II-4 TASKS

Medical Services Guidance Memorandum
Hospital and Emergency Medical Services Personnel
Training Courses

1. Conduct training sessions for the Pennsylvania Emergency Management Agency (PEMA) in support of the Medical Services Hospital (MS-1) Program for hospital emergency departments and Emergency Medical Services (EMS) personnel who have been designated to provide medical treatment to injured/contaminated victims of the general public and emergency workers in the event of a nuclear power plant incident. Training conducted shall comply with current Nuclear Regulatory Commission (NRC) regulations such as NUREG-0654 FEMA-REP-1 Titled “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants”; Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness Exercise Criteria as identified in the Federal Registry “Radiological Emergency Preparedness: Exercise Evaluation Methodology” (66 FR 47526-47546); FEMA Medical Services Guidance Memorandum for MS-1; The MS-1 Hospital Memorandum of Agreements between PEMA, Parent County, and MS-1 Hospitals, and guidance as stated in the Pennsylvania State Plan for Radiological Emergency Response.

2. Conduct up to a total of fifty three (53) training sessions annually as follows:
   a) two (2) for each of the listed 16 MS-1 hospitals listed below (total of 32 sessions)
   b) one (1) Emergency Medical Services session associated with each of the 16 identified hospitals (total of 16 sessions)
   c) one (1) for each of the five commercial nuclear power plants’ Annual Training Days to include Beaver Valley Power Station, Limerick Generating Station, Peach Bottom Atomic Power Station, Susquehanna Steam Electric Station, and Three Mile Island Nuclear Generating Station. (total of five sessions)
   d) Attend one (1) MS-1 annual hospital drill of which one must be a federally evaluated exercise within a two year period.
List of MS-1 Medical Facilities

Abington Memorial Hospital - Montgomery County
Lehigh Valley Hospital - Lehigh County
Bloomsburg Hospital - Columbia County
Brandywine Hospital - Chester County
Carlisle Regional Medical Center - Cumberland County
Ellwood City Hospital – Lawrence County
Ephrata Community Hospital - Lancaster County
Geisinger Wyoming Valley Medical Center - Luzerne County
Gettysburg Hospital - Adams County
Good Samaritan Hospital - Lebanon County
Hanover Hospital - York County
Holy Redeemer Hospital - Montgomery County
Reading Hospital and Medical Center - Berks County
Susquehanna Health System (Williamsport) - Lycoming County
Washington Hospital – Washington County
York Hospital - York County

3. Training for the MS-1 hospitals’ staff shall include but not be limited to:
   a. The role and responsibility (mission) of the MS-1 Hospital during a Commercial Nuclear Power Plant incident.
      1) Specific NPP EPZ
      2) Emergency Management Agencies – Structures and Roles
      3) Reception and Mass Care Centers
      4) Monitoring and Decontamination of the general public and Offsite Emergency Workers
      5) Medical intervention (MS-1) if decontamination is not effective
   b. Overview of the specific MS-1 Hospital plan.
      1) Notification and Activation Procedure
      2) Communication
      3) Organizational “Chain of Command”
      4) Incident Command System / NIMS
      5) Record keeping / forms
   c. Fundamentals of Radiation (related to a Nuclear Power Plant incident – offsite consequences)
      1) What is Radiation (ionizing and non-ionizing radiation)
      2) Background radiation and common sources of radiation
      3) Exposure vs. Contamination
      4) Alpha, Beta and Gamma
      5) Units of measure
         i. Exposure in millirem per hour (mR/hr.)
         ii. Contamination expressed as “Counts per minute” or CPM.
      6) Threshold for determining contamination in Pennsylvania
         i. Determine background in CPM
         ii. Contamination threshold = 300 CPM above background
   d. Preparation of the Radiation Emergency Area (REA)
      1) Discussion of the specific facility REA.
2) Supplies and their storage location.
3) Responsibilities for setting up the REA.
   i. Who makes the decision?
   ii. Anticipated time required to set up the REA.

e. Facility radiological team
   1) Team composition
   2) Key roles and responsibilities
   3) Team activation

f. Radiological monitoring
   1) Radiation control
      i. Dosimetry
      ii. Record Keeping
   2) Survey Instrumentation
      i. Operation of equipment
      ii. Record keeping
   3) Patient handling
      i. Patient transfer
      ii. Triage
      iii. Evaluation
      iv. Lab samples
         1. Blood
         2. swabs
   4) Decontamination procedures
      i. Dry techniques
      ii. Washing techniques
      iii. Control of runoff
      iv. Control of contamination
   5) Initial radiation exposure evaluation
      i. History and Physical
      ii. Determination of exposure time

NOTE: The audience for this training will include, but is not limited to, physicians, nurses, nuclear medicine staff, maintenance personnel, and security personnel. Any requirement, guidance, or directive changes to the Radiological Emergency Response Program shall be incorporated accordingly into the training program by the contractor at the direction of PEMA. All changes to the training program are to be approved by PEMA prior to implementation.

