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Salt Lake County Comprehensive Emergency Management Plan

Hazardous Materials Annex | July 2025

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104 **1 INTRODUCTION**

105 **1.1 Purpose**

106 This document serves as an annex to the Salt Lake County (“the County”) **Comprehensive**
 107 **Emergency Management Plan** (CEMP). The Hazardous Materials Annex provides an
 108 operational guide and framework for a Hazardous Materials incident response by the
 109 County, as well as processes for coordinating with federal, State, and municipal
 110 governments, private-sector entities, and non-governmental organizations (NGO). This
 111 plan has been developed in conjunction with the requirements of the Emergency Planning
 112 and Community Right-To-Know-Act (EPCRA) of 1986 (42. U.S. Code, Chapter 116,
 113 Subchapter 1, Section 11003). And the Utah State Hazardous Chemical Emergency
 114 Response Commission (53-2a-7 U.C.A.) The **Salt Lake County CEMP Hazardous**
 115 **Materials Annex** (“Hazmat Annex” or “the annex”) provides a detailed overview of the
 116 actions and considerations required by the County to manage the preparation for,
 117 identification of, response to, and recovery from a Hazardous Materials incident.

118 **1.2 Scope**

119 The Hazardous Materials Annex supplements guidance in the CEMP by providing
 120 considerations for a response to incidents involving hazardous materials spills or leaks
 121 impacting the County. The Environmental Protection Agency defines hazardous materials
 122 as any item or agent (biological, chemical, radiological, and/or physical) that has the
 123 potential to cause harm to humans, animals, or the environment, either by itself or through
 124 interaction with other factors. This annex addresses numerous types of hazmat incidents
 125 that may impact the County:

- 126 • Transportation spill/leak
- 127 • Facility leak
- 128 • Chemical
- 129 • Biological
- 130 • Radiological
- 131 • Nuclear
- 132 • Explosive
- 133 Battery Electrical Storage Systems

135 This hazard specific annex, a supporting component of Salt Lake County Comprehensive
 136 Emergency Management Plan describes unique aspects, actions and considerations for
 137 decision makers. This annex also serves as the Emergency Response Plan for the Local
 138 Emergency Planning Committee.

139

140 **1.3 Plan Objectives**

141 The primary objective of the Hazardous Materials Annex is to detail actions to support Salt
 142 Lake County’s rapid and effective emergency response to a Hazardous Materials incident
 143 through the coordination and action of relevant departments and agencies. The annex is
 144 designed to accomplish the following:

- 145 • Serve as a planning document to support further development of Hazmat incident
 146 response plans.
- 147 • Provide an overview of the threats posed by different types of hazardous materials
 148 releases and define the potential range of impacts of an incident in Salt Lake
 149 County.
- 150 • Provide standard operating procedures to guide emergency response personnel
 151 on the actions required for the protection of life and safety.

152 **Key Provisions**

- 153 • Identification of facilities that are subject to the requirements of local emergency
 154 planning, as well as any facility that may not be expressly subject to the regulation
 155 but could still be of concern in an emergency, in addition to any facilities that are
 156 subject to Tier II reporting.
- 157 • Provide methods and procedures to be followed by facility owners, operators, and
 158 local emergency response personnel because of any release of a hazardous
 159 substance.
- 160 • Designation of a Community Emergency Coordinator.
- 161 • Designation of a Facility Emergency Coordinator.
- 162 • Notification procedures sufficient to provide timely notification by Facility
 163 Emergency Coordinators to local, state, and federal emergency response agencies
 164 of hazardous incidents.
- 165 • Methods for determining the occurrence of a release and the area or population
 166 likely to be affected by a release.
- 167 • A description of emergency contacts for the community (Appendix 5)
- 168 • Evacuation plans, including precautionary evacuations and alternative traffic
 169 routes.
- 170 • Training program, including scheduling for the training of local emergency
 171 response personnel.
- 172 • Methods and schedules for exercising the plan.

173 **1.4 Plan Organization**

174 The organization of the annex aims to support both strategic decision-makers and
 175 operational emergency response personnel with information and actions necessary to
 176 support efficient and effective hazardous materials (hazmat) release incident response.

177 **Table 1** Error! Not a valid bookmark self-reference. details the organization of the annex.

Table 1: Plan Organization

Section	Description
Section 2: Situation and Assumptions	Provides the scenarios as the basis for response strategies detailed in the annex. This includes planning assumptions based on the hazmat incident types.
Section 3: Concept of Operations	Provides strategic, high-level considerations for response, recovery, mitigation and preparedness strategies regarding hazmat incidents. The content includes topics of Emergency Coordination Center (ECC) organization, objectives, and coordination.
Section 4: Situation Assessment	Provides specific operational actions that support detecting, identifying, and confirming a hazmat incident. This section includes activities for notifying the public and activating an emergency response to an incident.
Section 5: Operational Priorities	Provides specific hazmat incident response actions and the lead agency responsible. The operational priorities are organized into time frames accounting for immediate response to sustained operations.
Section 6: Standard Operating Procedures by Incident	Provides standard operating procedures, including response actions, time frames, notification requirements, and responsible agencies, for specific hazmat incidents.

179

1.5 Document Management

180

Salt Lake County Emergency Management (EM) intends to annually review and update the annex. The Salt Lake County Local Emergency Planning Committee is responsible for maintaining the annex, including incorporating any corrective actions or lessons learned from associated training, exercises, and real-world events, as well as changes in laws, rules, and regulations.

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186 **2 SITUATION AND ASSUMPTIONS**

Situation and Assumptions	Concept of Operations	Situation Assessment	Operational Priorities	Standard Operating Procedures by Weather Incident
<p>This section provides the scenarios as the basis for response strategies detailed in the annex. This includes planning assumptions specific to different types of hazmat events.</p>				

187 **2.1 Hazard Materials Releases in Salt Lake County**

188 Hazardous materials can be found in every community. They are in almost every
 189 home and in most hospitals and factories. Hazardous materials are shipped every day
 190 via land, air, and sea pathways and are frequently used to inspect pipelines
 191 If released, hazardous materials may cause harm to people, the environment, critical
 192 infrastructure, and property. Their potential for harm exists regardless of whether
 193 hazardous materials are released by accident, malicious actor, fire, or weather-
 194 related events.

195 Hazardous material incidents affect a range of stakeholders in the whole community.
 196 Workers in facilities who regularly use or handle hazardous materials, transportation
 197 carriers, nearby residents and students, first responders, and first receivers are all at
 198 risk of health impacts from hazardous materials.

199 **2.2 Hazmat Hazard-Specific Assumptions**

200 **2.2.1 Transportation Routes**

- 201 • Salt Lake County has several major highways: I-15, I-215, I-80, US-89, SR-201, SR-
 202 154, Redwood Rd. SR-68, the Legacy Parkway (SR-67), and the Mountain View
 203 Corridor (SR-85), which pose threats for potential hazardous incidents and
 204 accidents. Three major rail lines traverse Salt Lake County, carrying freight and
 205 passengers, creating unique hazmat scenarios. Salt Lake County is also home to
 206 the Salt Lake International Airport and the South Valley Regional Airport. The Salt
 207 Lake International Airport in 2025 was the 22nd busiest airport in the United States,
 208 carrying passengers and freight. Waterways traverse the county, creating scenarios
 209 where hazmat releases make specialized responses and problems. Multiple
 210 pipelines also wind through Salt Lake County, carrying different hazardous
 211 materials.
- 212 • Utah Inland Port Authority (UIPA) is in the northwest quadrant of Salt Lake City. This
 213 inland port builds a logistics infrastructure that links producers and consumers
 214 through a global supply chain network. The facility will act as an intermodal rail hub,
 215 warehouse, transloading, and network of truck parking solutions. This could impact

216 transportation routes by increasing daily truck trips. UIPA is participating in an
 217 initiative that supports clean heavy-duty transportation infrastructure and
 218 converting logistics fleets to zero-emissions technologies. When complete, the
 219 station will provide fueling options for CNG/, LNG, EV, and Hydrogen.
 220 • Industry throughout the county is making technological changes that include an
 221 ever-increasing number of sophisticated hazardous materials processes.
 222 Transportation through Salt Lake County of dangerous materials by rail, highway,
 223 air, and pipeline presents a different situation when an accidental release occurs.
 224 We must also accept that the transportation industry and industry, in general, are
 225 attempting to make their operations more efficient by consolidating materials and
 226 increasing container size. In many cases, this compounds the problems for the fire
 227 departments and responders in the containment of products, areas affected, the
 228 overall size of involvement, etc.

229 **2.2.2 Facility Reports/Software**

- 230 • Facilities that are subject to the requirements of local emergency planning and are
 231 required to complete a Tier II report are listed in an information-gathering tool that
 232 allows proper reporting and dissemination as outlined by EPCRA. Facilities that do
 233 not meet Tier II may be planned for, based on threat from locally stored chemicals.
- 234 • Tier II reports for Salt Lake County Local Emergency Planning Committee are
 235 submitted electronically at [Salt Lake County Tier II Portal](#).
- 236 • Facilities Tier II reports are automatically uploaded to a software program, currently
 237 Peac-Web by AristaTek, Inc. This program allows response organizations access to
 238 lists of chemicals, amounts of those chemicals, and other hazards around any spill.
 239 Additionally, the program uses current weather to build plume projections and
 240 other impacts of a possible spill event. Other information including schools and
 241 fire stations is also included in the maps.
- 242 • The software and provided information allow response organizations access to real
 243 time information during response efforts. Each fire department and hazardous
 244 materials response agency has access to the software information.

247 **2.2.3 Chemical**

- 248 • Understanding the Chemical's Properties:
 - 249 ○ **Physical State:** Is the chemical a gas, liquid, or solid? This impacts how it
 250 spreads and can be contained.
 - 251 ○ **Flammability and Explosibility:** Can the chemical ignite or explode? This
 252 is a critical factor in developing fire and explosion prevention plans.

