting instructions.

C.5.9.1.4 The contractor shall not alter operations or equipment without first obtaining written permission from the Contracting Officer or his representative.

C.5.9.2 Water Treatment System

C.5.9.2.1 The principle function of the water treatment system is to prevent scale and corrosion.

C.5.9.2.2 The water treatment system consists of a water softener and at least three chemical feed packages.

C.5.9.2.3 The water softener consists of two softeners in parallel. The softeners are supplied with automatic regeneration controls and equipment.

C.5.9.2.4 A typical package chemical feed system consists of a tank, mixer, controls and two chemical feed pumps.

C.5.9.3 Operating Responsibilities

C.5.9.3.1 The contractor shall provide labor, parts, supplies and materials for the
continuous operation of the water treatment system.

C.5.9.3.2 The contractor shall be responsible for the proper operation of the water treatment systems. The contractor shall maintain the water quality within the limits of manufacturer's recommendations. Manufacturer's recommendations include! water treatment chemical suppliers, water treatment equipment manufacturer's and

equipment manufacturer's recommendations. The contractor shall obtain these written recommendations and water quality limits. The contractor shall supply the Contracting Officer with three copies of these documents.

C.5.9.3.3 The contractor shall maintain a daily operating log for all important operating parameters such as pH, flows, concentrations, tank levels and pressures.

C.5.9.3.4 The contractor's personnel shall be thoroughly knowledgeable with applicable spill contingency plans and procedures. These personnel shall be trained inspill prevention, containment, neutralization, safety and emergency notification procedures. Potential spill sources are as follows:

C.5.9.3.4.1 Water Treatment Chemical Unloading

C.5.9.3.4.2 Water Treatment Chemical Storage Areas

C.5.9.3.4.3 Water Treatment Chemical Storage Tanks

C.5.9.3.4.4 Chemical Feed Pumps and Piping

C.5.9.3.4.5 The contractor shall be familiar with and comply with all applicable environmental laws and regulations.

C.5.9.3.4.6 The contractor shall maintain a clean and safe work environment.

C.5.9.3.4.7 The contractor shall insure that his personnel are properly trained and prepared for a safe and efficient operation of the water treatment system and all of its integrated processes, equipment and procedures.

C.5.9.4 MaintenanceResponsibilities

C.5.9.4.1 The contractor shall provide labor, parts, and materials for complete maintenance and repair of the entire water treatment system.

C.5.9.4.2 The contractor's maintenance program shall provide continuous operation of the water treatment system.

C.5. 9.4. 3 The contractor's maintenance responsibilities include but ate not limited to the following:

C.5.9.4.3.1 Demand Maintenance. The contractor shall repair or replace all systems and/or components of systems which in the course of use become broken, fail to work properly, fail to work efficiently or require work to minimize the possibility of failure. Minor remodeling or alteration may be required by the Contracting Officer or his representative.

C.5.9.4.3.2 Emergency Maintenance. The contractor shall repair or replace all systems and/or components of systems which the Contracting Officer or his representative identifies as critical to the operation of the facility.

C.5.9.4.3.3 Preventive Maintenance. The contractor shall prepare preventive maintenance routines for all water treatment systems and enforce them. The following schedule for preventive maintenance shall be considered minimum requirements. These shall be used to form the basis on which the contractor shall prepare his own routines, which shall also include equipment manufacturer's recommendations, good practice, and whatever routines are required to maintain the facility in a constant state of operability.

C.5.9.5 Operation and Maintenance Frequencies

C.5.9.5.1 Omitted.

C.5.9.5.1.1 Perform water analysis as required by equipment manufacturers and operation and maintenance manuals.

C.5.9.5.1.2 Insure that all water treatment equipment is properly operated and maintained.

C.5.9.5.1.3 Insure that allwater treatment chemicals are in adequate supply in day tanks and storage. As needed, mix proper concentrations of chemicals and water.

C.5.9.5.1.4 Analyze and record physical and chemical water quality.

C.5.9.5.1.5 Insure that all water treatment equipment, controls, tanks, chemicals and surrounding areas are kept clean.

C.5.9.5.1.6 Inspect all pumps for leakage, unusual noise, vibration and discharge pressures.

C.5.9.5.2 Weekly:

C.5.9.5.2.1 Record water and chemical usage.

C.5.9.5.2.2 Record chemical analysis.

C.5.9.5.2.3 Record operation, maintenance and preventive maintenance actions taken. Maintain record and logs in a neat and organized notebook(s) and/or file(s).

C.5.9.5.2.4 Observe and when required adjust regeneration controls.

C.5.9.5.3 Monthly:

C.5.9.5.3.1 Inspect all operations and maintenance logs and update them as required. If any items were over looked take corrective actions.

C.5.9.5.3.2 Insure that all operations and maintenance logs have been compiled in a notebook(s) and/or file(s).

C.5.9.5.4 PreWinter Inspection:

C.5.9.5.4.1 Inspect pipe heat tracing and insulation. Repair as needed.

C.5.9.5.5 SemiAnnually:

C.5.9.5.5.1 Check and tighten loose bolts in fans and pumps.

C.5.9.5.5.2 Oil and grease where applicable.

C.5.9.5.5.3 Check pump alignment and realign where necessary.

C.5.9.5.5.4 Check pump balance.

C.5.9.5.5.5 Check belt tension on Vbelt drives.

C.5.9.5.6 Annual:

C.5.9.5.6.1 Compile all logs and records for storage.

C.5.10 INCINERATOR AND AUTOCLAVE SYSTEMS

C.5.10.1 General Information

C.5.10.1.1 The contractor shall operate, repair, and maintain the complete incinerator and autoclave system of the COBRATF except as specified.

C.5.10.1.1.1 The contractor shall operate the Steam Autoclave System to process BDO's for reutilization in accordance with applicable standard operating procedures and environmental laws. Contractor shall provide repair autoclave as necessary and provide
supplies, peripherals, etc. for BDO bar coding system.

C.5.10.1.2 The contractor shall obtain the incinerator and autoclave operation and maintenance manuals from the Government. The contractor shall read and closely follow the instructions. of the operation and maintenance manuals.

C.5.10.1.3 The contractor shall be thoroughly familiar with the incinerator and autoclave logic, controls and equipment, manufacturer's maintenance and troubleshooting instructions.

C.5.10.1.4 The contractor shall! not alter operations or equipment without first obtaining written permission from the Contracting Officer or his representative.

C.5.10.2 Incinerator and Autoclave Equipment

C.5.10.2.1 The incinerator system's basic functions are to dispose of treated wastewater, contaminated HEPA and carbon filters, contaminated solid waste and to reclaim the generated heat.

C.5.10.2.2 The wastewater pH shall be adjusted as required and pumped to the incinerator at flow rates and conditions specified by the incinerator manufacturer. For details see Section C.5.8 titled, "Wastewater Treatment".

C.5.10.2.3 As determined by periodic air monitoring of filter units, or semiannual testing, the contractor shall remove the contaminated HEPA and carbon filters and transport the filters to the contaminated storage room. The contractor shall then incinerate the filters.

C.5.10.2.4 The Government shall package contaminated solid waste and maintenance contractor shall then transport contaminated waste to designated storage room. This waste will consist of such things as overgarments, gloves, boots, and hoods. The contractor shall incinerate this solid waste.

C.5.10.2.5 The contractor shall insure that the ash and other solid waste are picked up and disposed of in a timely manner. The contractor shall insure that the hauler, disposal procedures, and disposal site are approved by the state environmental regulatory agency.

C.5.10.2.6 The contractor shall be familiar with and comply with all applicable environmental laws, regulations and Alabama Department of Environmental Management Air Permit.

C.5.10.2.7 The contractor shall maintain a clean and safe work environment.

C.5.10.2.8 The contractor shall insure that his personnel are properly trained and prepared for a safe and efficient operation of the incinerator and autoclave and all of their integrated processes, equipment and procedures.

C.5.102.9 The contractor shalltake prompt actions to correct any operating deficiencies and alarm warning conditions.

C.5.10.3 Operating Responsibilities

C.5.10.3.1 The contractor shall provide labor, parts, supplies and materials for the continuous operation of the incinerator/autoclave system or the package boiler system whichever is applicable.

C.5.10.3.2 The contractor shall be responsible for the proper operation of this facility.

C.5.10.3.3 The contractor shall maintain a daily operating log for all important operating parameters while system is in operation.

C.5.10.3.4 Major potential spill sources are as follows:

C.5.10.3.4.1 Wastewater Piping

C.5.10.3.4.2 Ash

C.5.10.3.4.3 Contaminated Solid Waste

C.5.10.3.4.4 Piping associated with the above tanks and drum.

C.5.10.3.4.5 Tanker trucks unloading.

C.5.10.4 Maintenance Responsibilities

C.5.10.4.1 The contractor shall provide, labor, parts, and materials for complete maintenance and repair of the entire incinerator/autoclave system, as approved by the Government.

C.5.10.4.2 The contractor's maintenance program shall provide continuous operation of the incinerator/autoclave system and/or the package boiler system.

C.5.10.4.3 The contractor's maintenance responsibilities include but are not limited to the following:

C.5.10.4.3.1 Demand Maintenance. The contractor shall repair or replace all systems, associated systems and/or components of systems which in the course of use become broken, fail to work properly, fail to work efficiently, require painting or require work to minimize the possibility of failure. Minor remodeling or alterations may be required by the Contracting Officer or his representative.

C.5.10.4.3.2 Emergency Maintenance. The contractor shall repair or replace all systems and/or components of systems which the Contracting Officer or his representative identifies as critical to the operation of the facility.

C.5.10.4.3.3 Preventive Maintenance. The contractor shall prepare preventive maintenance routines for all incinerator/autoclave related systems and enforce them. The following schedule for preventive maintenance is to be considered minimum

requirements. These shall be used to form the basis on which the contractor is to prepare his own routines, which shall also include equipment manufacturer's recommendations, good practice, and what ever routines are required to maintain the facility in a co instant state of operability.

C.5.10.5 Operation and Maintenance Frequencies

C.5.10.5.1 Daily:

C.5.10.5.1.1 Perform daily operation and maintenance as specified by incinerator/autoclave vendor's operation and maintenance manual.

C.5.10.5.1.2 Observe and maintain operating parameters for the incinerator/autoclave and its interfacing equipment. These include but are not limited to the following:

C.5.10.5.1.2.1 Natural gas system pressures.

C.5.10.5.1.2.2 Incinerator temperatures, combustion air pressures and flame conditions.

C.5.10.5.1.2.3 Instruments and controls.

C.5.10.5.1.2.4 Waste heat boiler temperatures, flows and pressures.

C.5.10.5.1.2.5 Venturi scrubber temperature, flows, pressures and pressure differential.

C.5.10.5.1.2.6 Inspect scrubber caustic storage tank level and refill as required.

C.5.10.5.1.2.7 Packed tower temperatures, flow, pressure differential, pressures; scrubbing water pH and level.

C.5.10.5.1.2.8 Induced draft fan temperature.

C.5.10.5.1.2.9 Smoke stack emissions characteristics.

C.5.10.5.1.2.10 Wastewater pH and flow rates.

C.5.10.5.1.2.11 Incoming utilities pressures, flows, characteristics, etc.

C.5.10.5.1.2.12 Steam pressures, (these should also be recorded).

C.5.10.5.1.3 Incinerate wastewater and solid waste as it accumulates within the capacity of the incinerator. Wastewater and solid waste to be accumulated and disposed of as needed.

C.5.10.5.2 Weekly:

C.5.10.5.2.1 Check gas pipes for leaks.

C.5.10.5.2.2 Check compressed air pipes and compressor for leaks.

C.5.10.5.3 Monthly:

C.5.10.5.3.1 Actual operating conditions may dictate more frequent intervals than monthly.

C.5.10.5.3.2 Inspect all pumps for leakage, unusual noise, vibration and discharge pressures.

C.5.10.5.3.3 Inspect all fans for unusual noise, vibration and proper operation.

C.5.10.5.4 SemiAnnually:

C.5.10.5.4.1 Test operate steam drum pressure relief valve as required for safe operation.

C.5.10.5.4.2. Check and tighten loose bolts in fans and pumps.

C.5.10.5.4.3 Oil and grease where applicable.

