

**HAZARDOUS WASTE TREATMENT PERMIT**

**for the**

**EXPLOSIVE DESTRUCTION SYSTEM**

**at**

**TOOELE ARMY DEPOT SOUTH**

**August 5, 2015**

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- 16.2 Checklists for EDS Setup Procedures**
- 16.3 Fill Supply Tanks**
- 16.4 Prepare EDS Firing System**
- 16.5 Select Fragment Suppression System and Explosives for Munition**
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- 16.7 Assembly of Fragment Suppression System and Munition**
- 16.8 Closing and Sealing EDS Containment Vessel Door**
- 16.9 Detonate Munition**
- 16.10 Chemically Treat EDS Containment Vessel Contents**
- 16.11 Collect Neutralent Sample**
- 16.12 Remove Neutralent from EDS Containment Vessel**
- 16.13 Rinse and Drain EDS Containment Vessel**
- 16.14 Collect Vapor Sample**
- 16.15 Open EDS Containment Vessel Door**
- 16.16 Remove Solid Waste from EDS Containment Vessel**
- 16.17 Clean and Prepare Equipment**
- 16.18 Drain Supply Tanks**
- 16.19 Monitor and Decontaminate the EDS**
- 16.20 Break Down EDS Operations Area**

## LIST OF ACRONYMS

|           |  |
|-----------|--|
| AEL       | airborne exposure limit  |
| AFS       | air filtration system  |
| AFSS      | Advanced Fragment Suppression System   |
| Amp       | ampere   |
| AQCR      | Air Quality Control Region   |
| AR        | Army Regulation  |
| ASME      | American Society of Mechanical Engineers   |
| ASTM      | American Society for Testing and Materials   |
| ASZM-TEDA | Activated Carbon impregnated with Copper, Silver, Zinc, Molybdenum, and Triethylenediamine |
| CCV       | continuing calibration verification  |
| CERCLA    | Comprehensive Environmental Response, Compensation, and Liability Act                      |
| CFR       | Code of Federal Regulations  |
| CMA       | U.S. Army Chemical Materials Activity  |
| CPR       | cardiopulmonary resuscitation  |
| CSC       | conical-shaped charge  |
| CWC       | Chemical Weapons Convention  |
| CWM       | chemical warfare materiel  |
| DA PAM    | Department of the Army Pamphlet  |
| DAAMS     | Depot Area Air Monitoring System   |
| TEADS     | Tooele Army Depot South  |
| TEADS-EDS | Tooele Army Depot South- Explosive Destruction System                                      |
| DMS       | Data Management System   |

|          |  |
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| DWMRC    | Utah Division Waste Management and Radiation Control |
| DoD      | Department of Defense                                |
| DOT      | Department of Transportation                         |
| DQO      | data quality objective                               |
| ECBC     | Edgewood Chemical Biological Center                  |
| EDS      | Explosive Destruction System                         |
| EOC      | Emergency Operations Center                          |
| EOD      | explosive ordnance disposal                          |
| EMT      | Emergency Medical Technician                         |
| EPA      | Environmental Protection Agency                      |
| EPDM     | ethylene propylene diene monomer                     |
| EPDS     | Emergency Personnel Decontamination Station          |
| FEIS     | Final Environmental Impact Statement                 |
| FM       | Field Manual   |
| FM smoke | titanium tetrachloride                               |
| FS smoke | sulfur trioxide and chlorosulfonic acid              |
| FSS      | Fragment Suppression System                          |
| GA       | tabun  |
| GB       | sarin  |
| GC/MS    | gas chromatograph/mass spectrometer                  |
| gpm      | gallons per minute                                   |
| GPOS     | General Purpose Operations Shelter                   |
| GTR      | German Traktor Rocket                                |
| H        | Levinstein mustard                                   |
| HAZCOM   | hazard communications                                |

|                |   |
|----------------|---|
| HAZWOPER       | Hazardous Waste Operations and Emergency Response |
| HD             | distilled sulfur mustard                          |
| HEGA           | high efficiency gas adsorber                      |
| HEPA           | high efficiency particulate air                   |
| HN-3           | nitrogen mustard                                  |
| HT             | mustard-T mixture                                 |
| HTSL           | heat-traced sample line                           |
| ICV            | initial calibration verification                  |
| IDLH           | immediately dangerous to life and health          |
| IOSC           | Installation On-Scene Coordinator                 |
| IOP            | Internal Operating Procedure                      |
| kPa            | kilopascal  |
| kW             | kilowatt  |
| LCO            | limiting condition of operation                   |
| LDR            | Land Disposal Restrictions                        |
| LMQAP          | Laboratory and Monitoring Quality Assurance Plan  |
| LSC            | linear-shaped charge                              |
| m <sup>3</sup> | cubic meter                                       |
| MARB           | Materiel Assessment Review Board                  |
| MEA            | monoethanolamine                                  |
| MDL            | method detection limit                            |
| mg/L           | milligram per liter                               |
| MIL-STD        | Military Standard                                 |
| NaOCl          | sodium hypochlorite                               |
| NaOH           | sodium hydroxide                                  |

|                 |   |
|-----------------|---|
| NEC             | National Electrical Code                              |
| NEMA            | National Electrical Manufacturers Association         |
| NEW             | net explosive weight                                  |
| NFPA            | National Fire Protection Association                  |
| NIOSH           | National Institute for Occupational Safety and Health |
| NO <sub>x</sub> | nitrogen oxide  |
| NRC             | National Response Center                              |
| NRT             | near real-time  |
| OSC             | On-Scene Commander                                    |
| OSHA            | Occupational Safety and Health Administration         |
| PDS             | Personnel Decontamination Station                     |
| PEIS            | Programmatic Environmental Impact Statement           |
| PINS            | portable isotopic neutron spectroscopy                |
| PMCS            | preventive maintenance and checks services            |
| PPE             | personal protective equipment                         |
| ppmw            | parts per million by weight                           |
| psi             | pounds per square inch                                |
| psig            | pounds per square inch gauge                          |
| PQL             | practical quantitation limit                          |
| QA              | quality assurance                                     |
| QA/QC           | quality assurance/quality control                     |
| QAPjP           | Quality Assurance Project Plan                        |
| QC              | quality control                                       |
| QL              | instrument calibration verification sample            |
| QP              | Quality Plant sample (aka a DAAMS QC sample)          |

|            |   |
|------------|---|
| RCRA       | Resource Conservation and Recovery Act  |
| RCWM       | recovered chemical warfare materiel   |
| RDX        | cyclonite   |
| RL         | reportable limit  |
| RPD        | relative percent difference   |
| rpm        | revolution per minute   |
| SAP        | sampling and analysis plan  |
| SCBA       | self-contained breathing apparatus  |
| SDS        | safety data sheet   |
| SME        | subject matter expert   |
| SOP        | Standing Operating Procedure  |
| SPCCP/ISCP | Spill Prevention, Control, and Countermeasures Plan/Installation Spill Contingency Plan |
| sq km      | square kilometers   |
| STEL       | short-term exposure limit   |
| SWMU       | solid waste management unit   |
| TIC        | total ion chromatogram  |
| TNT        | trinitrotoluene   |
| UAC        | Utah Administrative Code  |
| UBC        | Uniform Building Code   |
| UDEQ       | Utah Department of Environmental Quality  |
| UL         | Underwriters Laboratory   |
| UN         | United Nations  |
| V          | volt  |
| VCS        | Vapor Containment Structure   |

|     |                           |
|-----|---------------------------|
| VOC | volatile organic compound |
| VSL | vapor screening level     |
| WAP | waste analysis plan       |
| WPL | worker population limit   |



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