- 253 ○ **Toxicity:** How harmful is the chemical if inhaled, ingested, or absorbed
- 254 through the skin? This informs emergency response protocols and personal
- 255 protective equipment (PPE) requirements.
- 256 ○ **Reactivity:** Can the chemical react with other materials, creating additional
- 257 hazards? This can lead to secondary releases or explosions.
- 258 ○ **Persistence:** How long does the chemical remain in the environment after
- 259 being released? This impacts the potential for long-term exposure and
- 260 contamination.
- 261 ● Understanding the Release Scenario:
- 262 ○ **Container Type:** What type of container (e.g., tank, pipe, drum) holds the
- 263 chemical? This affects how the release occurs and how it can be contained.
- 264 ○ **Location:** Where is the release occurring (e.g., indoors, outdoors, in a
- 265 transportation accident)? This impacts how the chemical will spread and the
- 266 potential for exposure to people and the environment.
- 267 ○ **Release Rate:** How rapidly is the chemical being released? This affects the
- 268 time available to respond and the potential for widespread exposure.
- 269 ○ **Environmental Conditions:** What are the prevailing weather conditions
- 270 (e.g., wind speed, temperature)? This impacts how the chemical will
- 271 disperse and the potential for localized hot spots.
- 272 ○ **Chemical Interaction:** What other chemicals are involved in the release?
- 273 The potential for chemical interaction likely will create a more hazardous
- 274 situation.
- 275
- 276 ● 3. Assumptions about Potential Consequences:
- 277 ○ **Exposure Pathways:** How can people be exposed to the chemical (e.g.,
- 278 inhalation, skin contact, ingestion)? This information aids in the selection of
- 279 appropriate PPE and emergency response procedures needed.
- 280 ○ **Health Effects:** What are the potential health effects of exposure to the
- 281 chemical? This is crucial for developing medical protocols and providing
- 282 guidance to first responders.
- 283 ○ **Environmental Impacts:** What are the potential environmental impacts of
- 284 the chemical release (e.g., soil and water contamination)? This is important
- 285 for determining cleanup procedures and potential remediation efforts.
- 286 ○ **Economic Impacts:** What are the potential economic impacts of the release
- 287 (e.g., property damage, business interruption)? This information is needed
- 288 for insurance and long-term financial planning.
- 289
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294 **2.2.4 Biological**

- 295 • Hazard-specific assumptions about a biological release involve understanding the
- 296 unique characteristics of the involved agent, including its transmission methods,
- 297 potential harm, and the specific circumstances of the release. These assumptions
- 298 are crucial for developing effective response strategies and mitigation measures.
- 299
- 300 ○ **Transmission:** Understanding how the biological agent spreads, whether
- 301 through airborne transmission, direct contact, cross-contamination, or
- 302 other vectors, is crucial for containment efforts.
- 303 ○ **Contagiousness:** Distinguishing between contagious (transmissible) and
- 304 non-contagious agents is important for implementing appropriate public
- 305 health measures.
- 306 ○ **Mode of Entry:** Knowing how the agent entered the environment
- 307 (intentional release, accidental release, natural outbreak) influences
- 308 response strategies.
- 309 ○ **Affected Populations:** Identifying vulnerable populations who may be
- 310 disproportionately impacted by the release is essential for targeted
- 311 interventions.
- 312 ○ **Public Response:** Anticipating how the public might react to a biological
- 313 incident, including potential panic or avoidance, is important for effective
- 314 communication and reassurance.
- 315 ○ **Responder Impacts:** Acknowledging the potential for responders to be
- 316 disproportionately affected, both physically and mentally, due to
- 317 prolonged exposure and working conditions, is crucial for their well-being
- 318 and continued effectiveness.
- 319 ○ **Available Resources:** Assessing the availability of resources, such as PPE
- 320 and medical countermeasures (diagnostic tests, prophylaxis,
- 321 therapeutics), is vital for planning and resource allocation.
- 322 ○ **Incident Characteristics:** Considering factors like the scale of the release,
- 323 whether it's a discrete location or a widespread outbreak, and the nature
- 324 of the agent (e.g., toxin vs. pathogen) helps tailor response strategies.

325 **2.2.5 Radiological**

- 326 • These may involve radioactive materials from medical sources, industrial
- 327 processes, or even nuclear weapons, posing risks of radiation exposure and
- 328 contamination.
- 329 • Hazard-specific assumptions for radiological release assessments involve making
- 330 conservative estimates about the amount of radioactive material released, the
- 331 pathway of release, and the potential impacts on people and the
- 332 environment. These assumptions help ensure that emergency response plans and

333 protective measures are adequate even if the actual event is less severe than the
 334 worst-case scenario.

- 335 • **Conservative Assumptions:** In radiological hazard assessments, conservative
 336 assumptions are used to overestimate the amount of radioactive material
 337 released and the potential impacts. This approach ensures that emergency
 338 responders and the public are protected even if the actual release is less severe
 339 than the predicted worst-case scenario.
- 340 • **Release Pathway:** Assumptions are made about how the radioactive material will
 341 be released, whether it will be released as an aerosolized cloud or other forms,
 342 and how it will disperse in the environment.
- 343 • **Environmental Impact:** Assumptions are also made about the potential impacts
 344 on the environment, including soil contamination, water contamination, and air
 345 quality.
- 346 • **Dose Calculations:** Conservative assumptions are used to calculate potential
 347 radiation doses to people, both directly from the release and from exposure to
 348 contaminated environments.
- 349 • **Protective Actions:** The assumptions about the release and its potential impacts
 350 inform the development of protective measures, such as evacuation, shelter-in-
 351 place, and medical interventions.

352 2.2.6 Nuclear

- 353 • Hazard-specific assumptions for nuclear release analyses are foundational
 354 assumptions about the behavior of radioactive material and its potential impact,
 355 used to assess the risk associated with nuclear releases. These assumptions help
 356 determine the extent of potential contamination, radiation exposure, and overall
 357 hazards to the public.
 - 358 o Release Scenarios and Containment:
 - 359 • **Worst-case scenarios:** Analyses often consider the most severe
 360 potential release scenarios, such as a core melt accident or a
 361 major containment failure.
 - 362 • **Assumed release fractions:** Assumptions are made about the
 363 fraction of radioactive material that might be released from the
 364 containment vessel into the environment.
 - 365 • **Containment integrity:** The analysis considers the effectiveness
 366 of containment systems and their ability to limit the release of
 367 radioactive material.
 - 368 o Atmospheric Dispersion and Transport:
 - 369 • **Weather patterns:** Assumptions about prevailing wind
 370 direction, speed, and atmospheric stability are used to model the
 371 movement of radioactive plumes.

- 372 • **Dispersion models:** Mathematical models are employed to
- 373 simulate how radioactive material will spread and dilute as it
- 374 moves through the atmosphere.
- 375 • **Long-range transport:** The potential for radioactive material to
- 376 be transported over long distances is considered in some
- 377 scenarios.
- 378 o Radiation Exposure and Effects:
- 379 • **External radiation exposure:** Estimates are made of the
- 380 radiation dose people might receive from external sources, such
- 381 as a radioactive plume.
- 382 • **Internal radiation exposure:** The potential for people to inhale
- 383 or ingest radioactive materials is considered, leading to internal
- 384 radiation exposure.
- 385 • **Health effects:** Assumptions are made about the potential
- 386 health effects of radiation exposure, such as radiation sickness,
- 387 cancer, and other long-term health problems
- 388 o Public Health and Safety:
- 389 • **Protection measures:** Assumptions are made about the
- 390 effectiveness of public protective measures, such as evacuation,
- 391 sheltering, and the use of radiation monitoring equipment.
- 392 • **Emergency response:** The assumptions consider the capacity of
- 393 emergency responders to mitigate the effects of a nuclear
- 394 release and provide assistance to the public.
- 395 • **Evacuation distances:** Assumptions are made about the
- 396 appropriate distances for evacuations, based on the anticipated
- 397 level of radiation exposure.
- 398 o Contamination and Remediation:
- 399 • **Contamination patterns:** Assumptions are made about how
- 400 radioactive materials might be deposited on surfaces and in the
- 401 environment.
- 402 • **Cleanup efforts:** The analysis considers the feasibility and
- 403 effectiveness of decontamination and remediation efforts.
- 404 o Uncertainties and Sensitivities:
- 405 • **Sensitivity analyses:** The analysis may include sensitivity studies
- 406 to assess how changes in certain assumptions might affect the
- 407 overall risk assessment.
- 408 o Conservative assumptions:
- 409 • In some cases, conservative assumptions are used to ensure that
- 410 the risk assessment is not underestimated.
- 411

412 2.2.7 Explosives

- 413 • When considering the hazard of an explosive release, it's crucial to make specific
- 414 assumptions to accurately assess the potential risks and consequences. These
- 415 assumptions can range from the type of explosion (e.g., mass explosion, projection
- 416 hazard, fire hazard) to the physical properties of the explosive material and the
- 417 surrounding environment. Understanding these assumptions is essential for
- 418 developing effective safety measures and emergency response plans.
- 419 ○ **Type of Explosion:** Assumptions are made about the nature of the
- 420 explosive release, such as whether it will be a mass explosion (affecting
- 421 the entire quantity virtually instantaneously), a projection hazard (throwing
- 422 projectiles), or a fire hazard with minor blast or projection effects.
- 423 ○ **Explosive Material:** Assumptions about the explosive material's
- 424 characteristics, including its chemical composition, energy content, and
- 425 ignition sensitivity, are vital.
- 426 ○ **Environmental Conditions:** Factors like temperature, pressure, humidity
- 427 and the presence of oxygen or other reactive substances in the
- 428 surrounding environment are considered.
- 429 ○ **Confinement:** Assumptions are made about the degree of confinement of
- 430 the explosion, which significantly impacts the blast wave and potential
- 431 damage.
- 432 ○ **Distance:** Assumptions about the distance from the explosive source are
- 433 used to predict the effects of the blast wave, including pressure, impulse,
- 434 and overpressure.
- 435 ○ **Target:** Assumptions about the type of target (e.g., building, vehicle,
- 436 person) and its structural integrity help determine the potential damage.
- 437 ○ **Ignition Source:** Assumptions are made about the potential ignition
- 438 sources, such as static electricity, sparks, heat, or open flames.
- 439 ○ **Debris:** Assumptions about the size, shape, and speed of debris
- 440 generated by the explosion are important for assessing the potential
- 441 impact on surrounding areas.
- 442 ○ **Fire:** Assumptions about the potential for fire following an explosion,
- 443 including the type and quantity of combustible materials involved, are
- 444 crucial.
- 445 ○ **Second Device:** In certain situations, it is assumed that a secondary
- 446 explosive device may be present, requiring additional safety measures
- 447 and search procedures.

448 **2.2.8 Battery Energy Storage Systems**

449

450 Battery Energy Storage Systems (BESS) is a system that stores electrical energy for later

451 use, often using batteries like lithium-ion or nickel-metal hydride. Battery energy storage

452 systems (BESS) in electric vehicles (EVs) pose several hazards, primarily related to thermal

453 runaway, fire, explosion, and exposure to hazardous chemicals. Electrical shock and flash
454 burns are also potential risks, particularly during installation or in case of damage.

455 **Thermal Runaway:**

- 456 • Flammable and Toxic Gases: During thermal runaway, the battery will release
457 flammable and potentially toxic gases like hydrogen, carbon monoxide, hydrogen
458 fluoride, hydrogen cyanide, methane, and others.
- 459 • Explosion Hazard: Accumulation of these gases can lead to an explosive
460 atmosphere if ignited.
- 461 • Cascading Failure: The initial failure of one cell can cause nearby cells to overheat
462 and go into thermal runaway, potentially spreading throughout the entire BESS.