C.5.10.5.4.4 Check pump alignment and realign where necessary.

C.5.10.5.4.5 Check pump balance.

C.5.10.5.4.6 Check belt tension on Vbelt drives.

C.5.10.5.4.7 Contractor shall take one samples of ash and scrubber brine and send them to be analyzed for all EP Toxicity using standard EPA procedures. Metal analyzed shall be given in parts per million for silver (AG), arsenic (AS), barium (Ba), cadmium (qd), chromium (Cr), mercury (HG), lead (Pb), selenium (Se), cobalt, cyanide, iron, nickel, tin, zinc, aluminum, and total metals.

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C.5.10.5.4.7.1 If test results show ash exhibits hazardous characteristics exceeding legal standards, the contractor shall contact the Contracting Officer for guidance.

C.5.10.5.4.8 Contractor shall furnish five (5) copies of results of analysis too the Contracting Officer.

C.5.11 SEWER SYSTEMS

C.5.11.1 General Information

C.5.11.1.1 The contractor shall operate, repair and maintain the complete sewer systems and sewers of the COBRATF.

C.5.11.1.2 The contractor shall obtain the sewer systems operation and maintenance manuals from the Government. The contractor shall read and closely follow the instructions of the operation and maintenance manual.

C.5.11.1.3 The contractor shall be thoroughly familiar with the sewer systems logic, controls and equipment manufacturer's maintenance and troubleshooting instructions.

C.5.11.1.4 The contractor shall not alter operations or equipment without first obtaining written permission from the Contracting Officer.

C.5.11.2 Sewer System

C.5.11.2.1 The two types of sewer systems are contaminated and noncontaminated. The contaminated sewer serves the training area and the laboratory. It consists of gravity sewers, two lift stations and force mains to the wastewater treatment influent tank. The non-contaminated sewer consists of gravity sewers, package lift station and force main to existing sewer.

C.5.11.3 Operating Responsibilities

C.5.11.3.1 The contractor shall provide labor, parts, supplies for the continuous operation of the sewer systems.

C.5.11.3.2 The contractor shall be responsible for the proper operation of the sewer systems.

C.5.11.3.3 The contractor's, personnel shall be thoroughly knowledgeable with applicable spill contingency plans and procedures. These personnel shall be trainedin spill prevention, containment, neutralization, safety and emergency notification procedures. Major potential spill sources are as follows:

C.5.11.3.3.1 Training Area Sump and Force Main

C.5.11.3.3.2 Lab Sump and Force Main

C.5.11.3.3.3 Gravity Sewers

C.5.11.3.3.4 Package Lift Station and Force Main

C.5.11.3.4 The contractor shall be familiar with and comply with all applicable environmental laws and regulations.

C.5.11.3.5 The contractor shall maintain a clean and safe work environment.

C.5.11.3.6 The contractor shall insure that his personnel are properly trained and prepared for a safe and efficient operation of the sewer systems and all of its integrated processes, equipment and procedures.

C.5.11.4 Maintenance Responsibilities

C.5.11.4.1 The contractor shall provide labor parts, and materials for complete maintenance and repair of the entire sewer system.

C.5.11.4.2 The contractor's maintenance program shall provide continuous operation of the sewer systems.

C.5.11.4.3 The contractor's maintenance responsibilities include but are not limited to the following:

C.5.11.4.3.1 Demand Maintenance. The contractor shall repair or replace all systems, associated systems and/or components of systems which in the course of use become broken, fail to work properly, fail to work efficiently, require painting or require work to minimize the possibility of failure. Minor remodeling or alterations may he required by the Contracting Officer or his representative.

C.5.11.4.3.2 Emergency Maintenance. The contractor shall repair or replace all systems and/or components of systems which the Contracting Officer or his representative identifies as critical to the operation of the facility.

C.5.11.4.3.3 Preventive Maintenance. The contractor shall prepare preventive maintenance routines for all sewers, pump stations, force mains and related systems and enforce them. The following schedule for preventive maintenance shall be considered minimum requirements. These shall be used to form the basis on which the contractor is to prepare his own routines, which shall also include equipment

manufacturer's recommendations, good practice, and whatever routines are required to maintain the facility in a constant state of operability.

C.5.11.5 Operation and Maintenance Frequencies

C.5.11.5.1 Weekly:

C.5.11.5.1.1 Inspect package lift station for over flows and leaks. Take Prompt corrective actions as needed.

C.5.11.5.1.2 Inspect contaminated force main for possible leaks. Take immediate corrective actions as needed.

C.5.11.5.2 Monthly:

C.5.11.5.2.1 Inspect sewer pumps, wet wells, and controls for proper operation. Take corrective actions and complete operations and maintenance log. Check pump onoff frequencies during peak demands. Adjust float switches where necessary.

C.5.11.5.2.2 Inspect force mains for leaks and needed repairs.

C.5.11.5.3 SemiAnnually:

C.5.11.5.3.1 Inspect the package lift station wet well. Remove and dispose of grease balls; floating material and debris.

C.5.11.5.3.2 Test the lift station level and alarm switches for proper operation and settings.

C.5.11.5.3.3 Perform a complete operational test which shall include but not be limited to the following; excessive pump noise, leaks, vibration, alignment, rust, and normal onoff frequencies. Make corrections as needed.

C.5.11.5.3.4 Perform preventive maintenance as required by manufacturer and operations and maintenance manual.

C.5.12 WATER STORAGE SYSTEM

C.5.12.1 General Information

C.5.12.1.1 The contractor shall operate, repair and maintain the complete water storage system of the COBRATF.

C.5.12.1.2 The contractor shall obtain the water storage operation and

maintenance manuals from the Government. The contractor shall read and closely follow the directions of the operation and maintenance manuals.

C.5.12.1.3 The contractor shall be thoroughly familiar with the water storage logic, controls and equipment manufacturer's maintenance and troubleshooting instructions.

C.5.12.1.4 The contractor shall not alteroperations or equipment without first obtaining written permission from the ContractingOfficer or his representative.

C.5.12.2. Water Storage

C.5.12.3 Operating Responsibilities

C.5.12.3.1 The contractor shall provide labor, parts, supplies and materials for the continuous operation of the water storage system.

C.5.12.3.2 The contractor is responsible for the proper operation of the water storage system.

C.5.12.3.3 The contractor shall maintain a daily operating log for all important operating parameters such as tank levels and pressures while the facility is in operation.

C.5.12.3.4 The contractor shall he familiar with and comply with all applicable public health and environmental laws and regulations.

C.5.12.3.5 The contractor shall maintain a clean and safe work environment.

C.5.12.3.6 The contractor is responsible for insuring that his personnel are properly trained and prepared for a safe and efficient operation of the water storage system and all of its integrated processes, equipment and procedures.

C.5.12. 4 Maintenance Responsibilities

C.5.12.4.1 The contractor shall provide, labor, parts, and materials for complete maintenance and repair of the entire water storage system.

C.5.12.4.2 The contractor's maintenance program shall provide continuous operation of the water storage system.

C.5.12.4.3 The contractor's maintenance responsibilities include but are not limited to the following:

C.5.12.4.3.1 Demand Maintenance. The contractor shall repair or replace all systems, associated systems and/or components of systems which in the course of use become broken, fail to work properly, fail to work efficiently, require painting or require work to minimize the possibility of failure. Minor remodeling or alterations may be required by the Contracting Officer or his representative.

C.5.12.4.3.2 Emergency Maintenance. The contractor shall repair or replace all systems and/or components of systems which the Contracting Officer or his representative identifies as critical to the operation of the facility.

C.5.12.4.3.3 Preventive Maintenance. The contractor shall prepare preventive maintenance routines for all water storage and related systems and enforce them The following schedule for preventive maintenance shall be considered minimum requirements. These shall be used to form the basis on which the contractor is to prepare his own routines, which shall also include equipment manufacturer's recommendations, good practice, and whatever routines are required to maintain the facility An a constant state of operability.

C.5.12.4.3.4 Sample water at least quarterly for total coliform. Should the bacteria count exceed state regulations, the contractor shall resample at the pump house, water storage tank and key points in the distribution system. Based on these results, the contractor shall disinfect all areas suspected of having poor water quality. This procedure shall be repeated until satisfactory samples are obtained.

C.5.12.5 Operation and Maintenance Frequencies

C.5.12.5.1 SemiAnnually:

C.5.12.5.1.1 Thoroughly inspect the inside and outside sections of the tank. Record defects. Clean and repair as needed.

C.5.12.5.1.2 Perform an operational check of the storage tank controls and the water pump system.

C.5.13 CUSTODIAL SERVICES

C.5.13.1 General

C.5.13.1.1 The contractor shall perform the custodial work to be performed in all buildings within the fenced area of the (COBRATF). Buildings include the Administration Building, Guard House, Training Facility, Waste Treatment Building, Incinerator Control Room and Filter Pad.

C.5.13.1.2 This section of the specifications covers custodial work to be performed. The work consists of furnishing all labor, tools, equipment materials and supplies for accomplishment of complete janitorial services. Work shall be accomplished in compliance with the procedures and standards contained in this specification.

C.5.13.1.3 The contractor shall be responsible for any custodial work in the hot area.

C.5.13.1.4 The manhours required shall be provided during the hours 7:30 A.M. to 4:15 P.M., Monday through Friday.

C.5.13.1.5 Cleaning of the Administration Building', Incinerator Control Room, Guard House, Waste Treatment Building and Filter Pad shall be in the morning and/or afternoon. The Training Building shall he cleaned in the afternoon.

C.5.13.1.6 A custodial procedures manual shall be submitted for approval to the contracting officer not later than ten (10) working days after award of the contract The manual shall be a comprehensive narrative description containing all procedures necessary to perform complete custodial services required by this contract.

C.5.13.1.7 The contractor shall not move, clean or otherwise handle any unique or monitoring equipment unless so instructed by the contracting Officer or his designated representative.

C.5.13.2 MATERIALS AND SUPPLIES

C.5.13.2.1 The contractor shall furnish all equipment and supplies. Supplies and equipment must meet the specifications below:

C.5.13.2.2 All items, except those listed otherwise, must be approved by the Contracting Officer prior to being used. New supplier or changes in previously approved materials shall require submission of product literature and samples to the Contracting Officer for approval.

C.5.13.2.3 Housekeeping personnel shallnot use steel wool abrasive metal cleaners, or any other cleaning material or supply which could cause damage to Government property.

C.5.13.2.4 All containers of cleaning chemicals and similar products must be conspicuously marked (preferably with a factory label) to identify contents. Materials bearing a DOT. (Department of Transportation) red label (flammable),will not be used.

C.5.13.2.5 Contractor provided equipment shall be compatible with existing sources of Government furnished power. All equipment must comply with all applicable safety standards. Rotary floor polishing, buffing and scrubbing machines shall have new brush or pad head assemblies made of nonporous material.

C.5.13.2.6 All electrically operated equipment shall be threewire grounded and equipped with an appropriate length of UL approved three conductor cord. Extension cords are prohibited.

C.5.13.2.7 When not, in use, equipment shall be stored in the contractor's designated storage area. Trash containers shall be washed prior to storage.

C.5.13.2.8 Sanitary products (toilet paper, paper towels, etc.) shall not be transported in trash barrels or mop buckets.

C.5.13.2.9 All vacuum cleaners and, equipment used for vacuum pickup (wet and dry types) shall be equipped with air filter systems which will filter out all dust particles in excess of threetenths (0.3) micron in size.

C.5.13.2.10 All material shall conform to the requirements of applicable publications and specific requirements. Within fifteen (15) days after award of this contract, the contractor shall submit to the Contracting Officer for approval a list of materials and supplies to be used in the accomplishment of required services. Along with the list of materials, the contractor shall present adequate brochures and information on each item to provide the Contracting Officer with sufficient data to establish compliance with the product specifications. If additional information is needed, the Contracting Officer may require the contractor to submit samples of materials and supplies. These shall be in factory sealed containers and in sufficient quantities to permit Government laboratory testing and periodic comparison. At any time a new item of supply or material is proposed which has not been previously approved, approval of the Contracting Officer must be obtained before the item is used. Materials bearing an ICC Red Label (acids) shall not be used or be permitted in any building or area covered by this contract. The Contractor shall be responsible for damage resulting from use of unsafe or harmful materials.

