Training Matrix for Environmental Emergency Service Providers (EESP)

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The purpose of this training standard is to establish criteria for initial training and re-certification for hazardous materials (Dangerous Goods) response personnel. As there are no agencies or documents that prescribe specific requirements for re-training, CERCA members are expected to meet this standard.

The matrix is based on the National Fire Protection Association criteria outlined in NFPA 472-2013. Since both Team Members and Team Leaders are expected to engage in offensive actions at an incident scene, all personnel must be trained to the Technician or Specialist Employee "A" Levels under this standard for all products and containers outlined in their EESP's chart. Additional requirements under the Occupational Health and Safety Act, Transportation of Dangerous Goods Act and associated CSA standards have been referenced.

The training matrix does not include support personnel and Incident Commanders. The Incident Commander role is seldom filled by an emergency contractor. In all cases, the ER Contractor works under the auspices of the responsible party or regulatory authorities (municipal, provincial or federal).

For the purpose of assessment, key elements of the applicable training programs will be reviewed. This will require each EESP to identify all "Key elements to be included in training" and both practical and theoretical testing documentation. All theoretical testing must be demonstrated on a physical test (paper, electronic). All practical testing must be documented in a job function competency report for review by the assessment team. "Container Specific Response Techniques" and "Product Handling and Recovery" have different requirements and will require separate items in the tracking report.

Topic	Requirements (Team members/ Team Leaders)	Frequency	Training Requirements	Key element to be Included in Training	Testing – Theory/Practical
First Aid & CPR	Team Leaders	As required	Team Leaders must have current certification. Certification is recommended for all other team members.	Standard or emergency level first aid (or better) including CPR from a recognized agency (St John's, Red Cross, Etc.)	**Theory:** Testing required by a recognized agency. **Practical:** Testing required by a recognized agency
Regulatory Compliance	Team Members and Team Leaders	As per regulation	Trained in the applicable sections of the Act(s) and Regulation(s) which apply to the contractor's area of operation and capability chart.	May include but not limited to; • WHMIS • Transportation of Dangerous Goods • Waste Management • Occupational Health and Safety	As required by regulation
Media Awareness	Team Members and Team Leaders	Once	Review and acceptance of the EESP's Media Awareness Policy Other training requirements as set by each individual EESP	As determined by the EESP	**Theory:** Signed review and acceptance of the EESP's Media Policy for each Team Leader/Member **Practical:** As determined by EESP
Incident Command Systems	Team Leaders	36 Months	ICS 200, IMS2 or equivalent	Advanced knowledge of positions and responsibilities of Command Staff, General Staff, Support Staff. Advanced Knowledge of Single and Unified command structures. Advanced knowledge of ICS facilities.	**Theory:** Test for knowledge from every key element to identify understanding and retention. **Practical:** None

				Advanced knowledge of ICS forms and document management.	
Incident Command Systems	Team Members	36 Months	ICS 100, IMS1 or equivalent	General knowledge of positions and responsibilities of Command Staff, General Staff, Support Staff General Knowledge of Single and Unified command structures. General knowledge of ICS facilities. General knowledge of ICS forms and document management.	**Theory:** Test for knowledge from every key element to identify understanding and retention. **Practical : None**
Surveying Dangerous Goods/ Hazardous Materials	Team Leaders and Team Members	12 Months	Capability to recognize the presence of Dangerous Goods/ hazardous materials and means of containment. Ability to estimate product volumes involved in an incident for all products outlined in the Environmental Emergency Service Providers (EESP) "capability chart"	Knowledge and use of information resources needed to identify Dangerous Goods (visual signs, shipping documents, container type, and container materials of construction). Ability to identify and interpret available resource material including; hazardous material databases, monitoring results, reference manuals, technical information centres. Ability to identify by name and specification, all containers	**Theory:** Identification of Hazardous Material by TDG placard, UN number, WHMIS classification and other visual sources of identification. Identify means of containment and typical contents by name and specification. Identify given markings on a container to identify capacity (by weight/ volume)

				outlined in the EESP "capability chart", including typical materials shipped, approximate capacities of containers and design/ construction features	**Practical:** None
Risk Assessment	Team Leaders and Team Members	12 Months	Capability of estimating the harm of all classifications/ products outlined in the EESP "capability chart". This will include collection of risk evaluation information and interpretation of collected data considering the variability of a given incident.	Ability to collect and interpret product characteristic data and to identify the hazards they may pose during a given incident. Ability to collect and interpret product exposure limits and to identify the hazards they may pose during an incident. Ability to identify the resources available for purposes of recognizing the effects of mixing various Dangerous Goods/ hazardous materials. Ability to identify types of container stress/ damage and the associated risks from the damage. Set criteria for hazard zones	**Theory:** Given a product, collect and interpret product characteristics and exposure limits for purposes of determining hazards (Life, Environment, and Property). Given a product, identify the criteria for hazard zones (Hot, Warm, and Cold). **Practical:** None