463 **Off-Gassing:**

- 464 • Release of Flammable and Toxic Gases: Even during normal operation or minor
465 fault conditions, there can be some off-gassing, releasing flammable and toxic
466 gases.
- 467 • Risk of Explosion: If these gases accumulate in an enclosed space and are ignited,
468 they can cause an explosion.

469 **Fire:**

- 470 • Difficult to Extinguish: Lithium-ion battery fires are challenging to put out and often
471 require large amounts of water for cooling and containment.
- 472 • Toxic Smoke and Fumes: The smoke and fumes from battery fires contain a mix of
473 harmful compounds, including toxic gases like carbon monoxide and hydrogen
474 fluoride.
- 475 • Risk of Re-ignition: Even after extinguishing, there's a chance of the fire re-igniting.

476 **Electrical Hazards:**

- 477 • Stranded Energy: Damaged batteries may contain an unknown amount of
478 electrical energy, posing a shock hazard to responders.
- 479 • Arc Flash: Systems operating above certain voltages carry the risk of arc flash,
480 requiring appropriate electrical safety precautions.

481 **Mechanical Hazards:**

- 482 • Physical Damage: Mechanical damage to batteries can lead to internal short
483 circuits and thermal runaway.
- 484 • Cell Breach/Rupture: High pressure during thermal runaway can cause cells to
485 rupture, releasing flammable gases and potentially high-speed projectiles.

486 **Environmental Impacts:**

- 487 • Water Contamination: Fire suppression efforts or leaks can result in toxic runoff that
- 488 can contaminate soil and water.
- 489 • Air Pollution: Toxic smoke and fumes from fires can affect air quality and pose
- 490 health risks to nearby residents.

491 **Manufacturing and Disposal:**

- 492 • Raw Material Sourcing: The sourcing of materials like lithium can raise
- 493 environmental and ethical concerns.
- 494 • Recycling and Disposal: Battery recycling involves handling hazardous chemicals
- 495 and managing waste streams, requiring specialized procedures.

496 **Important Considerations:**

- 497 • Battery Chemistry and State of Charge: The specific hazards and their severity
- 498 depend on the battery chemistry and its state of charge.
- 499 • Ventilation: Proper ventilation is crucial to prevent the accumulation of flammable
- 500 gases, reducing the risk of explosion.
- 501 • Early Detection: Early detection of thermal runaway is critical for intervention and
- 502 mitigation.
- 503 • Emergency Response: Well-trained personnel, including first responders, are
- 504 essential to safely manage BESS incidents.
- 505 • Adherence to Standards: Following safety standards and best practices, such as
- 506 those outlined in NFPA 855 and UL 9540A, is vital for safe BESS operations.

507
508

509 **2.3 Planning Assumptions**

- 510 • The emergency response operations outlined in this annex are implemented in
- 511 accordance with the CEMP Base Plan and other operational documents.
- 512 • The CEMP Hazardous Materials Annex is implemented after a Hazardous Materials
- 513 event occurs for reporting and response to incidents that have a significant impact
- 514 on the Salt Lake County region.
- 515 • EM activates response personnel from municipalities to staff response functions.
- 516 Volunteer Organizations Active in Disaster (VOAD) such as the American Red Cross
- 517 (ARC), other NGOs, contracted private entities, and spontaneous volunteers are
- 518 incorporated into Emergency Support Functions (ESF) as appropriate.

- 519 • The ECC is staffed with representatives from County agencies and private
520 organizations grouped under the ESF structure during response and the Recovery
521 Support Function (RSF) structure during recovery.
522
523

524 **2.4 Response Assumptions**

- 525 • This response plan identifies the resources in Salt Lake County that are available
526 for response to CBRNE incidents and other large-scale incidents. It also outlines the
527 answers of all agencies and disciplines incidents within and outside of the county.
528 • Emergency response personnel within Salt Lake County will respond to all
529 incidents within their respective jurisdictions. They will utilize their capabilities to
530 protect life, property, and the environment and to secure the area to prevent
531 further damage/injury from the incident. They will also respond by providing
532 mutual aid as incidents dictate.
533 • The Incident Commander and emergency response personnel at the scene must
534 use extreme caution in response procedures so that they do not involve themselves
535 with tactical operations that exceed the capabilities of their personnel, training,
536 and/or equipment.
537 • Each response agency should have a complete understanding of its capabilities
538 and ensure that adequately equipped and trained personnel are dispatched to
539 CBRNE incidents. This may be accomplished through mutual aid, private industries,
540 and/or other agencies.
541 • The implementation of this plan will result in a more efficient, expedited, and safer
542 response to any incident and provide greater protection to the public that we serve.
543 • The County may request mutual aid as part of its response, but regional mutual aid
544 support may be limited for a hazmat event impacting the region.
545

546 3 CONCEPT OF OPERATIONS

Situation and Assumptions	Concept of Operations	Situation Assessment	Operational Priorities	Standard Operating Procedures by Weather Incident
<p>This section provides strategic, high-level considerations for response, recovery, and preparedness strategies regarding hazardous materials emergencies. The content includes topics of ECC organization, objectives, and actions to protect life and public safety.</p>				

547 3.1 General Organization of the Local Emergency 548 Planning Committee

549 Major emergency hazardous materials incidents/accidents require activation of the Local
550 Emergency Planning Committee Plan to provide coordination between agencies. This
551 includes agencies within and outside Salt Lake County. In 2005 Salt Lake County adopted
552 the NIMS. Response agencies must understand and use the National Incident
553 Management System (NIMS). Support agencies will increase the need for coordination
554 during the emergency. If the local capabilities are overwhelmed, support may come from
555 other jurisdictions such as the county, state, or federal agencies. These resources may be
556 directed by an Emergency Operations Center or Emergency Coordination Center,
557 depending on the type of incident/accident and the level of response.

558 The central hub for coordination of a County-wide emergency response is the ECC,
559 located at 3380 S 900 W, South Salt Lake, UT 84119. Operational concepts and structures
560 for a hazardous materials response are consistent with those outlined in the CEMP. More
561 information about ECC operations, including an organizational chart, can be found in the
562 **CEMP Base Plan: Concept of Operations.**

563 3.2 General Local Emergency Planning Committee 564 Response Objectives and Operations

565 Primary responsibility for the safety and welfare of the residents of Salt Lake County rests
566 with the respective local governments and city and county officials. This plan is based on
567 a response at the lowest level of government. It should include all agreements of
568 cooperation between agencies within a jurisdiction. If the situation exceeds this level of
569 the government’s capabilities, additional assistance will be requested from Salt Lake
570 County. In these instances—in coordination with the Salt Lake County Health Department,
571 the Salt Lake County Emergency Manager will notify the County Mayor as to the status of
572 the emergency and coordinate the county’s resources, including personnel, equipment,
573 volunteer relief, and other governmental agencies. The State of Utah, Division of
574 Emergency Management, will coordinate state agencies; and, if deemed necessary,
575 request a Presidential Declaration through the Federal Emergency Management Agency

576 (FEMA). This level of declaration allows supplemental federal financial and technical
577 assistance.

578 The primary purpose of the plan is to provide practical, coordinated emergency
579 responses to incidents involving the release or potential release of hazardous materials
580 in Salt Lake County. For this plan, hazardous materials are defined to include any
581 chemical which is a physical hazard, or a health hazard as defined under OSHA 29 CFR
582 1910.120 and 1910.1200 and as described in this document; also, radioactive and non-
583 radioactive materials and explosives in reportable quantities, as well as other chemical
584 hazards that may be present within Salt Lake County.

585 We shall strive to increase the public's knowledge and access to information on the
586 presence of hazardous materials/chemicals in their communities (and the releases of
587 them into the environment) through information obtained through the LEPC, in
588 compliance with The Emergency Planning and Community Right-to-Know section of
589 1986 (EPCRA).

590 Special needs for the disabled, elderly, day-care centers, and non-ambulatory hospital
591 patients, as well as domesticated/agricultural animals, will be considered by each agency
592 within its capabilities.

593 **3.3 Coordination with Outside Agencies**

594 The ECC coordinates with municipal, State, federal, and private entities to implement
595 response operations and request resources when municipal and County capacities are
596 constrained. Response operations for a major hazmat event may require coordination with
597 entities outside the County. Synchronizing response activities is essential for aligning
598 efforts, leveraging resources, and receiving technical assistance. The ECC coordinates
599 with municipal, State, federal, and private entities to implement response operations and
600 request resources when County capacities are constrained.

601 The disaster declaration process is an essential step in accessing response resources
602 outside the County. Municipal and County agencies coordinate a request for a disaster
603 declaration through the State when the disaster or emergency requires capabilities or
604 resources from outside the County. The ECC Finance/Administration Section, in
605 coordination with the ECC Planning Section and County Chief Financial Officer (CFO), is
606 responsible for collecting and submitting documentation verifying that the impacts to the
607 County meet the economic threshold for a disaster declaration. More information about
608 the disaster declaration process can be found in the **CEMP Base Plan: Concept of**
609 **Operations.**

610 **3.3.1 Coordinating Mutual Aid**

611 Mutual aid is another method for obtaining external resources when response and
612 recovery operations require the use of resources beyond the capabilities of those within
613 the County. Salt Lake County has the following mutual aid agreements in place that can be
614 utilized during a hazardous materials event:

- 615 • Salt Lake Valley Automatic Mutual Aid Agreement
- 616 • Statewide Mutual Aid Act (SMAA)
- 617 • Multi-Jurisdictional Mutual Aid Agreement for Sheriff and Police Services
- 618 • Utah Water and Wastewater Agency Response Network (UTWARN)
- 619 • Health Departments
- 620 • Utah National Guard 85th WMD-CST
- 621

Hazardous Materials Event and Mutual Aid

A major hazardous materials event that affects Salt Lake County may impact surrounding jurisdictions. The multijurisdictional impacts limit available requestable resources due to those jurisdictions using them for their own response instead of providing them to Salt Lake County.

622

623 Details concerning the process for requesting resources for each existing mutual aid

624 mechanism are contained in **Appendix A: Mutual Aid Agreement Job Aids, A: Mutual**

625 **Aid Agreement Job Aids** reference tool for decision-makers. A list of potential resource

626 request items can be found in **Appendix B: .**

627 **3.3.2 Coordination with the State of Utah**

628 Coordinating directly with the State is an additional approach to obtaining external

629 resources. If response and recovery operations exhaust municipal and County resources,

630 the ECC requests additional resources from the State of Utah through the Utah Division of

631 Emergency Management (DEM). The steps below outline how to request resources from

632 the State.

- 633 1. A Local Emergency Proclamation is formally declared for the County.
- 634 2. The EM requests resources from the State through Region 2 DEM Liaison or directly
- 635 between the County ESF and State ESF.
- 636 3. The EM sends any required follow-up documentation to DEM within 48 hours.
- 637 4. DEM assigns sourcing and procurement of the resource through the
- 638 corresponding State ESF.