C.5.13.2.11 Requirements for major items of supplies to he furnished by the contractor. (All containers of cleaning chemicals and products shall be conspicuously marked to identify contents.)

C.5.13.2.11.1 Disinfectant/detergent shall comply with Fed. Spec. 001573A.

C.5.13.2.11.2 Wax stripper/ finish remover shall comply with Fed. Spec PR 1760

C.5.13.2.11.3 Floor finish, liquid shall comply with Fed. Spec. PF430 B.

C.5.13.2.11.4 Bowl cleaner, liquid, triple action, shall clean, disinfect and deodorize toilet bowls and urinals; shall have minimum phenol coefficient of 6 (FDA); shall be safe in contact with human skin (does not cause acid burn to normal skin on temporary contact); shall not fume or cause noxious or irritating fumes in use; and shall not require ICC "Caustic Poison" label.

C.5.13.2.11.5 Polish, metal shall comply with Fed. Spec. PP5560.(l).

C.5.13.2.11.6 Dust mops shall comply with Fed. Spec. TM570, and treated with a mixture of chemicals that shall not become greasy. A disposable nonwoven fabric or lint-less fabric consisting of textile fibers or a combination of fibers and yarn specially treated for dust mopping shall be used.

C.5.13.2.11.7 Glass cleaner, as approved by the Contracting Officer.

C.5.13.2.11.8 Shampoo shall incorporate an EPA registered sanitizer and soil retardant. The pH of the wet shampoo shall he between 9 and 10.5 for use on synthetic fibers and shall be no higher than 10 for use on natural fibers. PhenoliC.based disinfectants shall not be used as a carpet shampoo.

C.5.13.2.11.9 Cloths, Impregnated, Ousting and Sweeping: These cloths shall be tubular cotton with 1.8% to 22% nonoil impregnation by weight, and the impregnation compound must be registered with the EPA.

C.5.13.2.11.10 Vacuum Cleaners:

C.5.13.2.11.10.1 All vacuum equipment shall have an impaction type filtration system which shall filter out.all dust particles.

C.5.13.2.11.10.2 All exhaust systems shall discharge at least 15 degrees above the horizontal.

C.513.2.11.10.3 Dry vacuum cleaners shall be commercial type, 2/3 cubic foot capacity, or 1/2 bushel filtration system.

C.5.13.2.11.10.4 Upright vacuums shall have a motor driven beater brush and a separate motor for the vacuum.

C.5.13.2.11.10.5 Backpack vacuum units used in stairwells and wetvacuums as components, of combination scrubbers are excepted from the above provisions.

C.5.13.2.11.11 Floor, Polishers: Floor polishers shall have a nonporous scrubbing surface. Horsepower ratings for 15 to 16 inch floor polishers shall be not less than 3/4 horsepower; for 21 to 22 inch, not less than 11/4 horsepower; and for 23 to 24 inch, not less than 11/2 horsepower.

C.5.13.2.11.12 Housekeepers Carts: Housekeepers cartscan have a low platform for mop buckets, mop wringer, and other gear, with compartments for tools and cleaning supplies, and trash collection device. Carts must fit in storage closet.

C.5.13.2.11.13 Collection Containers: Trash collection containers shall be rigid with a smooth interior finish and equipped with a snug fitting cover and hard rubber nonmarking silent running casters. All trash containers must meet applicable fire regulations.

C.5.13.2.11.14 Mop Buckets: Mop buckets shall have a single or double compartment and must he constructed of nonporous, acid resistant, seamless material.

C.5.13.2.11.15 Other Items:

C.5.13.2.11.15.1 The contractor shall also furnish the following consumable items

C.5.13.2.11.15.2 Paper toilet tissue.

C.5.13.2.11.15.3 Paper towels (must fit existing dispensers).

C.5.13.2.11.15.4 Soap, hand floating.

C.5.13.2.11.15.5 Soap, hand, liquid.

C.5.13.2.11.15.6 Spray deodorant.

C.5.13.2.11.15.7 Plastic waste receptacle liners (must fit receptacle).

C.5.13.2.11.15.8 Sanitized sand for urns.

C.5 .13.3 CLEANLINESS, SAFETY AND INSPECTION

C.5.13.3.1 Cleanliness and Safety:

C.5.13.3.1.1 The contractor shall instruct his employees in appropriate safety measures, to include the applicable provisions of the Occupations Safety and Health Act of 1970. OSHA Document 225A contains a list of OSHA Training Requirements. The contractor shall provide appropriate , neat appearing, wellkept signs to indicate “CAUTION, WET FLOOR”; these shall be displayed at all times where cleaning

operations are in progress which necessitate use of equipment or supplies such as buckets, wires, ladder's, water or wax. When the cleaning of public traffic areas (lobbies and halls) results in the temporary hazard of wet/slippery floor surfaces, personnel shall use parallel cleaning procedures. Whenever possible, cleaning shall be accomplished in such a way that it will be unnecessary for personnel to cross the wet surfaces. When this is not possible, adequate warning signs shall be used. The contractor shall file accident reports with the Contracting Officer for all contractor personnel injured while employed on this contract. Safety forms shall be processed in accordance with applicable regulations.

C.5.13.3.1.2 All materials and equipment not immediately in Use must be picked up and work areas kept free from tripping hazards.

C.5.13.3.1.3 The contractor shall maintain his own equipment and any Governmentowned equipment he uses in a clean, sanitary condition at all times. No soiled equipment shall be taken into the factory. All carts shall be wiped down with a damp cloth at the end of each shift. Mop buckets shall be emptied, rinsed clean and dried completely at the end of each shift. All/wet mop heads sponges and other similar tools shall be rinsed carefully after use and replaced with new or clean dry mop heads, sponges, etc., when rinsing no longer restores them to a satisfactory state of cleanliness.

C.5.13.3.2 Inspection:

C.5.13.3.2.1 Random sampling of all the contractor's work will be made by the Contracting Officer or his staff who have authority to point out to the contractor incomplete or defective work and necessary corrective action. Unsatisfactory performance of one or more operations within a single room and/or area will constitute unsatisfactory service for the total square footage of that room and/or area for operation not performed satisfactorily.

C.5.13.4 TASKS

C.5.13.4.1 General Scope: The contractor shall perform all tasks identified below and in the Task and Frequency Charts (T&F Charts) J 9 attached Technical Exhibit.

C.5.13.4.2 Manuals Required: The contractor’s Procedures. Manual shall be submitted as specified in paragraph C.5.13.1.6.

C.5.13.4.3 Work Scheduling:

C.5.13.4.3.1 Task and Frequency Charts (T&F Charts): The T&F Charts shall be

the basis for scheduling performance of work in those items identified on the charts.

C.5.13.4.3.2 Project Cleaning Schedules: Project cleaning schedules adapted to the individual buildings shall be submitted monthly to the Contracting Officer with the first' schedule due by contract start date.. Project schedules shall show for the upcoming month the specific dates project work shall begin and end and show the phasing of work per area/room throughout the work period.

C.5.13.4.4 Facilities Defects Reporting: In the process of performing housekeeping duties, when facilities defects are found, they shall be reported to the Contracting Officer or his duly authorized representative by the end of the workday.

C.5.13.5 FLOOR CARE, NONCARPET

C.5.13.5.1 Floors shall be swept clean so 'that no dust streaks remain. No dust shall be allowed to remain in the corners, behind radiators, space heaters or under furniture, behind doors or on stair treads and risers.

C.5.13.5.2 Debris accumulated in the sweeping process shall be removed to receptacles provided for this purpose.

C.5.13.5.3 Furniture and equipment moved during the sweeping process shall be replaced in the original location at the completion of work.

C.5.13.5.4 Where wet mopping is indicated in the T&F Charts, sufficient water shall be used in the mopping surface to flood the entire floor surface and float any dirt and accumulated waste from the depressions in the flooring. .The double bucket method shall apply.

C.5.13.5.5 Spot mopping shall include, but not be limited to the removal of water and/or stains caused by spillage or soiling of small areas of the floor surfaces, and where open windows and doors allow rain, snow, sleet or dirt to flow in or be brought in by traffic.

C.5.13.5.6 Machine scrubbing and stripping with wax stripper and/or wax finish remover solutions shall be as called for in the T&F Charts.

C.5.13.5.7 The specified and approved floor finish shall be used on vinyl asbestos tile, vinyl tile, asphalt tile, asphalt sheet and other resilient composition floor covering except cork. Application of excessive amounts of finish shall be avoided and a buildup of finish shall not be permitted. Sufficient finish shall be used to fully protect the floor surface and present a neat, wellkept appearance.

C.5.13.5.8 Floor finish shall be thoroughly dry before buffing and then buffing

shall only be accomplished according to the recommendations of the manufacturer of the floor finish approved for 'Use. Abuffing machine shall be used and buffing shall be enough to bring the surface to a uniform luster. After buffing, all residual dirt and dust shall be swept up and removed.

C.5.13.5.9 In no case shall steel wool be used for floor care of any kind.

C.5.13.6 FLOOR CARE, CARPET

C.5.13.6.1 Rugs and carpets shall be vacuumed in accordance with the T&F Charts using vacuum cleaners specified. Vacuumed carpet shall be free of airborne lint or dust, loose dirt, cigarette ashes, sand and other nonadhesive soils.

C.5.13.6.2 Cleaning and shampooing shall be accomplished as specified in the T&F Charts. Carpets shall be shampooed in place using
Commercial carpet cleaning techniques and methods most suitable for the type of carpet and extent of. soiling involved. Cleaning shall .include spot removal.

C.5.13.6.3 Spot cleaning shall be accomplished as needed to remove stains and soil from heavy traffic, coffee, food, shoe polish, mud, ink, oil, grease, tar, or other sources.

C.5.13.6.4 Antistatic agent or compound shall be applied to carpet as necessary to control static buildup/discharge.

C.5.13.7 TOILET, SHOWER AND UTILITY ROOM CLEANING

C.5.13.7.1 Inside and outside surfaces of water closets, urinals, wash bowls, slop sinks and showers shall be cleaned to remove all rust, stains, scale and other foreign matter in order to maintain a highly sanitary condition at all times. Brass and chrome fittings shall be cleaned daily to remove all foreign matter and to prevent the accumulation of water marks. Urinal and toilet stall divider partitions and adjacent walls shall be maintained clean of all foreign matter and wiped down daily with detergent disinfectant solution.

C.5.13.7.2 Toilet rooms, shower rooms and utility rooms shall be mopped or scrubbed according to the appropriate procedures set forth in the procedures manuals specified. Floors shall be maintained free of soap film and buildup and mold deposits. Partitions and woodwork which are not washable shall be spot cleaned to remove accumulations of dirt, pencil and other defacing marks. Detergentdisinfectants shall be used in washing partitions and woodwork and followed by rinsing of the partitions and woodwork.

C.5.13.7.3 Paper towel, toilet paper and hand soap dispensers shall be maintained free of smudges and fingerprints, and they shall be maintained with an adequate supply of material at all times. Stacking of paper items on top of cabinets shall not be permitted.

C.5.13.8 Miscellaneous Cleaning: The Contractor shall provide cleaning in the following areas in accordance with the procedures manual at the frequencies stated below or on the T&F Charts.

C.5.13.8.1 Drinking fountains shall be cleaned to remove accumulations of stain, rust and scale. Chrome and brass fittings shall be cleaned and polished.

C.5.13.8.2 Ash trays and urns shall be emptied and wiped with a cloth and detergentdisinfectant as required to prevent deposits. Waste from ash trays shall be collected and disposed of so as not to be a fire hazard.

C.5.13.8.3 Radiators, convectors and space heaters shall he thoroughly dusted. Dust and lint shall be removed with mechanical vacuum equipment. Shields and louvers which must be removed to provide access shall be properly and securely replaced.

C.5.13.8.4 Waste receptacles shall be thoroughly cleaned and wiped out of all waste and residue at the time of each emptying. Plastic bags of an appropriate size for the container shall be placed in cleaned and dried receptacles as liners. In offices and administrative areas, trash shall be removed daily and the liner replaced as often as needed to maintain a neat appearance; waste receptacles shall be cleaned as often as necessary to maintain an acceptable level of sanitation and appearance.