				and monitoring needs.	
Air Monitoring	Team Leaders and Team Members	12 Months	Capability to choose, use and maintain the proper meter needed for products outlined in the EESP "capability chart", and to interpret and communicate results.	Know the capabilities, limiting factors, selection and use of metering equipment required for all products outlined in the EESP "capability chart" Capability to choose the proper instrument, understand the use of equipment, reasons for metering, field level functional bump testing/ calibration of equipment and to interpret and communicate results.	**Theory:** Given a product, identify the proper meter needed to evaluate associated hazards. Identify the meter's limiting factors, field calibration requirements, reading interpretation. **Practical:** Demonstrate the correct use of appropriate meters needed by a contractor (associated with the contractor's "capability chart")
Respiratory Protection	Team Leaders and Team Members	12 Months	Capability to choose, use, and inspect respiratory protection required for response to all products outlined in the EESP "capability chart"	Properly select the needed respiratory protection for a given product, concentration, and incident application. (CSA Z-94.4) Understand the use, limitations and inspection of all respiratory protection needed by the EESP. Complete fitting and testing of face piece seals as required (CSA Z94.4).	**Theory:** Given a product, concentration and incident application, identify the needed respiratory protection. **Practical:** Demonstrate proper inspection, use, and emergency procedures for all respiratory protection needed by the contractor. Fit testing – (CSA Z94.4)
Chemical	Team	12 Months	Capability to select proper PPE	Properly select the required	**Theory:** Given a product,

Protective Clothing	Leaders and Team Members		for any incident scenario involving products outlined in the EESP "capability chart". Don, work in, and doff applicable PPE.	PPE for a given incident scenario. Understand the three factors which may compromise the PPE. Permeation, Penetration, Degradation. Understand the potential stress placed on the suit wearer and the need to cool personnel in PPE.	concentration and incident application, identify the required PPE for the incident. **Practical:** Demonstrate the ability to Inspect, Don, work-in, Doff applicable PPE. Complete the following tasks. Demonstrate emergency procedures applicable to the PPE required by the EESP.
Decontamination	Team Leaders and Team Members	12 Months	Capability to select decontamination procedures associated with incidents involving products outlined in the EESP "capability chart". This will include proper planning, setup, and practical implementation/ use of the procedure.	Properly select the decontamination procedure for a given incident. Understand the required equipment and setup for all needed decontamination procedures. Understand the technical operations of ; • Decontamination to support entry EESP operations	**Theory:** Given a product, concentration and incident application, identify the proper decontamination procedure and associated equipment. **Practical:** Demonstrate the ability to setup and implement the following types of decontamination operations; • Technical decontamination to support EESP operations

Product Handling & Recovery	Team Leaders and Team Members	24 Months	Capability to select, implement, and complete product transfer procedures for all products and means of containment outlined on the EESP "capability chart"	Selection of appropriate transfer operations, equipment, and receiving containers by product and incident scenario (compatibility). Transfer operations for applicable products (Liquids, Solids, and Gases). Troubleshooting equipment problems associated with the EESP equipment Bonding and grounding setup; monitoring and maintenance.	**Theory:** Given a product, means of containment and incident application, identify product transfer options, associated equipment, and needed safety precautions. **Practical:** Demonstrate the setup, transfer, and breakdown of equipment needed to transfer products outlined in the EESP "Capability Chart"
Container specific response techniques	Team Leaders and Team Members	24 Months	Capability to implement actions required to deal with leaks from containers found in the EESP "capability chart"	Demonstrate the proper use of specialized equipment and techniques to deal with leaks from containers outlined in the contractor "capability chart"	**Theory:** None **Practical:** **Drum Response** Any contractor who shows capability for "small containers (drums)" response in any class, must demonstrate actions to be taken for the following leak points: • Bung leak • Chime Leak

					• Forklift puncture • Nail puncture Demonstrate over-packing techniques for placing damaged container into salvage drum. **Cylinder Response** Any contractor who shows capability for "cylinder" response in class 2, must demonstrate actions to be taken for the following leak points: • Fusible plug threads • Side wall of cylinder • Valve blowout • Valve gland • Valve inlet threads • Valve seat • Valve stem assembly blowout **Pressure Bulk Containers** Any contractor who shows capability for "Tank truck, or Tank Car" response in class 2, must demonstrate the following actions: • Close valves that are ope

					• Replace missing plugs • Tighten loose plugs • Install capping kit (if applicable for container) **Liquid Bulk Containers** Any contractor who shows capability for "Tank truck, or Tank Car" response in any class (other than 2), must demonstrate actions to be taken for the following leak points. • Valve leak • Manway leak (use of dor clamps) • Side of container • Cleanout caps
Project and Safety Management	Team Leaders	Once	Company specific training for project management and documentation control. Provincial or Federal supervisor responsibilities training.	As determined by the company and regulatory agency applicable to the EESP	**Theory:** • Provide examples of OHS plans created by Each Team Leader. • Provide examples of incident documentation completed by Each Team Leader This may be from a training or actual event.

					Practical: None