639 The State of Utah concurrently initiates its own actions after a major hazardous materials

640 event, which may include the following:

- 641 • Governor declaring a State Emergency
- 642 • Utah DEM activating the State Emergency Operations Center (SEOC)
- 643 • State agencies activating Department Operations Centers (DOC) to mobilize State
- 644 resources
- 645 • Governor requesting a presidential disaster declaration
- 646 • The Utah National Guard (UTNG) activated as requested by the governor or a
- 647 designee

648 The ECC can also obtain resources from other States through the Emergency
649 Management Assistance Compact (EMAC). Neither the County nor State are required to
650 exhaust mutual aid agreements before requesting federal assistance when performing
651 lifesaving, safety, or security actions.

652 **3.3.3 Coordination with the Federal Government**

653 **3.3.3.1 Federal Emergency Management Agency Region VIII**

654 The Federal Emergency Management Agency (FEMA) works directly with DEM to respond
655 to State requests for assistance. FEMA deploys an Emergency Response Team (ERT) which
656 includes federal agencies that provide support through the State ESFs identified in the
657 National Response Framework (NRF). Federal support may include direct assistance from:

- 658 • U.S. Army Corps of Engineers (USACE)
- 659 • Environmental Protection Agency (EPA)
- 660 • Urban Search and Rescue (USAR)
- 661 • Disaster Medical Assistance Teams (DMAT)
- 662 • Disaster Mortuary Operations Teams (DMORTs)
- 663 • U.S Department of Defense (DOD) Assets
- 664 • Utah National Guard (UTNG)

665 The ECC Operations and Logistics Sections coordinate the integration of these teams into
666 County response activities and logistics requirements associated with deployment. As
667 soon as possible, FEMA establishes a Joint Field Office (JFO) with its federal, State, County,
668 and municipal partners that becomes a hub of federal response operations. FEMA may
669 provide liaisons to work directly with the County to facilitate the deployment of federal
670 resources and assess needs. Key response initiatives conducted by FEMA Region VIII
671 include:

- 672 • Recommending individuals for appointments to serve as Federal Coordinating
673 Officer (FCO)
- 674 • Activating the Regional Response Coordination Center (RRCC) staff and all ESFs
- 675 • Designating Priority Response Areas and developing the Regional Support Plan
- 676 • Establishing the Unified Command Group (UCG) in coordination with the State
- 677 • Making decisions on facility locations and establishing facilities, staffing, program
678 priorities, resources, and demobilization

679 **3.3.4 Coordination with Non-Governmental Organizations**

680 NGOs and other private-sector entities are critical to hazardous materials response in the
681 County. These organizations can augment response operations and resource needs
682 throughout the incident. Salt Lake County has several faith-based and voluntary
683 organizations that participate in the response to emergencies and disasters. Partners for
684 response may include:

- 685 • National ARC
- 686 • Utah ARC Chapter
- 687 • Team Rubicon
- 688 • Amateur Radio Emergency Services (ARES)
- 689 • Community Emergency Response Teams (CERT)
- 690 • Church of Jesus Christ of Latter-Day Saints (LDS)
- 691 • Medical Reserve Corps (MRC)
- 692 • National Animal Rescue and Sheltering Coalition
- 693 • National Volunteer Organizations Active in Disaster (NVOAD) and Utah Volunteer
- 694 Organizations Active in Disaster (UVOAD)
- 695 • Southern Baptist Disaster Relief and Salvation Army
- 696 • Utah Funeral Directors Association
- 697 • “Be Ready Utah” Private-Sector Organizations
- 698 • Local Media

699 Details on the roles and responsibilities of private-sector entities during emergency
 700 response can be found in the **CEMP Base Plan: Roles and Responsibilities.**

701 **3.3.5 Transition to Recovery**

702 The length of recovery is influenced by the extent of the severity and scope of the
 703 hazardous materials event, extent of damage to infrastructure, impact on municipal and
 704 regional economies, and distress imposed on the population.

705 Recovery operations may begin while some response operations are still underway.
 706 Demobilization of response operations begins as determined by the Incident Commander
 707 (IC) or Unified Commander (UC) and EM. The ECC and ESFs do not have a predetermined
 708 deadline to demobilize and can stay active for as long as needed. All jurisdictions maintain
 709 situational awareness of the incident and communicate with the ECC if any area of the
 710 response requires additional resources that could require the ECC or an ESF to remobilize.

711 **3.3.6 Coordinating Recovery Operations**

712 Once the ECC transitions to a full recovery operation, coordination of recovery efforts
 713 through ESF #14 (Long-Term Community Recovery) may begin. Transitioning from
 714 response to recovery operations is a change from immediate lifesaving action to long-term
 715 community stabilization. When activated, the Recovery Task Force (RTF) manages,
 716 facilitates, and leads recovery operations and coordinates the development and
 717 implementation of a Long-Term Recovery Plan. More information regarding the roles of
 718 the RTF can be found in the **CEMP Base Plan: Recovery.**

719 ESF #14 coordinates recovery through RSFs. RSFs encompass the core recovery
 720 capabilities, including those not active in emergency response, to focus on community
 721 recovery needs. RSFs are organized into six core functions and can be activated to identify
 722 and resolve recovery challenges. The County’s RSFs are as follows:

- 723 • RSF #1: Community Planning and Capacity Building
- 724 • RSF #2: Economic Redevelopment
- 725 • RSF #3: Health and Social Services
- 726 • RSF #4: Housing
- 727 • RSF #5: Infrastructure Systems
- 728 • RSF #6: Natural and Cultural Resources

729 County RSFs may consist of redeployed County staff from departments whose day-to-day
 730 operations and expertise can be applied during recovery operations. The transition from
 731 response to recovery operations may require agencies to transfer authority to ESF #14.

732

733 4 SITUATION ASSESSMENT

Situation and Assumptions	Concept of Operations	Situation Assessment	Operational Priorities	Standard Operating Procedures by Weather Incident
This section provides specific, operational actions that support identifying the severity, extent, and scope of the severe weather event. This section includes activities for obtaining and confirming information about the severe weather.				

734 4.1 Overview

735 Superfund Amendments and Reauthorization Act (SARA) Legislation

- 736 • SARA requires identifying the locations and transportation routes of facilities,
 737 developing a plan for responding to a release, and establishing Right-to-Know
 738 Provisions for substances identified as highly hazardous, plus thousands of other
 739 potentially environmentally damaging dangerous substances and toxic chemicals.
- 740 • The portion of these chemicals specifically identified by name is given in the “List
 741 of Lists,” published by the Environmental Protection Agency (EPA).

742 SARA Facilities

- 743 • Over 400 businesses and industries within the Salt Lake County LEPC’s jurisdiction
 744 have been identified.

745 Local, State, and Federal

- 746 • Local, state, and federal facilities located within the boundaries of Salt Lake County
 747 are subject to the requirements of SARA Title III. They will participate in the
 748 planning and Right-to-Know provisions of the law.

749 Non-SARA Substances/Chemicals

- 750 • Other chemicals, not on lists specified by SARA, can cause hazardous situations
 751 that require a similar response to the emergency but may not have the same

752 reporting and Right-to-Know provisions and may be included in the provisions of
753 this plan.

754 **Hazardous Waste Sites**

- 755 • All sites used for the legal or illegal disposal of hazardous wastes, as defined by 40
756 CFR 261-3 and Utah Administrative Code R315-2-3, pose a threat to public health
757 and safety, and will be considered a “facility” for planning and response purposes.

758 **4.2 Assumptions**

759 **Transportation of Chemicals**

- 760 • Considering the volume of highway transportation, rail, pipeline, and air traffic that
761 passes through Salt Lake County daily, a significant risk to the public, property, and
762 the environment exists from hazardous materials transportation accidents.

763 **Chemicals at Fixed Sites**

- 764 • Hazardous chemicals are manufactured, processed, utilized, disposed of, and
765 otherwise handled at fixed sites throughout the county. Because these require
766 human and mechanical processes, there is a potential for an accidental release into
767 the environment.

768 **Radiological Materials**

- 769 • Radiological materials transported through the county or used at hospitals,
770 industrial or research facilities will be treated as a form of hazardous materials in
771 the context of this plan.

772 **Protective Action Considerations**

- 773 • Evacuation may not be the most preferred method of protective action near a
774 hazardous material (HazMat) release. In-place sheltering, or other public protection
775 measures may be considered as well, dependent upon the size, type, and location
776 of the release.

777 **Requirement for Specialized Assistance**

- 778 • The technical complexities of hazardous materials involved are often beyond the
779 capabilities of the local emergency responders and require assistance from trained
780 chemical experts from other state agencies and/or from industry within and outside
781 Salt Lake County.

782 **Public Concern**

- 783 • Any significant release will likely cause public concern and may cause intense
784 pressure from elected officials and the media for information that may not be
785 available until laboratory analyses are made. If questions are not answered within
786 a reasonable amount of time, public confidence may wane.

787 **Importance of Liaison**

- 788
- 789
- 790
- 791
- Liaison between all levels of government will be established to provide a unified and consistent flow of information. If necessary, a Joint Information Center (JIC) will be stood up, or a Joint Information System will be utilized to provide a central point of contact for the public and the media.

792 **Assistance Requests**

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- Typically, local government requests Salt Lake County assistance only when local resources have been expended. However, due to the technical nature and the equipment expense of a hazardous materials response, some cities have limited response capability. Salt Lake County recognizes this fact and intends to supplement local capabilities, not supplant them. The Incident Command System—when implemented by local government—will allow the county, or other resources, to become part of the response network without disrupting local effort. The decision to initiate a request for assistance, provided for in this plan, should be made by the Incident Commander, Unified Command, or other emergency responders when they determine that a hazardous material is involved, and circumstances may pose an immediate hazard to public health and/or the environment. The assistance requests are initiated by calling the Duty Officer at the Salt Lake County Emergency Management Bureau, who will notify the appropriate personnel and/or agencies. Assistance requests may be made directly through Salt Lake Valley Emergency Communications Center (VECC) or other authorized dispatch systems. All responders, local and requested, must abide by the strictest safety standards, including personal protective clothing recommended by the Emergency Response Guide or the Department of Health.

811 **Economy**

- 812
- 813
- 814
- 815
- 816
- The economy may not be affected by a hazardous materials spill unless the spill's effects are broad enough to close a significant portion of the business or industrial areas. Also, the delivery of services to the site will be postponed until the area can be decontaminated. All regulatory and contractual obligations will continue as usual.

817 **Property, Facilities, and Infrastructure**

- 818
- 819
- 820
- All property, facilities and infrastructure will be brought to a new normal, as close to pre-disaster order as soon as the decontamination process and any additional required inspections or public safety requirements are completed.