C.5.13.8.5 Draperies and curtains shall be cleaned by mechanical vacuum equipment as indicated on the T&F Charts. dry cleaning when deemed necessary shall be accomplished by the Contractor. Removal and reinstallation shall be accomplished by the Contractor at least twice a year.

C.5.13.8.6 Push plates, kick plates, elevator buttons and plates, and other such fixtures shall be polished to present a neat, clean shining appearance at all times.

C.5.13.8.7 General cleaning of light fixtures shall be accomplished according to the frequencies indicated on T&F Charts. Light fixture diffusers, howls or covers shall be removed from fixtures and cleaned to remove dust and stains.

C.5.13.8.8 Wall surface of vitreous materials or surfaces covered with washable paint, washable fabric, washable vinyl, etc., shall be washed completely at least once every six months, not less than six months apart. Walls, partitions, folding doors and woodwork shall be cleaned using approved detergent disinfectants In proper concentrations followed by rinsing with clean water. Wall surfaces which are not washable shall 'be cleaned without the use of abrasive materials. The wall washing task shall include cleaning of wall mounted fixtures such as cabinets, bulletin boards, etc.

C.5.13.8.9 Ceilings where material is of a washable nature shall be cleaned twice per year but not less than six months apart.

C.5.13.8.10 Entrances and entrance platforms are to be cleaned thoroughly. This task includes:

C.5.13.8.10.1 Remove dirt, mud and litter.

C.5.13.8.10.2 Clean foot scrapers, exterior entrance mats and individual trash and smoking receptacles.

C.5.13.8.10.3 Remove lint, cobwebs, mud and dirt from the outside walls in the immediate vicinity of entrances and from canopies and entrance lights.

C.5.13.8.10.4 Wash down the area and remove any standing water from the entrance and adjacent sidewalks.
C.5.13.8.10.5 Maintain entrance windows and doors as required to maintain a clean appearance.

C.5.13.8.11 Artificial plants are to be cleaned once a month.

C.5.13.8.12 Contractor area including housekeeper closets, storage areas, and administrative areas shall he maintained at the frequency specified in the T&F Chart.

C.5.13.9 DUSTING:

C.5.13.9.1 Venetian blinds, window shades. Venetian blinds shall be cleaned by damp dusting at the frequency indicated on the T&F Charts; window shades shall be dry cleaned with vacuum equipment or treated. Dry cloths only.

C.5.13.9.2 Furniture, low surfaces. Furniture, both movable and installed, window sills, baseboards, woodwork, shelves, builtin cabinets, bulletin boards, railings, ledges, chairs, desks, doors and door louvers, wall mounted cabinets, door frames and

similar items shall be dusted daily with tools capable of picking up dust and not spreading, it to other surfaces. Furniture with removable cushions and hacks shall have these removed and dust and debris removed from under them.

C.5.13.9.3 High dusting. Walls, ceilings, air conditioning grilles and supplies, conduits and pipes, ledges, light fixtures and similar items shall be cleaned with vacuum equipment at the frequency shown on T&F Charts.

C.5.14 TRASH REMOVAL

C.5.14.1 Trash generated by this facility shall be classified according to the Following lists:

Class I Contaminated Discussed in the incinerator section.

a) Training Exercises: Boots, tennis shoes, gloves, hoods, gas mask filters, over garments, etc.

b) Air Filtration System Prefilters, HEPA filters, carbon filters PVC bags,etc.

c) Miscellaneous Paper, glass, metal, rags, plastics, cloth, sludge, etc.
Class Il Non-contaminated:

Wet Garbage, .etc.
Dry Papers, crates, cartons, etc.
Class III Chemicals Acids and solvents.

C.5.14.2 The contractor shall maintain the grounds and surrounding area free of all trash, spillage and overflow.

C.5.14.3 Trash shall he sorted at point of origin, packaged and identified (by labeling, colorcoded containers or other acceptable methods according to the foregoing classification list. Packages of contaminated waste shall be sealed prior to removal and shall not be unsealed for any reason without express consent of the Contracting Officer or his representative.

C.5.14.4 The contractor shall collect trash and rubbish as scheduled and shall remove it to collection station. The trash container for dry noncontaminated trash will be located outside fenced area. Contractor shall remove trash from site to the trash container. No wet trash or incinerator ashes shall be placed in this container.

C.5.14.5 Trash containers used for trash removal purposes shall meet the approval of the Fire Marshall. They shall be constructed of rigid, seamless, rustproof metal with smooth neutral colored finish. They shall be equipped with snugfitting covers, silentrunning casters and have suitable rubber or plastic protective bumpers or guards to prevent damage to structural walls and doors. Containers shall have covers in place at any time containers are being transported within the building or on loading docks. Containers shall be of such construction that, should any liquid be deposited therein, such liquid shall not leak out onto the floor in the process of moving and further utilizing the containers. Cloth type bags shall not be approved under any circumstances.

C.5.14.6 The contractor shall maintain all trash containers used for trash mop removal purposes in a clean and sanitary condition at all times. Containers shall be cleaned anddisinfected. Sponges and other equipment used for the purpose of cleaning trash containers shall not. he used for any other cleaning purpose within the building. Sponges used shall be washed out thoroughly in detergentdisinfectant solution and stored in appropriate janitorial closets. Cloths used shall he disposed of at the end of each working day.

C.5.15 GENERAL AIR SAMPLING

C.5.15.1 GENERAL: Air sampling of selected points within the confines of the COBRATF shall be accomplished using the Depot Area Air Monitoring System (DAAMS) and the Miniature Chemical Agent Monitoring System (MINICAMS), M8Al Chemical Agent Alarm (or its replacement) and Hydrogen Gas Leak Detectors to comply with Federal regulatory requirements. This sampling will be conducted in accordance with existing Standing Operating Procedures and operating manuals.

C.5.15.2 The contractor shall perform air sampling within the COBRATF confines. All operations and repairs will be conducted in accordance with Federal Regulations and COBRATF SOP's and policies.

C.5.15.3 The work consists of furnishing all labor for the accomplishment of complete MINICAMS challenge, calibrations, repair, operations, and obtain repair parts. Work shall be accomplished in compliance with the procedures set forth in this specification.

C.5.15.4 The equipment, GFE provided under this contract are: MINICAMS, M8A1s, multiport sampling systems and, Hydrogen gas leak detector calibration kit.

C.5.16 Compressed Gases, Hydrogen and Helium

1.Scope: The contractor shall furnish Compressed Gases to the Chemical Ordnance Biological Radiological Training Facility (COBRATF), building 4480 Fort McClellan, Alabama, and shall maintain the compressed gas cylinders in accordance with these specifications and as instructed by the contracting officer or authorized representative.

2.General:
a.Compressed gas cylinders will be located behind the training building as directed by the contracting officer or authorized representative. It is estimated that 50 cylinders will be required at the start of the contract period and additional or fewer cylinders may be required at various times throughout the contract period. The mix of cylinders initially will be 25 each zero grade, hydrogen gas and 25 each zero grade, helium gas. The contracting officer or authorized representative will notify the contractor as to the actual quantity of gas cylinders and/or mix of gases on an as required basis.
b.Cylinders will be provided by the contractor and the contractor will main compressed gas cylinders IAW 29 CFR 1910.252 (OSHA): Replacement of defective gas cylinders will be performed by the contractor when required to meet safety, operational or regulatory requirements.

1.Specific Requirement for Compressed Gases
a.Each compressed gas cylinder shall consist of a metal tank with standard CGA valve fittings for the type gases contained. Each tank will be color coded using standard color

codes for the type gases contained. The metal tanks will be cylindrical and of standard. Each tank will be constructed to withstand an internal gas pressure of 3,000 psi without leakage or rupture. Each tank will be pressurized to 2,500 psi (+- 100 psi) of the appropriate gas at time of delivery. Each tank will have labels and markings to meet all safety and regulatory requirements of the type gas contained.

b. Gases will be of the following purity:

1. Hydrogen: 99.997% with maximum permissible impurities of 46 ppm as follows:

a. Nitrogen 15.0 ppm
b. Oxygen 3.0 ppm
c. Water Vapor 4.0 ppm
d. Neon 23.0 ppm
e. Hydrocarbon 1.0 ppm
f.

NOTE: Standards for Hydrocarbon cannot be relaxed.

1. Helium: 99.997% with maximum permissible impurities of 40 ppm as follows:

a. Nitrogen 5.0 ppm
b. Oxygen 3.0 ppm
c. Water Vapor 8.0 ppm
d. Neon 23.0 ppm
e. Hydrocarbon 1.0 ppm

NOTE: Standards for Hydrocarbon cannot be relaxed.

a. Contractor shall tag each cylinder with a batch analysis made by the contractor.

b. Contractor shall be required to make deliveries of cylinders to the COBRATF on an as required basis. The contractor will deliver cylinders to designated location, off load cylinders at storage location and load empty cylinders. Receipts for each delivery will be provided to the contracting officer's authorized representative at the COBRATF. The contractor shall respond to service or resupply requests within three working days of notification for service or resupply.

1. Packing and Marking (Color Coding)

a. The contractor shall preserve, package, pack and mark all items in accordance with the best commercial practices to meet the packing requirements of the carrier and ensure safe delivery at destination.

b. Color coding normally used by the contractor will be acceptable on contractor-owned cylinders.

c. All portable cylinders used for storage and shipment of compressed gases shall be constructed, labeled and maintained in accordance with the regulations of the U.S. Department of Transportation, 49 CFR, Parts 171 through 179.

d.Military Standard (MIL-STD-101B), dated December 3, 1970, titled, Color Code for Pipelines and for Compressed Gas Cylinders.

C.5.17 MINIATURE CHEMICAL AGENT MONITORING SYSTEMS (MINICAMS) OPERATIONS:

C.5.17.1 The contractor shall perform the following operations in accordance with Annex I and J of COBRATF SOP's.

C.5.17.1.1 When MINICAMS readings are above limits set in SOP above collect air samples throughout the facility using Depot Area Air Monitoring Systems (DAAMS).

C.5.17.1.2 Perform daily checks of MINICAMS Air Monitoring Systems (MINICAMS)

C.5.17.1.3 Challenge MINICAMS with dilute agent test solution. (daily)

C.5.17.1.4 Perform daily services for MINICAMS including replacing conversion pads as necessary.

C.5.17.1.5 Calibrate MINICAMS.

C.5.17.1.6 Challenge Hydrogen Leak Monitors

C.5.17.1.7 Perform daily checks and services of 6 M8A1 Automatic Agent Alarms.

C.5.17.1.8 Replace conversion filters on MINICAMS.

C.5.17.1.9 Cut filter pads.

C.5.17.1.10 Prepare tubes for MINICAMS. Tube certification shall be in accordance with manufacturer’s procedures.

C.5.17.1.11 Provide initial response within 30 minutes to MINICAMS or M8AI Alarms 24 hours per day.

C.5.17.1.12 Ensure that the MINICAMS units located in the laboratory filter stack, and incinerator stack (when incinerator is burning) are operational at all times.

C.5.17.1.13 Ensure all hydrogen leak monitors are operational at all times.

C.5.17.2 The contractor shall perform the following maintenance

C.5.17.2.1 Troubleshoot and repair all MINICAMS and related equipment to include
a. MINICAMS unit.

b. Multiport samplers.
c. Stack sampler with related support brackets, and housing.
d. All heat trace lines for sampling.
e.Vacuum pumps, air sampling.
f . Battery backup power supply units.
g. Compressed gas feed lines (hydrogen, helium, compressed air).
h. Compressed gas, gauges and manifolds.
i. Charcoal and molecular sieve (dryer) filter mounted in compressed gas/oxygen feed lines.
j. Strip chart recorder.
k. Remote alarm panels in Safety Control and Guard House with related cabling.
l. Mininet computer system.

C.5.17.2.2 Obtain all items required to repair and/or operate MINICAMS and related equipment (except RDTE dilute solutions).

C.5.17.2.2.1 Keep abreast of technological advances in monitoring and new requirements. Make necessary systems improvements with approval of Chief, COBRATF to meet operational /technical requirements.

C.5.17.2.3 In case of air monitoring equipment failure, a maximum of 48 hours will he allowed to troubleshoot/diagnose the problem and repair or order parts not in stock. After receipt of parts, a maximum of 12 hours will be allowed to install and recalibrate MINICAMS.