4. Training for the supporting Emergency Medical Services (EMS) personnel as appropriate to include, but is not limited to:
   a. The role and responsibility (mission) of the MS-1 Emergency Medical Service Provider during a Commercial Nuclear Power Plant incident.
      1) Specific Nuclear Power Plant Emergency Planning Zone information.
      2) Emergency Management Agencies – Structures and Roles
      3) Reception and Mass Care Centers and Emergency Worker Monitoring and Decontamination Facilities
4) Monitoring and Decontamination of the general public and Offsite Emergency Workers
5) Medical intervention (MS-1) if decontamination is not effective

b. Overview of the specific MS-1 plan.
   1) Notification and Activation Procedure
   2) Communication
   3) Organizational “Chain of Command”
   4) Incident Command System / NIMS
   5) Record keeping / forms

c. Fundamentals of Radiation (related to a Nuclear Power Plant incident – offsite consequences)
   1) What is Radiation (ionizing and non-ionizing radiation)
   2) Background radiation and common sources of radiation
   3) Exposure vs. Contamination
   4) Alpha, Beta and Gamma
   5) Units of measure
      i. Exposure in millirem per hour (mR/hr.)
      ii. Contamination expressed as “Counts per minute” or CPM.
   6) Threshold for determining contamination in Pennsylvania
      i. Determine background in CPM
      ii. Contamination threshold = 300 CPM above background

d. Preparation of the Emergency Medical Services Transport Vehicle

e. Discussion of contamination control.
   1) How to minimize the spread of contamination
   2) Emergency Care
   3) Cocooning the patient
   4) Transport and transfer of the patient to the MS-1 Facility (clean transfer)
   5) Responsibilities for isolation.

f. Notification of the MS-1 facility
   1) Method
   2) Required information
   3) Record keeping
   4) Team composition

g. Key roles and responsibilities

h. Radiation and the patient
   1) Initial radiation exposure and evaluation
      i. History and Physical
      ii. Determination of exposure time
      iii. Acute Radiation Syndrome
      iv. Record Keeping
   2) Time, Distance and Shielding

Note: Any requirement, guidance, or directive changes to the Radiological Emergency Response Program shall be incorporated accordingly into the training program by the contractor at the direction of PEMA. All changes to the training program are to be approved by PEMA prior to implementation.
Training for both hospital staff and EMS personnel must include 1 hour of classroom instruction and a 2 hour practical application session to ensure proficiency. The practical application session will include a drill replicating the practical hands on skills consistent with a FEMA evaluated exercise. The total time for each training session conducted will be 3 hours per session.

At the conclusion of each session, the contractor shall provide to PEMA a student roster, student course evaluation forms (one per student), and each student’s graded course examination (quiz) for each training session conducted, along with any additional paperwork for course credits such as Continuing Education Sign-In Rosters and Continuing Education Cards otherwise known as “Con-Ed”. End of session paperwork must be returned to PEMA within 7 working days of the session for processing. Course exams will be graded by the contractor / vendor. Incomplete or missing paperwork may result in Pennsylvania Department of Health course credit being denied. Adequacy of the training will be determined by audits conducted by the PEMA Radiological Emergency Preparedness Program and by evaluated performance during the annual MS-1 drills. There is no required limit to the number of attendees for any training session however, for planning purposes, the number attending can be estimated at 30. Priority will be given to the host facility participants and classroom space must be taken into consideration.

The successful contractor will be responsible for scheduling each identified hospital’s training dates 90 days in advance of the MS-1 drill and providing those dates to PEMA, Bureau of Planning and Preparedness. If experiencing difficulty scheduling the dates by that deadline, the contractor must notify the MS-1 Coordinator. The contractor will be responsible for the completion of and turn-in of all paperwork required for Continuing Education Units offered through the Pennsylvania Department of Health and other governmental or private education institutions which have registered and approved credits submitted through PEMA Bureau of Planning and Preparedness. All end of session paperwork will then be submitted to the PEMA MS-1 Coordinator for further processing with each applicable educational institution. Additionally, the contractor will offer certificates of training to both hospital and EMS attendees who complete the training session. It is the responsibility of the contractor to prepare and mail certificates to attendees at the completion of each course. The contractor must incorporate any changes into the training program that PEMA deems essential to the Medical Services (MS-1) Program and be willing to meet at least once per year for an annual review of the MS-1 training material. PEMA reserves the right to make changes in the program as necessary and monitor training sessions for quality control purposes.