821 **4.3 Hazard Specific Assessments**

822 Understanding the unique characteristics and response requirements of different

823 hazardous materials is essential for effective emergency preparedness and

824 coordinated response operations. This section provides a focused assessment of six

825 specific hazard types—chemical, biological, radiological, nuclear, explosive, and

826 battery energy storage systems—that pose varying levels of risk to Salt Lake County.
827 Each hazard is evaluated based on its potential sources, modes of exposure, health
828 and infrastructure impacts, and required response strategies. By identifying and
829 analyzing these threats, the LEPC can better inform planning efforts, support agency
830 coordination, and enhance public safety initiatives across the county’s diverse
831 industrial, transportation, and residential environments.
832

833 **4.3.1 Chemical**

- 834 • These might involve industrial chemicals, pesticides, or synthetic agents,
835 potentially causing poisoning, burns, or other adverse effects
- 836 • Chemical hazards refer to toxic, corrosive, flammable, or reactive substances that
837 can cause significant harm to human health, infrastructure, and the environment.
838 These substances may be released accidentally—such as during transportation
839 incidents, industrial accidents, or chemical spills—or intentionally through acts of
840 terrorism. Chemical agents may be solids, liquids, or gases, and their impact
841 depends on concentration, exposure duration, and the route of entry into the body
842 (inhalation, ingestion, dermal contact). Salt Lake County's proximity to industrial
843 corridors and transportation hubs increases its vulnerability to chemical incidents,
844 requiring coordinated multi-agency response protocols and public protective
845 actions such as shelter-in-place or evacuation.

847 **4.3.2 Biological**

- 848 • This could include viruses, bacteria, or toxins that can spread through contact,
849 inhalation, or ingestion.
- 850 • Biological hazards involve pathogens or toxins that can cause disease in humans,
851 animals, or plants. These may be naturally occurring outbreaks (e.g., pandemic
852 influenza or West Nile Virus), accidental releases from laboratories or agricultural
853 facilities, or deliberate acts of bioterrorism involving agents like anthrax, smallpox,
854 or botulinum toxin. Biological incidents often have delayed symptom onset,
855 complicating early detection and containment. Effective response requires
856 integration with public health authorities, rapid epidemiological investigation,
857 mass prophylaxis or vaccination campaigns, and public communication strategies
858 to mitigate fear and misinformation.

859 **4.3.3 Radiological**

- 860 • Radiological hazards arise from the release of radioactive materials, which emit
861 ionizing radiation capable of damaging living tissue and contaminating air, water,
862 and surfaces. These hazards may stem from industrial accidents, medical facility
863 incidents, transportation of radioactive sources, or deliberate use of a radiological

864 dispersal device ("dirty bomb"). Radiological incidents demand specialized
 865 detection equipment, protective measures for responders and the public,
 866 decontamination protocols, and coordination with state and federal radiation
 867 control programs. Public messaging is especially important to manage concerns
 868 related to invisible and long-term health risks.

869 **4.3.4 Nuclear**

- 870 • These could include nuclear explosions or the dispersal of nuclear materials,
 871 leading to devastating consequences.
- 872 • Nuclear hazards refer to the detonation of a nuclear device—either because of
 873 warfare or terrorism—or catastrophic failure at a nuclear facility, which is less likely
 874 in Utah due to the absence of commercial nuclear power plants. Nuclear
 875 detonation would result in an immediate, massive blast; intense heat;
 876 electromagnetic pulse (EMP); and widespread radioactive fallout, causing both
 877 acute casualties and long-term environmental contamination. While the probability
 878 is low, the consequences are catastrophic, requiring detailed mass casualty
 879 planning, long-duration sheltering, and coordination with national-level resources
 880 such as the Department of Energy and FEMA.

881 **4.3.5 Explosive**

- 882 • This encompasses various types of explosive materials, including conventional
 883 explosives, improvised explosive devices (IEDs), and nuclear explosions, posing
 884 risks of blast damage and injury.
- 885 • Explosive hazards involve materials that can detonate or combust rapidly, releasing
 886 a high-pressure shockwave, heat, and shrapnel. These include commercial
 887 explosives, military ordnance, improvised explosive devices (IEDs), and industrial
 888 accidents involving pressurized containers or combustible dust. Explosive
 889 incidents pose immediate threats to life, structural integrity, and responder safety.
 890 Response plans must address blast zone triage, secondary device threats,
 891 evacuation, and structural collapse potential. Unified command with law
 892 enforcement, bomb squads, and fire/rescue teams is essential for effective
 893 mitigation.

894 **4.3.6 Battery Energy Storage Systems.**

- 895 • The increasing prevalence of electric vehicles (EVs) introduces new hazardous
 896 materials considerations, particularly regarding lithium-ion batteries. These high-
 897 energy battery systems pose risks of thermal runaway, fire, and explosion,
 898 especially when damaged in collisions or exposed to water during flooding. EV
 899 battery fires can burn at extremely high temperatures, release toxic gases, and are
 900 difficult to extinguish with traditional firefighting methods. Incident response
 901 requires specialized training, thermal imaging, and extended cooling and

902 monitoring periods post-extinguishment. Salt Lake County responders must
 903 incorporate EV hazards into transportation incident planning, HAZMAT response
 904 protocols, and public education efforts as EV adoption grows.
 905

906 **4.4 Initial Situation Assessment**

907 The process, resources, and staff needed for collecting and communicating hazmat event
 908 information will be sourced from observations on the ground and radar information. The
 909 ECC Planning Section and ESF #5, when activated, are responsible for collecting,
 910 aggregating, and disseminating situational information communicated from the field.

911 **4.4.1 Ground Information**

912 Depending on the type of hazmat event, reports on the event’s impact will likely
 913 immediately overwhelm the ECC. Information flows through formal and informal reporting
 914 channels. It is critical to quickly process and analyze the information to ensure response
 915 activities align with the scope of damage.

916 The role of EM is to develop a common operating picture by reconciling gaps in situational
 917 awareness through communication with municipalities and augmentation of unmet needs.
 918 Municipal response entities are responsible for assigning personnel to rapid damage
 919 assessment (RDA) activities. Field personnel have first-hand knowledge of the impacts of
 920 the event. Personnel located in the field at the time of the event or deployed after the event
 921 should perform the following activities:

- 922 • Ensure their personal safety and the safety of citizens in the immediate area.
- 923 • Note all threats to life and safety in their immediate area and report any time-
 924 sensitive information to their dispatcher through radio equipment.
- 925 • Note non-life safety information in their immediate area and report to the liaison
 926 officers through radio channels, either through personal, Unified Fire Authority
 927 (UFA), or Unified Police Department (UPD) equipment.
- 928 • Follow response procedure established by their department’s emergency plan.
 929

930 **4.4.2 Notification and Activation**

931 The initial notification of the covered release or accident is made by the facility or
 932 carrier. The facility or carrier must report all qualifying incidents or emergencies adhering
 933 to all Local, State, and Federal guidelines. Notification must be made in an expeditious
 934 manner to ensure life safety, property preservation, and to protect the environment.
 935

936 You will, without delay, immediately report the incident to (in order of importance
 937 and report):
 938

- 939 • 911 (Local Jurisdiction)

- 940 • The National Response Center at 1-800-424-8802 or 202-267-2675
- 941 • The Utah State Department of Environmental Quality at 801.536.4123 or the
- 942 current listing
- 943 • The Salt Lake County Local Emergency Planning Committee (LEPC) at 801-896-
- 944 7526 or the current listing
- 945 • Spill Notification form:
- 946 <https://airtable.com/appDHoRFj9Az6CiLe/pag9tvLEmClcgSAFO/form>
- 947 On Scene Response units will Notify the following:
- 948 • Salt Lake County Health Department
- 949 • Salt Lake Valley Emergency Communications Center
- 950 • Affected nearby jurisdictions
- 951
- 952 See Appendix B for more information on notification.
- 953
- 954

955 5 STANDARD OPERATING PROCEDURES

Situation and Assumptions	Concept of Operations	Situation Assessment	Operational Priorities	Standard Operating Procedures by Weather Incident
<p>This section provides specific severe weather event response actions and the responsible lead agency. The operational priorities are organized into time frames accounting for immediate response to sustained operations.</p>				

956 5.1 Overview

957 The Standard Operating Procedures

958 Response is the operational actions taken to save lives and prevent further impacts from
 959 the incident. The following sections outline responsible agencies, considerations, and
 960 response actions for hazardous materials specific response operations.

961 Once notified of a hazmat incident that requires a significant response, EM follows
 962 procedures outlined in the **CEMP Base Plan: Activation** to determine the activation level
 963 of the ECC.

964

965 5.2 Activation Stages

966 A series of "Activation Stages" has been devised to clarify response levels. However, it
 967 should be noted that these activation levels are intended as a guide only. Likely, a
 968 "Normal Response" in an area of the county having a fully equipped hazardous materials
 969 team may very well be a Community Emergency in an area of the county that has little or
 970 no response capability. In all cases, the level of health and environmental threat will be
 971 the critical factor in determining the response level.

972

973 This Hazardous Materials Plan will be activated in stages as follows:

974 **Normal Response: (NIMS LEVEL 3)**

- 975
- 976 • Emergencies are handled through normal response without reducing the available response to other incidents.

977 **Community Emergency: (NIMS LEVEL 3 or 2)**

- 978
- Emergencies may require significant commitment of resources.

979 **Minor Disaster: (NIMS Level 2)**

- 980
- 981 • Any disaster within the response capabilities of local government results in only a minimal need for state or federal assistance.

982 **Major Disaster: (NIMS Level 2 or 1)**

- 983 • Any disaster is likely to exceed local capabilities and require a broad range of state and
984 federal assistance. The Federal Emergency Management Agency (FEMA) will be
985 notified, and potentially federal aid will be predominantly recovery oriented.

986 **Catastrophic Disaster: (NIMS Level 1)**

- 987 • Any disaster that will require massive state and federal assistance, including immediate
988 military involvement. Federal aid will involve response as well as recovery needs.
989

990 **5.3 Assignment of Responsibilities**

991 **5.3.1.1 Purpose**

992 **Develop Plans**

993 Appropriate city and county departments/agencies shall develop and
994 maintain contingency plans to support the Salt Lake County Hazardous
995 Local Emergency Planning Committee’s ERP.

996 **Develop Facility Participation**

997 All agencies shall encourage the participation of business, industry,
998 government, and volunteer agencies in planning and support at all levels
999 of government aimed at developing an enhanced response and recovery
1000 capability to hazardous material releases.