C.5.17.2.4 Troubleshoot and repair hydrogen leak monitors, cabling and alarm panels.

C.5.17.2.5 If a hydrogen leak monitor is inoperable, immediate corrective action will be taken and the Chief, COBRATF, advises to cease operations until the problem is corrected.

C.5.18 SAFETY CONTROL PANEL OPERATIONS

C.5.18.1 General: Operation of the safety control panel will be conducted in accordance with Federal Regulations, existing COBRATF SOPs / operating manuals and policies. This control panel contains remote controls and sensors for all critical environmental controls and alarms to ensure the safe conduct of daily operations and training.

C.5.18.2 The contractor shall:

C.5.18.2.1 Monitor safety control panel to detect possible equipment malfunctions or other problems.

C.5.18.2.2 Communicate with other staff members using intercom, telephones, or radio.

C.5.18.2.3 Make adjustments to ventilation speeds as necessary to maintain proper negative pressure gradient throughout training building.

C.5.18.2.4 Make daily. readings of filter bank differential pressures.

C.5.18.2.5 Notify maintenance personnel of services or repairs as indicated by control panel readings.

C.5.18.2.6 Monitor progress of MINICAMS and agent alarm calibrations through control panel indicators.

C.5.18.2.7 Notify COBRATF operations personnel immediately of situations that are outside normal instructions or Standing Operating Procedures.

C.5.18.2.8 With the assistance of one or more Government personnel, provide training building entry control and maintain the safety control room operations log.

C.5.18.2.9 During offduty hours, including weekends, conduct periodic checks of safety control panel instruments.

C.5.18.2.10 Provide all required information and assistance to Chief, COBRATF, to ensure personnel subject to work in Safety Control continuously meet the requirements of the Contractor / Employee Reliability Program.(CERP).

C.5.19 GENERAL SPECIFIC TASK

C.5.19.1 The purpose of plant maintenance is to maintain a safe, effective, and appealing physical environment in which the training assignment of the facility can be provided.

C.5.19.2 The DOJ will be using this facility to train First Responder personnel

in Weapons of Mass Destruction (WMD) Response. The rooms used to decontaminate chemical warfare agents are classified as "hot" areas. The "hot" area is defined as the training area. It is any area where toxic agent has been stored, used, or disposed.

C.5.19.3 The Operations & Maintenance (O&M) contractor shall have responsibility for maintenance in the "Hot" area with exception of laboratory instruments. The worker shall suit up before entering "Hot" area. Work shall be performed so as not to conflict with training (normally between 0730 and 1330).

C.5.19.4 All hot systems shall be assumed to operate continuously., The O&M contractor shall coordinate daily the required maintenance with the Director at the COBRATF.

C.5.19.5 Plant maintenance comprises all real property (building and systems) in the COBRATF and includes the organization of manpower, supplies, processes, procedures and controls to be responsive on an emergency or routine basis (24 hours a day). The contractor shall provide inspection, calibration, service, maintenance, repair, overhaul and operation of the mechanical, structural, and electrical systems within the fenced area plus the water storage tank and booster pump house.

C.5.19.6 Contractor shall maintain the intrusion system and provide boiler and tower water treatment, for facilities at the COBRATF.

C.5.19.7 SPECIFICATION CONCEPT

C.5.19.7.1 Work included in this specification requires an orderly, wellplanned operating and maintenance program, incorporating provisions for prompt, decisive action on all operating and maintenance needs as specified elsewhere in these specifications, including non-repetitive jobs, to achieve the maximum benefits from the system and assure a longer equipment life.

C.5.19.8 The contractor shall immediately initiate corrective action for an emergency situation. Immediate corrective action shall consist of immediate work with measurable immediate results which alleviate the emergency. The O&M contractor shall provide emergency maintenance within 30 minutes of needed emergency 24 hours a day, seven days a week. The O&M contractor shall provide the Contracting Officer and Chief, COBRATF with an uptodate monthly schedule of personnel on 24 hour emergency call. The schedule shall include dates, names, contractorprovided beeper numbers and phone numbers by which these personnel can always be reached.

C.5.20 LAUNDRY OPERATIONS

C.5.20.1 Introduction

This document will be usedto establish and maintain an effective quality control (QC) program for the Personnel Clothing and Equipment (PC&E) Section operations at the COBRATF Chemical Ordnance Biological Radiological/Nuclear Training Facility (COBRATF). An effective program will ensure that personal protective equipment (PPE) in support of toxic, agent operations at the COBRATF is both clean and serviceable within the limits specified by applicable regulations.

C.5.20.1.1 Terminology

Quality Control refers to the procedures used to measure the quality, accuracy and precision of the certification, testing and assembly procedures used in the COBRATF PC &E Section.

Quality Assurance The system of monitoring, inspecting, and auditing which assures the operations conducted in the COBRATF PC&E Section are documented and conducted according to applicable regulations and the PC&E Section's standing operating procedures (SOPs).

C.5.20.1.2 Scope of Work

The PC&E Section provides PPE for toxic agent operations at the COBRATF. This equipment includes, but is not limited to: M40 series protective mask, MCU2/P series protective mask, M17 series protective mask, M3 tap suit and accessories, Battle Dress Over garment (BDO) and accessories, and TAP apron. The COBRATF PC&E Section performs laundering, inspection, repair, and re-certification operations on PPE after it is used in toxic agent operations or when mandated by regulatory requirements. Additionally, the COBRATF PC&E, Section performs maintenance and repairs on chemical test equipment.

C.5.20.1.3 Quality Policy Statement/Requirements

C.5.20.1.3.1 Statement It is the policy of the COBRATF PC&E Section to provide cleaning and maintenance of all PPE on site. The COBRATF shall provide personnel with the appropriate training and. resources necessary to perform quality work.. The PC&E Section shall implement a sound QA/QC: program for the operation and maintenance of all PC&E equipment and for cleaning and maintenance of PPE. The PC&E Section will strive for continuous improvements by stressing personnel, facility, and process improvements.

C.5.20.1.3.2 Requirements. The following is a list of QC requirements:

Mask Certification

Toxicological Agent Protective Equipment Certification

BDO Reutilization

Impermeable Items Reutilization

Laundering

Preventive Maintenance

Documentation

Personnel Training

Operating Procedures

Drink Tube Sanitation

C.5.20.1.4 Equipment

M14 Tester Mask
M4 Tester Mask
Q204 Tester Mask
Q79AI Tester TAP Suit, Boot, & Glove
M41 Protection Assessment Test System (PATS)
Washing Machines
Wash Vats
Sanitation Vat
Rinse Vat
Dryer
Free Standing & Portable Drying Racks
Drink Tube Sanitation Station

C.5.20.1.5 Personal Protective Equipment (PPE)

M3 TAP Suit, M2AI Boot, M40SP Hood, M3 & M4 Glove, MI Over bootie
Battle Dress Over garment (BDO) Standard A

Chemical Protective Footwear Covers (Over boots), Standard A
Chemical Protective with Insert Standard A, Glove Set
Undergarments
Tap Aprons M2
General Purpose Hoods M6A2, M40, & MCU2/P
Tennis Shoes, Civilian
Socks
Explosive Handlers Coveralls, MILC. 14610
Battle Dress Undergarments (BDU)
M40 Series Protective Mask
M17 Series Protective Mask
MCU2/P Series Protective Mask
German M65 Protective Mask
British S 10 Protective Mask
Danish S12 Protective Mask
Other Protective Masks and Equipment

C.5.20.2 Responsibilities, General

PC&E Section personnel are responsible for maintaining test equipment IAW manufacturers manuals. Personal Protective Equipment, most be cleaned, inspected, maintained and certified IAW applicable regulations and COBRATF SOPs. PC&E Section personnel will also perform decontamination of personnel and equipment and initiate emergency action procedures upon request.

C.5.20.2.1 Supervisor The COBRATF PC&E Supervisor is responsible for ensuring responsibilities described in paragraph C5.19.2 are executed to the fullest extent and assisting and directing PC&E Section operations as necessary. The supervisor will observe personnel performing duties to ensure they are properly trained and am performing to the designated work standards and will ensure employees perform only work they are certified for.

C.5.20.2.2 Quality Control Coordinator (QCC). The QCC will be responsible for the following:

Maintaining accurate, and detailed records of the QC checks IAW Tables C.5.20.2.1 C.5.20.2.6.

Performing QCC checks of the PPE for conditions that might jeopardize the individuals utilizing the equipment. Checks will be IAW Tables C.5.20.2.1 C.5.20.2.6 and will be recorded on the QCC Form (Appendix A).

Identification of any processes which need to be improved that may be preventing

successful accomplishment of the PC&E Section's work scope.

Investigation and documentation of the reason for identified deficiencies and the corrective action required to prevent reoccurrence.

Table C.5.20.2.1: QCC PC&E Personnel Observation Requirements

OPERATIONS	FREQUENCY # SAMPLES TO CHECK
Mask Certification	Quarterly Min 5 / Operator
TAP Suit Certification	Quarterly One Suit / Operator
M2AI Boot Certification	Quarterly One Pair / Operator
M13 or M4 Glove Certification	Quarterly One Pair / Operator
Laundering of XXX Items	Quarterly Hot Laundry Items
Chemical Test Equipment Maintenance	Quarterly M14, M4 & Q204
Mask Maintenance/Inspection	Quarterly Min 5 /Operator
Drink Tube Sanitation	Quarterly Min 5 /Operator
BDO Inspection & Scanning	Quarterly 5 Items/ Operator

Table C.5.20.2.2: QCC _Inspection Requirements for Certification Tracking

OPERATIONS	FREQUENCY	#SAMPLES TO CHECK
Automated Mask Recall	Quarterly	Check for Expired Mask
Automated TAP Recall	Quarterly	Check for Expired TAP Items
Automated BDO Recall	Quarterly	Check for Expired Items
Automated SCRAM Recall	Quarterly	Check, for Expired Items

Table C.5.20.23. QCC Inspection Requirements for Calibrated Equipment

OPERATIONS	FREQUENCY	# SAMPLES TO CHECK
M 14, M4, Q204 & Q79 Testers	Quarterly	Check Label for expired Date
Torque Wrenches	Quarterly	Check Label for Exp. Date
Stop Watch	Quarterly	Check Label for Exp. Date
M41 PATS	Quarterly	Check Label & Hours Used

Table C.5.20.2.4: QCC Inspection Requirements for Training Certification

OPERATIONS	FREQUENCY	# SAMPLES TO CHECK
Phase I & II Training	Quarterly	Check Tng, Records
HAZCOM	Quarterly	Check Tng Records
Maintenance & Operator Cert.	Quarterly	Review Cert. Memorandums
CPR	Quarterly	Review CPR Cards

Table C.5.20.2.5 QCC Inspection Requirements for Maintenance Performed & Scheduling

OPERATIONS	FREQUENCY	# SAMPLES TO CHECK
Maint On M14, M4&Q204 Tester	Quarterly	Check Maint Forms for Documentation
Mask Maintenance	Quarterly	Check Computer Tracking Records
TAP Maintenance	Quarterly	Check Computer Tracking Records
Hoist Maintenance.	Quarterly	Check Maint Forms for Documentation

Table C.5.20.2.6 Physical Inspection of PPE

OPERATIONS	FREQUENCY	SAMPLES TO CHECK
Mask	Monthly	Inspect 5 ea.
BDOs	Monthly	Inspect 5 ea.
TAP Suit	Monthly	Inspect 2 ea.
TAP Apron	Monthly	Inspect 2 ea.
TAP G love	Monthly	Inspect 4 ea.
M2A I Boot	Monthly	Inspect 4 ea.
TAP Hood	Monthly	Inspect 2 ea.
Filter Element Mask	Monthly	Inspect 5 ea. Against SB302

C.5.20.2.3 Quality Assurance Evaluator (QAE).

The QAE will verify the checks done by the QCC on a quarterly basis. The QAE will submit a written verification of all results to the Chief, COBRATF and maintain a file copy of each quarterly inspection. Any issues on questionable procedures will. be first directed to. the Chief, COBRATF. If after notification to the Chief COBRATF an adequate response is not reached, the QAE may then contact the Installation Safety Manager for assistance.