Training for the medical treatment facilities (MS-1) Hospitals will be scheduled by the contractor with the MS-1 Hospitals with priority of training dates and times given to each medical treatment facility that best suits the hospital’s training needs.
Training for the EMS personnel will be scheduled by the contractor with the Parent County Emergency Management Coordinator. It is the responsibility of the parent county to identify a training location, date and time, and to notify county EMS personnel and provide the information to the contractor in order to schedule training.

Training sessions for the five one-day Nuclear Power Plants Annual Training Days will be provided upon request by the utility concerned and approved by the PEMA State Training Officer. A request for training shall include identification of either a hospital or EMS (MS-1) training session, date, time, and location of training.

The contractor shall be available to conduct training at times suitable to the medical treatment facility and the EMS organization based on the medical treatment facility and the EMS organization schedules. An example of this may be the requirement to conduct evening training sessions in order to muster the necessary numbers of EMS personnel to conduct training.

All training sessions are offered but not required by the MS-1 Hospital or county EMS. If the option is not to take advantage of one or more training session, the unused session(s) may be used in another geographical area on a case-by-case basis and at the discretion of the PEMA Division of Technological Hazards, REP Program.

A 48 hour notice will be given to the contractor when PEMA determines a training drill cancellation is necessary without charge to the Commonwealth. Due to unforeseen extreme circumstances (weather, emergency, act of God, etc) a training drill may be cancelled without charge to the Commonwealth that would not meet the 48 hour deadline.

Bids shall define the costs per training session, for the two-year period. Payment will be rendered for services performed, upon receipt of invoice from the contractor and submission of administrative materials such as student rosters, student course evaluations, continuing education cards, and final graded examination (quiz).

Bids shall be accompanied by a proposed training course outline that identifies the subject and content of training modules (or syllabus) to be presented along with a timeline of the 3 hour training session.
Contractor shall provide to PEMA, with its bid, any and all lesson plans, handouts, and training aids, etc., to be utilized during each training session. Contractor must have the ability to present course material via Power Point Presentation. All equipment, instructional materials, and training aids will be provided at the contractor’s expense. Instructional items prepared and utilized during training, including but not limited to, lesson plans, visual aids, etc., shall be considered to be the property of PEMA. Additionally, in the bid, the contractor will provide resumes of each instructor/trainer to be used in MS-1 training. Resumes must include any qualifications, training, schooling, certifications and experience of each trainer in the instruction of Radiological Emergency Preparedness and in accordance with the other references identified in paragraph 1 of this bid. Experience in the instruction of treatment and handling of radiological contaminated victims that’s consistent with the MS-1 Program is required. This must include experience in the instruction in the field of health physics and equal or comparable training consistent with the Radiological Emergency Assistance Center Training Site, Oak Ridge Institute of Science and Education.
PART III QUOTE FORMAT (Supplier Response)

III-1 DETAILED WORK PLAN

The contractor / vendor is expected to provide a detailed “work plan” as a part of his response to include but not be limited to the following information:

- A statement of work showing how the Agency expectations will be met,
- The development of the course curriculum, syllabus material, handouts and instructional methodology,
- Timeline showing the amount of time required to develop the instructional materials including a description of the materials (PowerPoint, Video, Handouts, etc.),
- The projected per session timeline including preparation, delivery and post delivery tasks for each session.

III-2 PRIOR EXPERIENCE

This section should identify the number of years of relevant experience for each of the staff assigned to this effort specifically to the work skills required as defined in Part II – Work Skills.

Provide the assignment or role for each individual such as instructor, administrative support, financial oversight, project management, etc.

III-3 COSTS (Use the Supplier Cost Form for the detailed Price submittal)

Be specific on the itemized price breakdown for the project, including but not limited to training/consulting hours, materials, preparation time, travel and facility expense.

Any costs not provided in the cost proposal are assumed to be at no charge to the Commonwealth and that the quote is a maximum price not to exceed the purchase order.

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