1001 **5.3.1.2 Participants**

1002 **County/City Mayor**

1003 Appoint a County/Local Community Coordinator that is charged with
1004 reviewing all reported hazardous material incidents/accidents to appropriate
1005 local and state agencies.
1006

1007 **Community/Facility Emergency Coordinator**

- 1008 • Has working knowledge of the Salt Lake County LEPC Hazardous Materials
1009 Response Plan.
- 1010 • Advises County/City officials to ensure appropriate measures are taken to
1011 protect the population.
- 1012 • Serves in an appropriate capacity on the LEPC and provides technical input on
1013 developing hazardous materials response plans.
- 1014 • Notifies Salt Lake County Emergency Management (SLCo EM) and State
1015 Division of Emergency Management (DEM) of Community Emergencies or
1016 more significant hazardous materials incidents.
- 1017 • Assists the LEPC, through the planning process, in identifying individuals who
1018 should be assigned functional responsibilities necessary to the planning and
1019 implantation of the hazardous materials response plans

- 1020 • Develops, in conjunction with the LEPC and county officials, a system for rapid
1021 notification of the appropriate elected officials, key staff, public safety officials,
1022 volunteer organizations, and institutions/sites at risk.
- 1023 • Assist the local fire/emergency response agencies in the preparation for a
1024 coordinated re-entry into the evacuated area.
- 1025 • Develop and deliver training to those individuals, agencies, and services that
1026 will be expected to respond to a HazMat emergency.
- 1027 • Coordinates planning with the LEPC, Health Department, and hospitals to
1028 maintain the ability to handle and treat hazardous materials accident victims.

1029 **Salt Lake County Emergency Management Division**

- 1030 • Make appropriate notifications to county agencies and the Utah Division of
1031 Emergency Management (UDEM). The Division will also coordinate additional
1032 governmental and private assistance and coordinate arrangements for state
1033 and federal government assistance, as may be necessary.
- 1034 • Takes responsibility for the development, maintenance, and exercise of the Salt
1035 Lake County Comprehensive Emergency Management Plan, the LEPC
1036 Hazardous Materials Emergency Response Plan (ERP), that resides within the
1037 Salt Lake County Emergency Coordination Center (ECC).
- 1038 • Provide administrative support to the Salt Lake County Local Emergency
1039 Planning Committee (LEPC).

1041 **Local Emergency Planning Committee**

- 1042 • Hold scheduled public meetings to establish short and long-range plans
1043 subject to the requirements of SARA Title III.
- 1044 • Provide planning focus and support to facilities and companies planning for
1045 hazardous materials incidents at their location.
- 1046 • Receive notifications from Tier II facilities and respond to requests for
1047 assistance.
- 1048 • Receive comments from the public about areas of concern and/or problems.
- 1049 • Process Community Right-to-know requests in compliance with the law and any
1050 applicable LEPC rules and/or policies.
- 1051 • Respond to requests for information from private and public entities in
1052 compliance with the law and any applicable.
- 1053 • Receive technical incident response assistance, which will be accomplished
1054 using SARA Title III data and other information sources.
- 1055 • Adopt policies, rules, and procedures to accomplish the goals and objectives of
1056 the LEPC.

- 1057 • The LEPC may: Issue administrative notices, orders, and actions to enhance
- 1058 compliance.

1059

1060 **City/Salt Lake County District Attorney**

- 1061 • Act as legal advisor on items related to public safety.
- 1062 • Assist in legal issues that may arise due to the LEPC’s implementation of SARA
- 1063 Title III.
- 1064 • Assist in legal issues that may arise due to chemical accidents/incidents or
- 1065 violations.

1066

1067 **City/County Fire Departments**

- 1068 • Implement the Incident Command System (ICS) within the federally mandated
- 1069 National Response Framework & NIMS guidelines and assume the roles of
- 1070 Incident Command when responding within their own jurisdiction.
- 1071 • Determines the incident level and directs response operations regarding:
 - 1072 o Status of incident.
 - 1073 o Harmful nature of materials involved.
 - 1074 o Type, condition, behavior of shipping containers.
 - 1075 o Conditions (location, time, weather)
 - 1076 o Spread of hazardous materials after release: and
 - 1077 o Potential losses versus control measures available.
- 1078 • Decides which public protective actions are appropriate based on the initial
- 1079 phase of incident and clearly specifies objectives and tactics which may include
- 1080 but are not limited to:
 - 1081 o Establishing staging areas.
 - 1082 o Rescue of the injured and commence evacuating the exposure area.
 - 1083 o Coordinating with on-site authorities and the ECC.
 - 1084 o Coordinating, as well as implementing the necessary resources, to
 - 1085 neutralize or contain hazardous material or waste.
 - 1086 o Coordinating the activities of all support agencies at the Incident
 - 1087 Command Post (ICP). Also briefs health, medical, law enforcement
 - 1088 and other authorities on the hazard evaluation and environmental
 - 1089 assessment.
 - 1090 o Requests the necessary support by type (technical assistance,
 - 1091 manpower, equipment, etc) through dispatch, and if dispatch is

- 1092 overwhelmed, or the order is deemed outside of the normal
- 1093 requests, then the request is through the local EOC/ECC.
- 1094 o Developing and maintaining the HazMat Team Standard Operating
- 1095 Procedures (SOPs) and/or Standard Operating Guidelines (SOGs).
- 1096 o Aiding in search and rescue operations. Maintains records of all
- 1097 people in the exclusion area. Provides for decontamination of
- 1098 personnel and equipment.
- 1099 o Communicating through an established radio network system.
- 1100 Communications will be networked through the EOC/ECC, fire
- 1101 department mobiles, radios, mobile phones and pagers.
- 1102
- 1103 • The Incident Commander/Unified Command (IC/UC) shall have responsibility
- 1104 for all people at chemical fires, explosions, leaks, or spills. The Incident
- 1105 Commander should also direct and adopt all measures that are necessary and
- 1106 advisable for suppression of chemical fires, protection of life, property, and the
- 1107 environment.
- 1108 • The Fire Chief, Fire Marshal, UDEM, County/State Department of Health, and/or
- 1109 Incident Commander/Unified Command shall have the enforcement power, if
- 1110 necessary, to request facility personnel to remove any chemicals that may
- 1111 increase or catalyze the fire, explosion, or leaks to a dangerous or
- 1112 uncontrollable level, according to current applicable laws/statutes.
- 1113 • The Fire Department is responsible for the initial response, evacuation, and
- 1114 isolation, and if capable, containment of hazardous materials.
- 1115

City/County Public Information Officer (PIO)

- 1116 One person should be designated as the PIO by the Local Incident
- 1117 Command Agency.
- 1118
- 1119 o Initial Actions:
- 1120
 - 1121 ▪ Work with the joint information center and/or incident
 - 1122 commander on press releases.
 - 1123 ▪ Set up press briefing area in secure location.
 - 1124 ▪ Establish both incoming and outgoing telephone
 - 1125 communications at the press briefing area, if possible.
 - 1126 ▪ Periodically get status summary from incident commander.
 - 1127 ▪ Provide information at the press briefing area to local media
 - 1128 informing them as to the nature of the emergency, if possible.
- 1129 o Long Term Actions:
 - 1129 ▪ Coordinate press releases with all agencies involved.

- 1130 ▪ Coordinate with state and federal PIOs.
- 1131 ▪ Be a direct liaison with all news media.
- 1132 ▪ Do follow-up after the emergency is over for evaluation
- 1133 purposes.
- 1134 ▪ Offer on-going contact with media for wrap up.
- 1135 ▪ Represent the city/county at the Joint Information Center
- 1136 (JIC).

1137 **Law Enforcement (Police/Sheriff)**

- 1138 o Maintain law and order and provide field operations support to the
- 1139 Incident Commander/Unified Command (IC/UC).
- 1140 o Establish outer incident boundaries, determine location of access &
- 1141 traffic control points in accordance with IC/UC
- 1142 guidelines/recommendations.
- 1143 o Provide evacuation warning support and coordinate evacuation to
- 1144 sheltering areas or to pick-up points.
- 1145 o Maintain security of designated areas.

1146 **City/County Public Works**

- 1147 o Provide resources to support the Incident Commander.
- 1148 o Provide damage assessment regarding infrastructure including, but
- 1149 not limited to roads, bridges, selected buildings, and utilities.
- 1150 o Provide staff support to the Emergency Coordination Center and
- 1151 Incident Command Post.
- 1152 o Aid with traffic control, supplying barricades, etc.

1154 **Salt Lake County Health Department**

- 1155 o Provide technical advice and assistance in the alleviation of public
- 1156 health and environmental hazards associated with hazardous
- 1157 materials releases.
- 1158 o Provide appropriate information for actions associated with the
- 1159 decontamination, cleanup and disposal, or other handling of
- 1160 hazardous materials.
- 1161 o Aid in early assessment of health and environmental hazards
- 1162 associated with hazardous materials releases, by dispatching agency
- 1163 staff at the request of the Incident Commander.
- 1164 o Provide oversight of the responsible party or landowner in cleanup
- 1165 and disposal efforts, which may include, but is not limited to:

- 1205 disseminate emergency public information guidance and materials
- 1206 concerning protective actions to the population at risk. This may
- 1207 include the use of the Emergency Alert System (EAS), National
- 1208 Oceanic and Atmospheric Administration (NOAA) Weather Radios,
- 1209 TV Stations, and other available resources (reverse 911, social media,
- 1210 etc.).
- 1211 o Assist the local fire/emergency agencies in preparation for a
- 1212 coordinated re-entry into the evacuated area.
- 1213 o Develop and deliver training to those individuals, city agencies, and
- 1214 services that will be expected to respond to a HazMat emergency
- 1215 within their community.
- 1216 o Coordinate planning with the LEPC, Health Department, and
- 1217 hospitals to maintain an ability to handle and treat hazardous
- 1218 materials accident victims.
- 1219 o Assist American Red Cross with establishment of an evacuation
- 1220 shelter.
- 1221

City or Town Councils (or equivalent)

- 1222
- 1223 o Report to and function from an appropriate EOC/ECC, or other pre-
- 1224 designated central coordination point.
- 1225 o Participate in the Policy Group and in major policy decisions
- 1226 regarding active chemical incidents affecting their city.
- 1227 o Extend or cancel use of resources as emergency measures for public
- 1228 safety.
- 1229 o Establish a policy for mitigation and recovery within the jurisdiction.

Volunteer Organizations Responsibilities

- 1230
- 1231 o Maintain a comprehensive resource listing of all member
- 1232 organizations, points of contact, and types of services each
- 1233 organization could provide on a voluntary basis in case of hazardous
- 1234 materials emergency.
- 1235 o Derive consensus guidelines and standards from the member
- 1236 organizations as they pertain to hazardous materials.

Responsibilities Common to All Agencies/Facilities

- 1237
- 1238 • Designate personnel who are available and capable of responding to
- 1239 hazardous materials emergencies, including regular updates as personnel and
- 1240 training levels change.