C.5.20.3_Laundry Standards

The COBRATF PC&E Section will meet all applicable standards IAW Operational SOP F (Laundry Operations).

CA.5.20.3.1 Equipment Standards Test equipment will be calibrated, maintained and setup IAW, COBRATF SOP F and the manufacturers instruction/operation manuals. Operating standards will not be compromised or deviate from. specified operating parameters.

CA.5.20.3.2 PPE Standards PPE will meet the standards described in COBRATF SOP F and all other applicable regulations as specified for the specific piece of equipment for its intended use.

C.5.20.4 Certification

C.5.20.4.1 Operator Certification -- Maintenance and operators of PPE test equipment will be initially trained and then certified on an annual basis by personnel at Pine Bluff Arsenal. A certification memorandum for all PC&E personnel will be maintained by the PC&E supervisor.

C.5.20.4.2 PPE Certification PPE requiring certification will be certified by the PC&E personnel IAW applicable regulations and COBRATF SOPs.

C.5.20.5 Calibration

The calibration of test equipment is an integral component of any QCC plan. To ensure the highest quality of work, equipment used in the conduct of PC&E operations will be maintained within prescribed operating standards and calibrated as directed by applicable regulations and operating manuals.

C.5.20.5.1 Calibration Requirement The requirement for PC&E Section equipment calibration shall be maintained by the QCC. Specifically, PC&E Section equipment will be calibrated IAW Table C.5.20.5.1. The QCC will be responsible to maintain calibration stickers on all equipment. The COBRATF TMDE will maintain the calibration tracking records for all laundry equipment requiring local calibration. The M4, M14,Q79 andQ204. test equipment is calibrated annually by technicians from Pine Bluff Arsenal, Arkansas and annotated with a signed and dated calibration sticker. Equipment will be changed every five years upon notification by Pine Bluff Arsenal, Arkansas.

Table C.5.20.5.1: Calibration Requirements

ITEM	Calibration Frequency	Agency Conducting Calibration

M4Tester	Annual Pine Bluff Arsenal
M14 Tester	Annual Pine Bluff Arsenal
Q79 Tester	Annual Pine Bluff Arsenal
Q204 Tester	Annual Pine Bluff Arsenal
Stop Watch	Annual Pine Bluff Arsenal
Torque Wrenches	As Specified Anniston Army Depot
Flow meters	NCR NCR

C.5.20.6 PPE Management

Adequate amounts of PPE will be available and physically ready for use in quantities adequate to meet training demands. The equipment will be tracked IAW COBRATF SOP F to ensure maintenance, inspection and certification are kept current. A memorandum will be posted in the PC&E Section indicating minimum levels of PPE and indicating personnel responsible for drawing the PPE from supply.

C.5.20.7 Quality Control

The primary objective of the QC is the verification of the accuracy and precision of re-certification/test procedures utilized in the PC&E Section operations as well as the overall training program of personnel.

C.5.20.7.1 Test Samples of PPE Test samples are those samples that are randomly selected for certification by the QCC to verify operators are conducting certification/testing/inspection within acceptable limits.

C.5.20.7.2 Mask Certification/Operators Proficiency Required documentation for the QA/QC data for mask certification can be found in Appendix A. The frequency of checks is based upon the actual amount of equipment certified and the number of operators conducting the certification IAW Tables C.5.20.2.1, C.5.20.2.2 & C.5.20.2.6.

C.5.20.7.3. BDO Reutilization Required documentation for the QA/QC, data for BDO reutilization can be found in Appendix A. The frequency of checks is based upon the actual amount of equipment reutilized and the number of operators conducting the operation IAW C.5.20.2.1, C.5.20.2.2 & C.5.20.2.6.

C.5.20.7.4 TAP Certification Required documentation for the QA/QC data for TAP equipment certification can be found in Appendix A. The frequency of checks is based upon the actual amount of equipment certified and the number of operators conducting the certification IAW Tables C.5.20.2.1, C.5.20.2.2, C.5.20.2.5 & C.5.20.2.6.

C.5.20.7.5 Impermeable Item Reutilization Required documentation for the QA1QC

data for impermeable item reutilization can be found in Appendix A. The frequency of checks is based upon the actual amount of equipment reutilized and the number of operators conducting the operation IAW Tables C.5.20.2.1, C.5.20.2.2, C.5.20.2.5, & C.5.20.2.6.

C.5.20.7.6 General Laundering Required documentation for the QA/QC data for general laundering, can be found in Appendix A. The frequency of checks is based upon the actual amount of equipment reutilized and the number of operators conducting the operation IAW Tables Table C.5.20.2.1.

C.5.20.7.7 Record Keeping for QC Samples of PPE The QCC will ensure that test sampling of PPE is documented as required and annotated in the appropriate log books for PPE and test equipment. A summary QCC report will be prepared at the end of each inspection cycle indicating the QCC pass rating and a summary of deficiencies (Appendix B).

C.5.20.7.8 Miscellaneous QCC Data Input During the course of training operations, PPE may be discovered to have deficiencies. To capture these items in the QCC inspection cycle, personnel will return all defective equipment to the PC&E Section QCC and indicate the deficiency. The QCC will re-inspect the item and include the check in his QCC inspection report.

C.5.20.8 Training

PC&E personnel will meet mandated training requirements stipulated in COBRATF Policy Memo 1097 and Chapter Four to COBRATFs Safety Program Document. Prior to the completion of training requirements, the PC&E. Supervisor or his designated representative will supervise all equipment certification operations performed by the individual. QC evaluations for this portion of the QC program involves evaluation of operator's training received and their demonstrated level of proficiency. This standard of evaluation will be applied for COBRATF Policy Memo Phase I and II requirements as well as Phase IIIb requirements outlined in Table C.5.20.2.4.

C.5.20.8.1 Training for Laundry Personnel – PC&E personnel must be trained. in all operational aspects of their jobs. Formal training will be documented on a memorandum and filed by the PC&E supervisor. Informal training will be documented in a logbook and initialed by the supervisor and the employee.

C.5.20.8.1.1 Formal Maintenance training will be performed at Pine Bluff Arsenal, Arkansas. Operator training will be taught by instructor personnel form Pine Bluff Arsenal at Fort. McClellan. Operators and mechanics must be certified before performing maintenance or operator work. Memorandums verifying certification will be maintained in a personnel training folder by the PC&E supervisor.

C.5.20.8.1.2 Informal Informal training consist ofemergency response procedures, toxic agent sampling procedures, proper wear of PPE, review of COBRATF SOPs, and chemical surety safety training. Records of training will be maintained on all assigned personnel by the PC&E Supervisor in the personnel training folder.

C.5.20.8.1.3 Additional Training Since technology and methods change there will arise a need for additional training of personnel. When a need for additional training is identified by the PC&E Supervisor, the employee will be trained and if necessary undergo re-certification. This will be documented by the appropriate supervisor.

C.5.20.9 Preventive Maintenance

Preventive maintenance must be performed in order to minimize breakdown of equipment. Preventive maintenance will be scheduled on a DA Form 314 and logged on DD Form 2404 when performed. If the maintenance system has been automated, the use of DA Form is not required. Preventive maintenance will be performed IAW the manufacturers instructions and Table C.5.19.2.5. The PC&E supervisor will schedule and ensure maintenance is performed to the prescribed standards. Common spare parts will be onhand to prevent excessive down time of the equipment. Personnel from the PC&E Section will be assigned by memorandum to coordinate with supply to order needed parts.

C.5.20.10 Audits

Audits allow an objective review of the overall QC plan and will give insight into the effectiveness of the program. Audits give opportunities to make changes or modifications of the PPE handling procedures or equipment procedures that improve the quality of PPE output or increase the efficiency of operations. Results of audits will be documented and changes to Standard Operating Procedures, quality control plans or training policies will be made based on those results.

C.5.20.11 Documentation

Records must be kept of all significant activities performed in the PC&E Section. As a minimum, records will be kept of quality control operations and all required training.

C.5.20.11.1 Document Control An SOP and a copy of the QC Plan will be maintained in the COBRATF PC&E Section by the PC&E supervisor.

C.5.20.11.1.1 Document Approval and Issue The PC&E Section will develop and revise SOPs as directed by the COBRATF Operations Section when new equipment is introduced into operation or when a change to operating procedures occurs. A method

will be implemented to control SOPs in such a way to prevent out of date SOPs being in the workplace or being left out in distribution. Current copies of QA/QC documents will be maintained in the work area by the QCC.

C.5.20.11.1.2 Document Changes/Modifications All changes to documents and computer programs will be documented by the QCC. Records will be created and maintained of changes as they are made including the nature of the change, revision number, and date of revision.

C.5.20.11.1.3 Quality Instruction Documents, such as drawings, tables, and charts, etc., that are posted in operational areas or in logbooks should originate from aSOP, QC Plan, or manufacturer's operating manual. Such documents are considered quality instructions and must be controlled to minimize the potential for using obsolete instructions.

C.5.20.12 Inspection and Testing
Supplies and auxiliary equipment used in the PC&E Section should be of the highest quality and reliable. Prior to using any of these supplies or auxiliary equipment, a thorough visual inspection will be conducted. This is to ensure that the items are operational, available in required quantities, and meets the PC&E Section's operational requirements.

C.5.20.12.1 Inspection and Testing System The QC system will ensure that PPE are available for students and instructors that meets the annual requirements for use in a toxic agent environment. The system will also ensure that equipment and tools requiring calibration do not exceed expiration date and that personnel maintain training and certification levels IAW Table C.5.20.2.3 and C.5.20.2.5.

C.5.20.12.2 Corrective Action There are three types of situations that require corrective action: (1) "out of control" situations; (2) identified deficiencies and (3) systematic problems. Investigation and documentation of the cause of deficiencies and the corrective action required to prevent a reoccurrence will be done by the QCC. When corrective action is necessary, controls shall be established which ensure that the specified corrective action has been undertaken and is effective. Any changes to existing procedures will be documented (Appendix C). The PC&E Section will maintain an "Out of Control" log book and it will contain the following information:

What condition prompted the out of control situation.
Who was notified of the problem.
What corrective action procedures were employed.

Who performed the corrective action procedure.
Results of the corrective action.
How long was the instrument out of control.
How long was the instrument out of service due to corrective action procedure.

C.5.21 MEDICAL TREATMENT

C.5.21.1 The contractor shall have two (2) paramedics on site at the COBRATF during live agent operations, while students/responders are present and/or when workers enter the toxic area.

C.5.21.2 The contractor shall have two (2) paramedics on site at the Urban Training Facility (UTF) site while students/responders are present.

C.5.21.3 It shall be the responsibility of the Director, CDP to provide the proper equipment necessary to accomplish the mission required at the COBRATF and the UTF site.

C.5.21.3.1 Paramedics must be trained in the effects of nerve agent poisoning and the proper use of nerve agent antidotes. It is the responsibility of the one (1) supervisory paramedic to ensure all necessary training is completed to allow paramedics to accomplish the mission required at the COBRATF and the UTF site.

C.5.21.3.2 The equipment shall include two (2) ambulances stocked with: a full line of advanced life support equipment, i.e., cardiac monitor / defibrillators (LifePak 10 or better); a full line of cardiac drugs; airway maintenance equipment and trauma life support equipment.

C.5.21.4 All paramedics must maintain State of Alabama paramedic protocol credentials plus have knowledge in treatment of chemical casualties. Paramedics must be trained in proper use of chemical protective clothing and the ability to decontaminate patients presented to them who have not been properly decontaminated.

C.5.21.5 It shall be the responsibility of the emergency medical staff to collect pre-training and post-training blood samples from each student / first responder who trains at the COBRATF.

C.5.21.6 The emergency medical staff (paramedics) will be trained in laboratory procedures pertaining to Red Blood Cell (RBC) Cholinesterase (ChE) testing / analysis.

C.5.21.7 The Director, COBRATF, is responsible for providing and maintaining a full line

of blood collecting supplies. The contractor is responsible for providing expendable medical supplies, emergency medical supplies and all required drugs.

C.5.22. Six (6) LEAD TRAINERS

C.5.22.1 The contractor shall ensure instructor personnel are trained and remain proficient in execution of toxic chemical operation safety procedures prior to and during the conduct of student training operations.

C.5.22.2 The contractor shall ensure toxic chemical agent instruction as well as COBRATF site specific safety and operations training is provided to all newly assigned COBRATF personnel. Training shall also include annual refresher training.

C.5.22.3 The contractor shall assist the operations staff in verifying accuracy of toxic chemical operational safety procedures in applicable SOPs and lesson plans.

C.5.22.4 The contractor shall ensure compliance with execution of toxic chemical operational safety procedures during student training.

C.5.22.5 The contractor shall conduct hazard analysis for all training activities.

C.5.22.6 The contractor shall review and make recommendations to revise, as necessary, lesson plans for all toxic chemical agent training. At a minimum, provide annual review of all lesson plans for accuracy.

C.5.22.7 The contractor shall confirm training schedules with CDP training staff for all student related activities and requirements.

C.5.22.8 The contractor shall establish and maintain a site safety program to include a safety council and related activities.

C.5.22.9 The contractor shall maintain a technical library for all appropriate reference materiel required for COBRATF operations.

C.5.22.10 The contractor shall be responsible for forming emergency response teams comprised of staff/training personnel who will have duties of responding to the site within 30 minutes of a chemical accident / incident as directed by the COBRATF Director or his designated representative.

C.5.22.11 As senior trainers, the contractor shall provide input regarding employee's performance on a recurring basis as required by COBRATF directives.

C.5.22.12 The contractor sahll serve as Safety Control Operator for all toxic agent operations as follows:

C.5.22.12.1 The contractor shall execute and enforce toxic chemical agent safety procedures prior to and during the conduct of toxic chemical operations.

C.5.22.12.2 The contractor shall conduct pre-operational safety checks of all engineering / environmental controls used during the conduct of toxic chemical operations and day-to-day operations in accordance with established SOPs.

C.5.22.12.3 The contractor shall maintain 100% accountability of all students and training personnel entering the toxic chemical training building during conduct of training.

C.5.22.12.4 The contractor shall review, verify and update safety control procedures and SOPs governing the execution of toxic chemical operations at least annually.

C.5.22.12.5 The contractor shall direct and execute emergency response procedures as required.

C.5.22.12.6 The contractor shall inform the Director / Deputy Director, COBRATF of any situations requiring immediate response regarding toxic chemical operations.

C.5.22.13 The contractor shall serve as equipment calibration coordinator for all COBRATF training and measurement equipment.

C.5.22.14 The contractor shall be responsible for the XXX and XXXXX Control and Certification Programs, i.e., writing SOPs on use and handling of equipment previously used in toxic agent training.

C.5.22.15 The contractor shall be operationally and technically proficient on wearing personal protective equipment such as special protective clothing, boots, gloves and facemask for prolonged periods as required. Positions require clean shaven face to the extent there is no possible interference of any hair growth with the sealing of a protective mask.

C.5.22.16 The contractor shall serve as nerve agent, GB and VX, handler / pourer during conduct of all toxic agent training .

C.5.22.17 The contractor shall work on either fixed or rotating shifts.

C.5.22.18 The contractor shall work under stressful situations.

C.5.22.19 The contractor shall obtain and maintain required level of security clearance.

C.5.22.20 The contractor must be Contractor Employee Reliability Program (CERP) certified to hold position.
C.5.22.21 The contractor is subjected to urinalysis and/or random drug testing.
C.5.22.22 The contractor shall conduct administrative support functions as required by the Director, COBRATF.

C.5.23. ADMINISTRATIVE STAFFING

The Administrative Staff shall report to the Director, COBRATF or his Deputy. The staff support sections will consist of: Operations, Technical, Secretarial, Chemical Hygiene and Environmental Compliance - Quality Assurance / Quality Control (QA / QC).

Operations Section:

Serve as the COBRATF Director's principle staff advisor and subject matter expert regarding all toxic chemical nerve agent training operations, chemical surety procedures, and regulatory safety programs.

Serve as COBRATF Toxic Chemical Safety Program Coordinator with the following duties:

- Develop and enforce COBRATF Chemical Surety Safety Program procedures and SOPs for conduct of toxic chemical operations in accordance with established guidelines and procedures.
- Conduct periodic review of safety procedures and applicable SOPs to verify training procedure accuracy. This includes oversight of the periodic updating of COBRATF risk assessments and job hazard analysis.
- Ensure applicable operational SOPs meet toxic chemical operational safety requirements.
- Periodically review toxic chemical training to ensure proper execution of operational safety procedures
- Review suggestions for operational safety procedural changes and provide recommendations to the Director, COBRATF.
- Record and maintain records of safety related mishaps and provide recommendations to prevent reoccurence (s).
- Oversee development and evaluation of COBRATF's emergency response procedures.

Responsible for management and execution of all Programs of Instruction.
Responsible for implementing new equipment training for newly developed chemical equipment to be used at the COBRATF.

Perform duties as the COBRATF main operational briefer for visiting dignitaries.

Oversee execution of established environmental controls and permits.

Wear personal protective equipment such as special protective clothing, boots, gloves and facemask for prolonged periods as required. Positions require clean shaven face to the extent there is no possible interference of any hair growth with the sealing of a protective mask.

Work on either fixed or rotating shifts.

Work under stressful situations.

Obtain and maintain required level of security clearance.

Must be Contractor Employee Reliability Program (CERP) certified to hold position.

Subject to urinalysis and/or random drug testing.

Technical Section:

Serve as the COBRATF Director's principle staff advisor on all matters regarding chemical agent monitoring, decontamination, laundry, and certification / testing of chemical Protective Clothing and Equipment (PC&E).

Provides technical supervision for general laboratory operations.

Ensure safety procedures regarding toxic chemical operations or potential exposure to toxic chemicals are properly annotated in laboratory and PC&E operations.

Periodically review safety procedures during the conduct of all laboratory chemical surety material (CSM) and chemical agent standard / analytical reference material (CASARM) operations.

Periodically review procedures for PC&E care, maintenance and testing for compliance with existing safety and testing guidelines.

Oversee COBRATF hazardous communications (HAZCOM) program. Maintain and update Material Safety Data Sheets (MSDS) books as required. Conduct or arrange for hazardous communication training for all COBRA personnel.

Provide recommendations to the Operations section regarding needed changes to PC&E operational safety procedures.

Oversee COBRATF “XXX” decontamination certification program. Develop and document procedures for “XXX” certification and storage.

Assist the chemist to develop and adapt new procedures and analytical techniques required to assure environmental quality in accordance with Environmental Protection Agency (EPA), Alabama Department of Environmental Management (ADEM) and local requirements.

Studies technical literature and keeps currently informed of advances in the “state-of-the-art” toxic agent related chemistry, environmental sampling and new laboratory instrumentation.

Wear personal protective equipment such as special protective clothing, boots, gloves and facemask for prolonged periods as required. Positions require clean shaven face to the extent there is no possible interference of any hair growth with the sealing of a protective mask.

Work on either fixed or rotating shifts.

Work under stressful situations.

Obtain and maintain required level of security clearance.

Must be Contractor Employee Reliability Program (CERP) certified to hold position.

Subject to urinalysis and/or random drug testing.

Secretarial Section:

Provide administrative support to the COBRATF Director and facility personnel.

Serve as receptionist for all contacts to the COBRATF Director and facility staff personnel.

Conduct administrative review of all correspondence prepared for distribution.

Conduct administrative clerical work to include correspondence preparation, administrative suspense and maintenance of administrative / historical files.

Perform chemical surety management administrative support function for the screening

and recording of Personnel Reliability Program applicants and participants.

Maintain suspense file and civilian time cards.

Maintain and operate office automation system.

Chemical Hygiene Section :

Enforce a chemical hygiene program that addresses appropriate chemical hygiene policies and practices for the safeguarding of COBRATF laboratory workers conducting laboratory operations.

Ensure appropriate periodic audits of the chemical hygiene program are conducted and properly documented.

Assist the COBRATF Director in developing precautions and adequate facilities.

Ensure all COBRATF laboratory personnel understand the essential elements of chemical hygiene in a hazardous chemical laboratory.

Train new COBRATF personnel in safe chemical hygiene practices.

Review COBRATF Chemical Hygiene Plan annually and provide updates as required.

Wear personal protective equipment such as special protective clothing, boots, gloves and facemask for prolonged periods as required. Positions require clean shaven face to the extent there is no possible interference of any hair growth with the sealing of a protective mask.

Work on either fixed or rotating shifts.

Work under stressful situations.

Obtain and maintain required level of security clearance.

Must be Contractor Employee Reliability Program (CERP) certified to hold position.

Subject to urinalysis and/or random drug testing.

Environmental Compliance – QA /QC Section:

Air Emission: Ensure permit requirements for air emissions are in compliance with established Alabama Department of Environmental Management (ADEM) and Federal Environmental Protection Agency (EPA) specifications.

Hazardous Waste: Ensure procedures for the temporary accumulation of hazardous waste generated at the COBRATF are in compliance with the Code of Federal Regulations requirements.

Calibration, Maintenance and Readiness: Ensure all applicable equipment used to support execution of operations, transfer activities, and agent operations are calibrated and maintained in accordance with established technical manuals.

Inventory and Accountability: Ensure procedures are established and enforced for accountability of all chemical surety material in accordance with established requirements.

Ensure all equipment used to support training and emergency response operations is properly stored and maintained in accordance with established technical manuals.

Assist in development / revision and oversight of COBRATF QA /QC programs for environmental air monitoring, safety control, PC&E and toxic agent laboratory operations.

C.5.24. Five (5) LABORATORY / AIR MONITORING TECHNICIANS

C.5.24.1 The contractor shall receive general project guidance and goals from COBRATF chemist.

C.5.24.2 The contractor shall serve as physical science technician engaged in independent chemical analysis and air sampling tasks in support of all phases of training and decontamination.

C.5.24.3 The contractor shall serve as a “member” of interdisciplinary scientific team within the COBRATF in order to develop procedures and methods to assure the quality and environmental assurance aspects of training with full strength toxic agents and decontamination operations.

C.5.24.4 The contractor shall be responsible for establishing procedures, conducting training and directing the activities of personnel in support of chemical laboratory and environmental sampling operations.

C.5.24.5 The contractor shall routinely conduct tests to determine the presence of chemical agents in COBRATF effluents and air monitoring samples.

C.5.24.6 The contractor shall conduct tests to certify that incinerator residue and process salts are free from agent contamination.

C.5.24.7 The contractor shall handle dilute solutions of toxic chemical agents used to calibrate analytical instrumentation.

C.5.24.8 The contractor shall perform calculations required to conduct tests and analyze test results. Prepares appropriate graphs and charts used in quantitative analysis.

C.5.24.9 The contractor shall exercise a working knowledge of computer operations to tabulate test results and integrate analyses with Quality Assurance / Quality Control (QA/QC) Program. Maintains application programs for the COBRATF Lab.

C.5.24.10 The contractor shall perform setup and independent preventative maintenance operations of analytical instruments such as Gas Chromatograph, infrared spectrophotometer, clorimeter and technician autoanalyzer. Knowledge of mechanical, chemical and electronic functions of equipment is operating within specifications.

C.5.24.11 The contractor shall record data and prepare summaries of work performed.

C.5.24.12 The contractor shall assist in the preparation and revision of laboratory SOPs.

C.5.24.13 The contractor shall perform detailed chemical assays of toxic chemicals to determine the percent of purity of the lethal chemical agents.

C.5.24.14 The contractor shall handle concentrated solutions of toxic chemical agents while preparing diluted solutions of toxic agents for use in calibrating laboratory instruments and chemical detection equipment.

C.5.24.15 The contractor shall maintain records for accountability and issuance of toxic agents for training.

C.5.24.16 The contractor shall work for a substantial portion of time in dangerous proximity to operations and areas where permanent disability or death could occur as a result of exposure to lethal toxic chemicals.

C.5.24.17 The contractor shall fill syringes with concentrated toxic chemical nerve agents for training applications.

C.5.24.18 The contractor shall secure agent in vault, exercises two-person key control for storage vault and multiple locks of the lab.

C.5.24.19 The contractor shall assist the chemist to plan, organize, implement, document and conduct special projects / research when assigned, i.e., collection, treatment and shipping of incinerator ash burn samples for EPA.