- 1241 • Adhere to the provisions and procedures of the Salt Lake County Local
1242 Emergency Management Planning Committee Hazardous Materials Emergency
1243 Response Plan.
- 1244 • Channel on-site media communications through the designated Public
1245 Information Officer (PIO) or Incident Commander (IC).
- 1246 • Cooperate with the directions of the Incident Commander (IC) for on-site
1247 emergency response activities.
- 1248 • Educate and train employees in hazardous materials response on a continuing
1249 basis as required by 29 CFR 1910.120 and/or NFPA 471, 472, 473.
- 1250 • Participate in post-incident evaluation to aid future prevention and improved
1251 emergency response.
- 1252 • Conduct and/or participate in drills or exercises using their response system.
- 1253 • Participate in briefings, critiques and after-action reports/debriefs.
- 1254

1255 **Planning and Response Procedures**

- 1256 • Cities, Towns, and Salt Lake County are responsible for completing an
1257 Emergency Operations Plan (EOP) or Comprehensive Emergency Management
1258 Plan (CEMP), which includes a section on hazardous materials. A copy of the
1259 plan must be on file at the LEPC and be updated as per their requirements and
1260 statutes. That plan must comply with the following:
 - 1261 ○ Define response actions.
 - 1262 ○ Define the roles and expectations of each group and responders.
 - 1263
 - 1264 • Cities, Towns, and the County must create and/or maintain Standard Operating
1265 Procedures (SOPs) or Standard Operating Guidelines (SOGs) for response to
1266 hazardous materials incidents which must comply with the following:
 - 1267 ○ Define and assign the basic command functions, including a
1268 standard method of assuming and continuing command.
 - 1269 ○ Define a method to divide command responsibility through the
1270 delegation of areas and functions to officers.
 - 1271 ○ Describe all aspects of communications and dispatch.
 - 1272 ○ Define the rules for incident safety.
 - 1273 ○ Define guidelines that establish and describe tactical priorities and
1274 related support functions.
 - 1275 ○ Define a regular method of initial resource deployment.
 - 1276 ○ Outline the responsibilities and functions of various agencies, units,
1277 and organizations.

- 1278 o Take immediate action steps to safeguard public health and the
- 1279 environment.
- 1280 o Use emergency responder evaluation criteria to determine if a
- 1281 hazardous chemical, biological agent, or radioactive material, is
- 1282 present.
- 1283 o Notify City, Township, or Town Coordinators in a timely manner, who
- 1284 in turn shall report the incident to the LEPC.
- 1285
- 1286 • Each agency is responsible for the documentation of its costs for
- 1287 reimbursement.
- 1288

1289 **5.4 Emergency Notification**

1290
 1291 The initial notification of the covered release or accident is made by the facility or carrier.
 1292 The facility or carrier must report all qualifying incidents or emergencies adhering to all
 1293 Local, State, and Federal guidelines. Notification must be made in an expeditious
 1294 manner to ensure life safety, property preservation, and to protect the environment.
 1295 You will, without delay, immediately report the incident to (in order of importance and
 1296 report):

- 1297 • 911 (Local Jurisdiction)
- 1298 • The National Response Center at 1-800-424-8802 or 202-267-2675
- 1299 • The Utah State Department of Environmental Quality at 801.536.4123 or the
- 1300 current listing
- 1301 • The Salt Lake County Local Emergency Planning Committee (LEPC) at 801-896-
- 1302 7526 or the current listing
- 1303 • Spill Notification form:
- 1304 <https://airtable.com/appDHoRFj9Az6CiLe/pag9tvLEmClcgSAFO/form>
- 1305 • See Appendix B for more information on notification.
- 1306

1307 **5.5 Response**

1308 Public safety response is based upon the five response levels previously
 1309 described. No response will be made if the facility reports that the release is
 1310 non-reportable and is within the facility’s property line, and they have sufficient
 1311 in-house resources and pose NO threat to public safety.

1312 **5.5.1.1 Mitigation**

1313 On-site basic hazardous materials mitigation activities and planning are the
 1314 responsibility of the facility in accordance with federal, state, and local
 1315 requirements and regulations to conduct these activities.

1316 **5.5.1.2 Incident Management**

1317 Homeland Security Presidential Directive - 5 (HSPD-5) and 29 CFR 1910.120
 1318 require the use of the Incident Command/Management System for all
 1319 emergency response organizations.

1320 **5.5.1.3 Remediation/Clean up**

1321 Remediation work must be performed by qualified individuals with oversight by
 1322 State and County Health Departments, and the IC/UC, in accordance with
 1323 applicable local, county, state, and federal laws, federal regulations, rules, and
 1324 ordinances. The current state, county, or locally adopted rules or standards
 1325 which may include the International Fire Code (IFC), and the Utah Code
 1326 Annotated (UCA) 19-6-301 to 19-6-326 state that site remediation shall be
 1327 performed by the responsible party, or if they are unwilling or unable to, by the
 1328 property owner. If the responsible party or property owner is either unable or
 1329 unwilling to remediate the contamination, the jurisdictional agency may
 1330 contract for the activity and pursue a legal remedy.

1331 **5.5.1.4 Safe for Public Entry**

1332 The responsible party and/or property owner shall clean up hazardous
 1333 materials incidents and certify to the Health Department that the site is safe for
 1334 human occupancy.

1335 **5.5.1.5 On-Site Response Plan**

1336 In accordance with SARA Title III, each facility with Extremely Hazardous
 1337 Substances (EHS) is required to designate a Facility Emergency Coordinator
 1338 (FEC). The FEC is responsible for ensuring facility compliance with this plan and
 1339 all local, state and federal regulations.

1340 **5.5.1.6 Containment and Cleanup/Disposal**

- 1341 • The responsibility for selecting and implementing the appropriate emergency
 1342 containment procedures to protect public safety is assigned to the Incident
 1343 Commander.
- 1344 • The responsible party is, by law, responsible and liable for all cleanup/disposal
 1345 operations. Salt Lake County Health Department, in conjunction with the Utah
 1346 State Department of Environmental Quality and the U.S. E.P.A., is responsible
 1347 for overseeing and/or monitoring the cleanup/disposal operations.
- 1348 • The initial assessment of the incident is undertaken by the responsible party. It
 1349 should be recognized that the capability to assess the situation is supported by

1350 in-depth knowledge of chemicals and the environment. The responsible party is
 1351 liable for damages resulting from a release and is motivated to provide a timely
 1352 and accurate assessment of each situation. Other assessment capabilities are
 1353 available.

- 1354 o The Utah State Department of Environmental Quality can monitor
 1355 and assess exposure.
- 1356 o The Federal Regional Response Team has in-depth assessment and
 1357 monitoring resources.
- 1358 o Private sector resources that may include qualified individuals and/or
 1359 equipment.
- 1360 o Local or regional Hazardous Materials Teams at the request of the
 1361 IC/UC.
- 1362 o National Guard Civil Support Team (CST) at the request of an IC/UC.
 1363

1364 **5.5.1.7 Restoration**

- 1365 o The City, Towns, and/or County, in conjunction with state and federal
 1366 authorities, will direct the responsible party’s restoration efforts.
- 1367 o Treatment of all contamination is the duty of the responsible party
 1368 and/or approved contractor.
 1369

1370 **5.5.1.8 Resources for Cleanup and Disposal**

- 1371 o The State Department of Environmental Quality, Division of
 1372 Environmental Response and Remediation, 801.536.4123, may be
 1373 able to identify cleanup and disposal resources.

1374 **5.5.1.9 Documentation and Investigative Follow-Up**

1375 The responsibilities for documentation of accidental release fall upon facility,
 1376 transportation company, and may include federal, state, county or local officials
 1377 taking part in the incident and should include:

- 1378 • A written report of the incident including time, cause of spill, material and
 1379 quantity released, location, response actions, etc. (See Emergency Notification
 1380 Procedures Appendix)
- 1381 • To keep accurate records of the unauthorized discharge of hazardous material.

1382 **5.6 Procedures for Annual Testing and Updating the**
 1383 **Plan**

- 1384 • The Local Emergency Planning Committee (LEPC) for Salt Lake County and all
1385 member jurisdictions are responsible for scheduling, designing, conducting,
1386 and evaluating all areas of the plan.
- 1387 • An exercise will be conducted to train personnel in the use of this plan. Each
1388 exercise and/or incident will be followed by a critique to review the
1389 effectiveness of this plan and its support system. The plan will be revised based
1390 on the results of the exercise or incident evaluation.
- 1391 • As revisions are made, revised, and updated, changed pages will be provided
1392 to all individuals and agencies involved with the execution or support of the
1393 plan. This may be done in either hard copy or digital format. It is the
1394 responsibility of the copyholder to keep individual copies current.

1395 **5.6.1.1 Training**

- 1396 • Training courses are available with the state through the Utah State Fire
1397 Marshal's Section, FEMA, U-Train, Utah Valley University's Utah Fire and Rescue
1398 Academy (UFRA), and other approved sources.
- 1399 • Responders shall be trained in the proper safety procedures, as required by 29
1400 CFR 1910.120 subparagraph q, to use when approaching a hazardous
1401 materials site, shall have a working knowledge of how to use the DOT
1402 Emergency Response Guidebook, and shall know how to find shipping papers
1403 in trucks, aircraft, watercraft, and trains.
- 1404 • Responders shall have a basic understanding of and be able to apply ICS and
1405 other NIMS components.
- 1406 • Managers who fill the functionary positions in ICS should have specialized
1407 training to enable them to implement the assigned roles.
- 1408 • All responders to hazardous materials incidents must be trained to the level
1409 required by OSHA Regulation 29 CFR 1910.120.
- 1410 • Local Emergency Planning Committee members shall participate in a minimum
1411 of one exercise per year, pertaining to the Emergency Response Plan (ERP).

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EMERGENCY RESPONSE PLAN /HAZMAT ANNEX APPENDICES

1434 **APPENDIX A: MUTUAL AID AGREEMENT JOB**
 1435 **AIDS**

1436 **Salt Lake Valley Automatic Mutual Aid Agreement**

1437 Jurisdictions who have signed the Salt Lake Valley Automatic Aid Agreement will provide
 1438 available personnel and equipment to assist Salt Lake County either through automatic
 1439 mutual aid or upon a mutual aid request, provided that a jurisdiction has personnel and
 1440 equipment reasonably available for use. **Table 2** Table below details the different
 1441 aid processes available through this agreement.

1442 *Table 2: Salt Lake Valley Automatic Mutual Aid Agreement Processes*

Characteristic	Automatic Mutual Aid	Mutual Aid Request
Activation Process	<ul style="list-style-type: none"> Aid is activated without a request if an incident impacting public safety occurs. 	<ul style="list-style-type: none"> Aid is requested from fire department command staff to support response to major incidents.
Resource Deployment	<ul style="list-style-type: none"> Support provided is dependent on the immediate operational capacity of the County. Resources are dispatched by dispatch centers or public safety answering points (PSAP). 	<ul style="list-style-type: none"> Aid is deployed by a jurisdiction in coordination with their associated organizational counterpart.

Characteristic	Automatic Mutual Aid	Mutual Aid Request
Cost	<ul style="list-style-type: none"> Aid is typically provided at no cost to the County. 	<ul style="list-style-type: none"> Aid is provided by an outside jurisdiction without cost for the initial operational period of 24 hours. The reimbursement of costs for aid beyond the initial operational period is subject to the agreement between Salt Lake County and the responding jurisdiction established either at the time of the request, a previously established agreement for cost allocation and/or reimbursement, or through a bill within 60 days of the end of the incident.

1443

1444

1445

1446 **State Mutual Aid Act**

1447 During a declared emergency, DEM can request additional assistance from other
 1448 jurisdictions within Utah through the State Mutual Aid Act. Critical actions to obtain
 1449 assistance include:

- 1450 • The Mayor of Salt Lake County or the officer's designee submits a written oral
 1451 request for resources. Oral requests must be reduced to writing and delivered to
 1452 the other participating jurisdiction as soon as practical or within a specified time
 1453 frame.
- 1454 • Responsible State ESF reports the request to the DEM Director.
- 1455 • The emergency response personnel, equipment, and other assets of a responding
 1456 jurisdiction or the State are under the operational control of the incident
 1457 management system of the State or Salt Lake County.

1458 **American Public Works Association Mutual Aid**
 1459 **Agreement**

1460 This mutual aid agreement was made by the Department of Public Works & Municipal
 1461 Services (PW) and related service agencies to provide mutual assistance in times of
 1462 emergency. This Public Works Emergency Management Alliance mutual aid program
 1463 creates a method of support where participating agencies which sustain damage from a
 1464 disaster can obtain emergency assistance, in the form of personnel, equipment, materials,

1465 and other associated services, from other agencies. Critical actions to obtain assistance
1466 include:

- 1467 • The on-scene IC or UC, as designated by PW, serves as the requesting entity.
- 1468 • The on-scene IC or UC provides response assignments.
- 1469 • Personnel, equipment, and materials of the assisting agency are released from the
1470 response when it is determined by the on-scene IC or the UC.

1471 **Multi-Jurisdictional Mutual Aid Agreement for Sheriff** 1472 **and Police Services**

1473 The purpose of the Multi-Jurisdictional Mutual Aid Agreement for Sheriff and Police
1474 Services mutual aid mechanism is to provide assistance in emergency situations which
1475 require additional security resources. Critical actions to obtain assistance include:

- 1476 • The police representative, who is responsible for coordinating law enforcement
1477 response to the emergency, designates dispatcher or other personnel to request
1478 assistance from other jurisdictions.
- 1479 • The agency who provides support to the County is responsible for determining
1480 when it is unable to provide resources, personnel, or equipment.
- 1481 • The responding personnel reports to the IC upon arrival at the scene of an
1482 emergency or the location where assistance is requested and follows the directions
1483 of the IC with respect to the emergency.

1484 **Utah Water and Wastewater Agency Response** 1485 **Network**

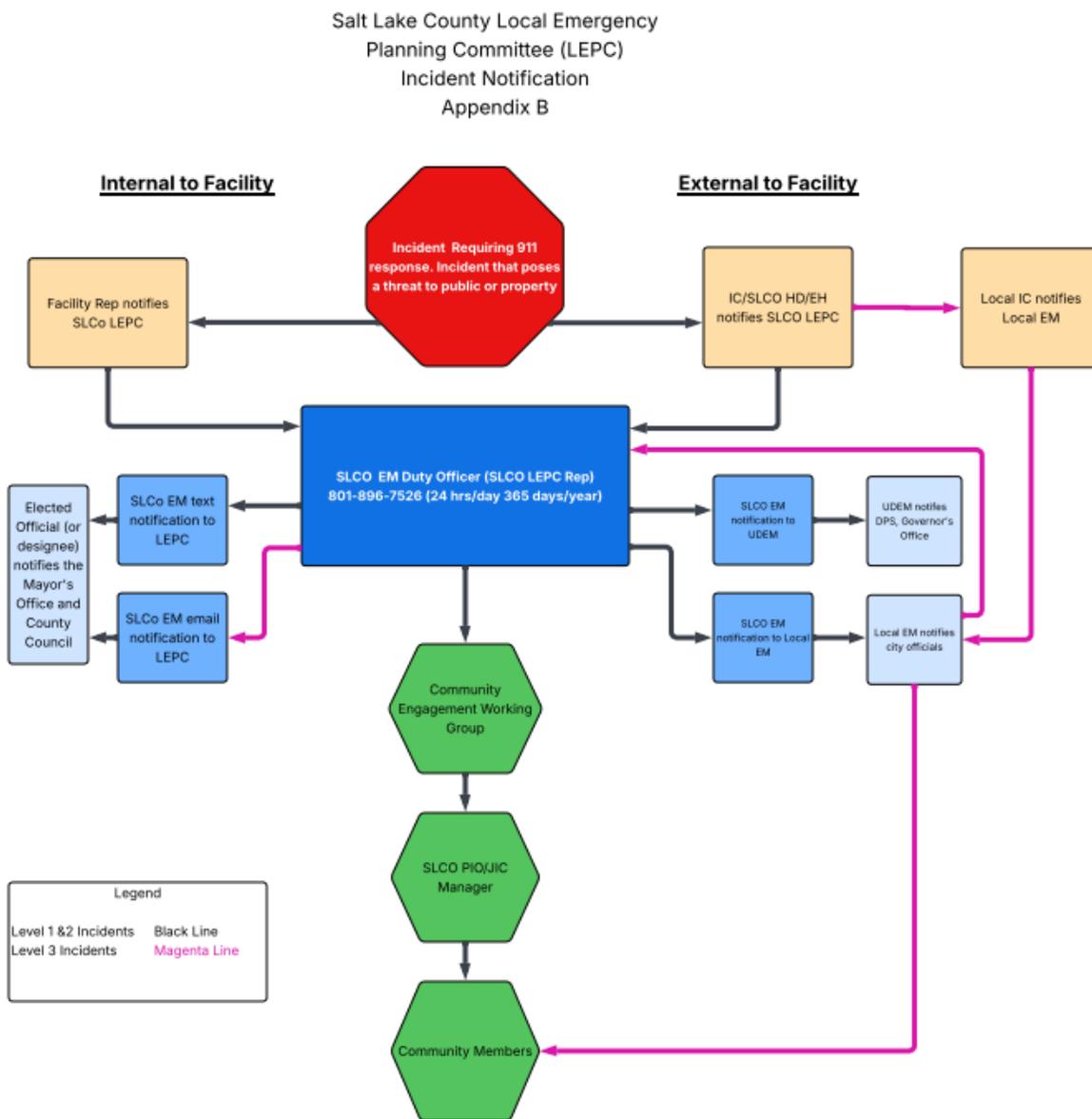
1486 The UTWARN compiles a pool of certified water and wastewater operators who are
1487 available to provide emergency on-site assistance to other systems during an incident.
1488 Critical actions to obtain assistance include:

- 1489 • Salt Lake County identifies the water and wastewater related resources needed.
- 1490 • IC or UC directly contacts other UTWARN members or contacts the UTWARN
1491 administration for resource requests.

1492

1493

1494 **APPENDIX B:**



1495

1496 Spill notification form:

1497 <https://airtable.com/appDHoRFj9Az6CiLe/pag9tvLEmClcgSAFO/form>

1498

1499 LEPC helpful resources: <https://saltlakecountyem.gov/helpful-resources/local-emergency-planning-committee/>

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1501 **APPENDIX C: PUBLIC NOTIFICATION TOOLS**

1502 Below is information on the primary tools and strategies that can be used for public
 1503 notification during a public health incident.

Type	Function
Social Media	<ul style="list-style-type: none"> • Used primarily to issue precautionary alerts, advisories, and warnings via multiple platforms • Allows rapid dissemination of messages that have the potential to reach a broad audience and to correct misinformation
Salt Lake County Websites	<ul style="list-style-type: none"> • Provides a secure and reliable location for County residents to seek relevant, timely, and reliable sources of information • Allows a singular location from trusted authorities, which is effective for combatting misinformation in times of emergencies • Provides City Council district community bulletin boards
Television and Radio News	<ul style="list-style-type: none"> • Contacts directly or through press briefings, and requests to air messages that alert the public of an active or possible threat
Local Mass Notification System	<ul style="list-style-type: none"> • Utilizes reverse 911 Current community notification system, Reverse Notification, Nextdoor.com, or other voluntary sign-up notification systems implemented at the municipal level
Regional Emergency Notification Systems	<ul style="list-style-type: none"> • Can be directed to residents in specific geographic areas and on a shared system serving all residents in Salt Lake County • Able to call landline phones and will leave an automated message • Notifies residents of shelter locations, evacuation orders, or other time sensitive emergency material • As allowed by statute, this system can contact all listed and unlisted telephone uses the region’s 911 database provided by the municipal telephone company

Type	Function
Integrated Public Alert and Warning System (IPAWS)	<ul style="list-style-type: none"> • FEMA’s national system for municipal alerting, which can be used by federal, State, local, tribal, and territorial alerting authorities in specific geographic areas • Uses cell towers in a geographic area to send alerts to residents or television broadcast and broadcast radio to interrupt programming with the emergency message. Can use either cell towers or television and radio or a combination of both • Provides public safety officials with a fast and effective way to alert and warn the public about incidents and emergencies • Has a limited character count of 360 including punctuation, with the ability to send messages in English and Spanish
Door-to-Door/Sirens	<ul style="list-style-type: none"> • In extreme/severe situations, loudspeakers can be mounted to police or fire apparatus to broadcast emergency messages in affected communities • Emergency personnel can be tasked to go door-to-door to inform residents of a need to evacuate or shelter-in-place • Door-to-door should be used to alert residents that are deaf or hard of hearing • Identifying physical community bulletin boards to place flyers and other communication materials
Visual Messaging Boards/Freeway Signs	<ul style="list-style-type: none"> • Visual Messaging Boards (VMS) are physical electronic signs that can be placed along roads to display emergency or evacuation information • Freeway Signs are electronic signs above major freeways that can display short emergency and/or warning information

1504

1505

APPENDIX D: ACRONYM LIST

Acronym	Definition
ARC	American Red Cross
CEMP	Comprehensive Emergency Management Plan
CERT	Community Emergency Response Team
CWLF	Cities Water Loan Fund
DEM	Utah Division of Emergency Management
DMORT	Disaster Mortuary Operational Response Team
ECC	Emergency Coordination Center
EM	Salt Lake County Emergency Management
EMS	Emergency Medical Service
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
GIS	Geographic Information System
IC	Incident Commander
ICS	Incident Command System
IPAWS	Integrated Public Alert and Warning System
JIC	Joint Information Center
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
NWS	The National Weather Service
PIO	Public Information Officer
PW	Department of Public Works & Municipal Services
RCF	Revolving Construction Fund
RSF	Recovery Support Function
RTF	Recovery Task Force
UC	Unified Commander
UFA	Unified Fire Authority
UHI	Urban Heat Islands
UPD	Unified Police Department
UTNG	Utah National Guard
UTWARN	Utah Water and Wastewater Agency Response Network

1506