C.5.24.20 The contractor shall obtain and maintain level of security clearance as required.

C.5.24.21 The contractor must be Contractor Employee Reliability Program (CERP) certified to hold position.

C.5.24.22 The contractor shall be subjected to urinalysis and/or random drug testing.

C.5.24.23 When assigned to perform test of air, water and ash from toxic chemical training, the contractor shall use rubber gloves and perform work in a positive ventilation fume hood.

C.5.24.24 When handling concentrated lethal agents, the contractor must be able to wear proper protective clothing.

C.5.24.25 The contractor must apply first aid training including self-injection of antidotes if exposed.

C.5.25 BLOOD ANALYSIS LABORATORY

C.5.25.1 NOTE: Contractors are put on notice that it is their responsibility to be familiar with United States Army Center for Health Promotion and Preventive Medicine (USACHPPM) Red Blood Cell (RBC) Cholinesterase (ChE) laboratory procedures.

C.5.25.2 Based on the projected workload of 20,000 plus blood draws per year, it is estimated that a total of four (4) Medical Laboratory Technicians (MLTs) will be required.

C.5.25.3 RBC - ChE determinations are considered high complexity tests because the analysis is completed manually. MLTs must be USACHPPM certified for tests of high complexity.

C.5.25.4 MLTs must undergo a 40-hour training program at USACHPPM.

C.5.25.5 MLTs must initially work under another certified MLT at USACHPPM for approximately 90 workdays.

C.5.25.6 The contractor shall provide a lab director. The contractor shall provide a clinical consultant to address unusual situations. The contractor is required to have a licensed physician, on-call or part time, in either one of these two positions. These positions could be filled with the same person provided that the individual is a licensed physician who meets the requirements of C.5.24.8.

C.5.25.7 The contractor shall provide a full-time lab supervisor, who must be a physician or MLT with at least 4 years of experience in high complexity testing.

C.5.25.8 Specific USACHPPM requirements for the lab director, lab supervisor and clinical consultant are in the Armed Forces Institute of Pathology (AFIP) Pam 40-24.

C.5.25.9 The contractor shall provide MLTs to operate the RBC-ChE USACHPPM certified analysis lab whose duties include:

C.5.25.9.1 Calibrates, standardizes, adjusts and operates all equipment used to perform RBC - ChE testing.

C.5.25.9.2 Implements and monitors the overall Chemical Hygiene Plan and Safety Plan in the laboratory.

C.5.25.9.3 Monitors the Material Safety Data Sheets (MSDS) verifying availability for all chemicals / reagents located in the laboratory.

C.5.25.9.4 Prepares chemical reagents and controls for use.

C.5.25.9.5 Performs routine RBC-ChE testing.

C.5.25.9.6 Maintains appropriate laboratory records.

C.5.25.9.7 Provides appropriate distribution of test results.

C.5.25.9.8 Monitors results that suggest exposure and evaluates the data in relation to the test system and assay procedure. Performs further specialized testing when necessary.

C.5.25.9.9 Prepares specimens for shipping to USACHPPM reference laboratory in accordance with mailing regulations to prevent delay in specimen arrival.

C.5.25.10 Additional requirements for the position of Lab Director / Clinical Consultant physician shall include but not be limited to:

C.5.25.10.1 Medically clears students to train at the COBRATF when the decision cannot be determined by the on-site Occupational Health Nurse (OHN).

C.5.25.10.2 Approves and co-signs with on-site OHN all Standards Operating Procedures and program documents.

C.5.25.10.3 Co-signs physical examinations conducted by the on-site OHN on civil service employees.

C.5.25.10.4 Purchase drug supplies for utilization by on-site paramedics.

C.5.25.10.5 Verify contaminated patients are fully decontaminated prior to transport for medical treatment.

C.5.26 Physical Security

Contractor will provide personnel, uniforms, equipment, tools, materials, supplies, supervision and other items and services, except such equipment and supplies as provided by the Government, necessary to:

1.Plan for and provide supervised, continuous (24 hours per day, 7 days per week), professional, trained, licensed, armed and certified security services to implement required security measures to protect chemical agent, i.e., nerve agents GB and VX, at the Chemical, Ordnance, Biological, Radiological / Nuclear (COBRA) Training Facility, Center for Domestic Preparedness, Office of Justice Programs, United States Department of Justice (USDOJ), located at Fort McClellan, Alabama.

2.Immediately after award of the contract and prior to performance, the Contractor and

Contracting Officer Representative will make an on-site, in-depth review of the total job requirements to include, but are not limited to the following:
a.The general type of work to be performed.
b.The specific job tasks / descriptions and manhours required for each of two 24 hour, on-site guard posts.
c.The policies and procedures for responding to emergency situations at the facility.
d.Floor plans and area maps of the facility which depict emergency evacuation routes, the location and type of alarm, location of utility cutoff valves and switches, utility system controls, special instructions for Intrusion Detection Systems and other monitor / alarm systems.
e.Facility emergency plans, notification procedures / requirements, and Chemical Accident / Incident Response Assistance plans.
f.Requirements for contract guard eligibility, such as background investigations (National Crime Information Center and local records), medical examinations, personal history statements, successful completion of all required training and testing prior to assignment, to include weapons qualification, and contractor employee personnel reliability program.

1.Conditions of employment/assignment and minimum background investigation requirements are listed at Enclosure 1. Sixty hours of minimum basic training in the subjects listed at Enclosure 2 is required prior to assignment, in addition to 40 hours of firearms training and qualification. American Red Cross CPR/First Aid training/certification is also required. Thirty hours of site-specific training will be completed upon assignment to the facility. Fifteen hours of annual refresher training, and annual CPR/First Aid recertification/weapons qualification is required. Supervisor training will include all minimum basic training, plus supervisory duties and responsibilities, methods and theories of supervision, effective leadership, disciplinary methods and procedures, effective written and oral communications, motivating employees and problem solving methods, scheduling employees, and contractor employee reliability program supervision.

2.Typical Duties include: Entry/access control, operate and enforce a system of personnel identification, package inspection, vehicle inspection; perform both static and roving patrols; identify, correct, secure, or arrange to correct security violations and initiate necessary reports; perform traffic control as needed; receive, issue, and account for keys and locks; monitor fire, intrusion detection system, and other facility protection devices/alarms; conduct building security checks; enforce compliance with posted facility rules and regulations; detain suspects for violations until Federal or local police assistance arrives, initiate or assist in preliminary investigations as necessary; maintain law and order within area of assignment within limits of authority; identify and report hazardous conditions; discover and detain persons attempting to gain unauthorized access to the facility through independent aggressive patrol or through operation of

security systems; render first aid/CPR in emergency situations; prepare required duty reports; perform such control functions as directed in the event of civil disturbances; espionage attempts, sabotage, or other criminal activity adversely affecting the safety and security of facility employees, property or the general public; perform emergency response duties and other duties as directed.

3.Contractor shall meet all Federal and State of Alabama licensing, certification, liability insurance and bonding requirements for armed contract security guards.

4.The security force will consist of 10 guard positions and 2 supervisor positions. Work will be divided into three shifts with 2 guards on duty at all times. Shifts will overlap 15 minutes. The shifts will be divided as follows: 5:45 A.M.– 2:00 P.M., 1:45 P.M. – 10:00 P.M. and 9:45 P.M. – 6:00 A.M. One supervisor will be on duty at the COBRATF during operational hours. Second supervisor will be on call during non-duty hours.

Security Force Checklist (Enclosure 1)

- Conditions of Employment. Positions require that incumbents be:
- U.S. Citizens and a minimum of twenty-one (21) years of age.
- Physically fit (physical ability) and be able to work under stressful conditions.
- Clean-shaven to the extent that there is no interference with the sealing of a protective facemask.

Must be able to wear personal protective equipment such as protective clothing, boots, gloves and facemask for prolonged periods as required.

- Must be able to obtain and maintain required level of security clearance.
- Must be a high school graduate or equivalent with two years' security experience.
- Must be Contractor Employee Reliability Program (CERP) certified to hold position.
- Must pass pre-employment drug screening.
- Must obtain and maintain a valid Alabama State Drivers License.
- Minimum Background Investigation Requirements:

- Complete and submit a Questionnaire for Public Trust Positions (Standard Form 85P), a Declaration for Federal Employment (Optional Form 306), including applicable release authorizations and supporting documents, and FBI Fingerprint Search Request (Form FD-258).
- Complete an NCIC or National Agency Check (NAC); i.e., investigative and criminal history files of the FBI, to include fingerprint search; checks of Office of Personnel Management, Department of Defense indexes and files, and other national agencies, as appropriate to the individual's background.
- Verification of U.S. Citizenship dates and place of birth.
- Verification of financial status, including credit bureau checks, for the past 7 years.
- Checks with law enforcement agencies having jurisdiction where the candidate lived, worked, and or attended school for the past five years.
- Checks with former employers and or supervisors, and personal references.
- Appropriate pre-employment drug screening.
- Appropriate medical examination.

Basic COBRATF Training Program (Enclosure 2)

23.General Training

x.Personnel Identification, Badging Systems, and Entry Control Rosters.
y.Circulation Control (how personnel within the facility are identified and controlled, to include escort requirements and procedures for duress situations) and Two-person Rule.
z.Arrest/Apprehension Procedures.
aa.Operation, Use, Testing and Protection of IDS and monitoring Equipment/Information.
bb.Search and Seizure (individuals, packages and material control, and vehicles).
cc.Operation and use of primary alternate security communications systems and equipment, i.e., radio and telephone equipment.

dd.Operation and procedures for starting emergency generators when automatic system fails.

ee.Security Awareness, Vigilance and Adversary Threat (e.g., terrorism, sabotage, espionage, theft, loss, or diversion, civil disturbances, demonstration, etc.).

32.Adversary Groups to include insiders.
33.Motivation and Objectives.
34.Tactics
35.Recognition of sabotage related devices and equipment.

jj.Security Vehicle Operations.
kk.Duress and Surveillance Systems.
ll.Lock and Key Control Systems and Procedures.
mm.Record Keeping, including reporting writing and maintaining operator logs.
nn.Type and location of hazardous vulnerable equipment and material.
oo.Location and use of fire protection equipment, utility switches, and first aid facilities.
pp.Protective measures against chemical attack, self-aid, and first aid measures.
qq.Identification of chemical agents (recognition of such items in case of attempted unauthorized removal from the site or area.
rr.Personal communications skills, personnel interaction and community relations.

45.Security Skills Training:

tt.Small unit combat tactics (day and night).
uu.Antiterrorism tactics.
vv.Specialized equipment, e.g., protective masks, body armor, night vision devices, radio communications, metal detectors, etc.
ww.Use of force including deadly force, non-lethal devices, and unarmed self-defense and restraint techniques.
xx.Site defense plans.
yy.Weapons training/qualification with assigned weapons to include familiarization fire where applicable.
zz.Definition, establishment and identification of restricted, limited and exclusion areas.
aaa.Operational knowledge of physical security measures at a Title 5, USC, and federal facility.

54.Transportation Security (when applicable):

ccc.Convoy/landing zone security techniques.
ddd.Escort vehicle procedures.
eee.General tactics for responding to threats.
fff.Continuous surveillance of shipment procedures.
ggg.Isolation of shipment (load) vehicle/aircraft.

60.Security Supervisory Personnel Training:

iii.Site Defense and Security Plans

62.Bomb threats
63.Control and response to civil disturbances/demonstrations.
64.Hostage situations.
65.Motivation of security personnel.
66.Evaluation and uses of intelligence services.
67.Alcohol and drug abuse identification and intervention.
68.End of day security checks.

qqq.Chemical agent recapture and recovery operations.

70.Recapture and recovery plan.
71.Interaction with military or civilian recovery forces.

ttt.Emergency reporting requirements.

73.Specialized Training:

vvv.Site-Specific Guard Orders and Procedures.
www.Standards of Conduct and Ethics.
xxx.Equal Opportunity Training.
yyy.Sexual Harassment Awareness Training.
zzz.Safety
aaaa.CDP Organization and Chain of Command.
bbbb.Security Force Command and Control during normal and contingency operations.
cccc.Chemical Accident Incident Response Assistance (CAIRA) Exercise and Chemical Event Actions and Procedures.