Chemical Release Investigation Kit & Template (CRIKT)
For Local Health Departments

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<tr>
<th>CHEMICAL</th>
<th>TRADE NAME(S)</th>
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<tbody>
<tr>
<td>Chlorine Dioxide</td>
<td>Chlorine oxide, Chlorine peroxide, Chlorine (IV) oxide, Chloryl</td>
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**PREPARING FOR THE INVESTIGATION**

**Know the Agent**

- Chlorine dioxide is a yellow to red gas or a red-brown liquid that is not naturally found in the environment.
  - Read about chlorine dioxide in the chlorine dioxide Fact Sheet.

- Contact:
  - Public Health Preparedness & Response Branch (PHP&R): 888.820.0520.

- Print and review form:
  - Chemically Exposed Persons Line Listing.

**CONDUCTING THE INVESTIGATION**

**Evaluate Release/Exposure**

- Define scale/scope of exposure (work with N.C. Emergency Management, HazMat, an Environmental Health Specialist at the local or state level, N.C. Department of Environment and Natural Resources [N.C. DENR], and U.S. Environmental Protection Agency [U.S. EPA] if applicable).

**Identify Route of Human Chemical Exposure**

- Identify route of exposure:
  - Inhalation
  - Ingestion
Chlorine Dioxide Investigation Steps

June 2015

Dermal (Skin) Injection

- Interview responders and/or exposed individuals to obtain additional information about the chlorine dioxide exposure within 24-hours.

**Describe Exposed Population**

- Determine the following:
  - Geographic area affected
  - Population affected (general population, employees and residents)
  - How population exposed (in vicinity, inhalation or direct contact)
  - Define cases within the exposed population
- Contact OEEB (919.707.5900) to assist in developing a risk assessment to be shared with officials.
- Once completed, provide OEEB with the Chemically Exposed Persons Line Listing.

**Implement Control Measures to Prevent Additional Exposures**

- Decide on measures to protect citizens and the surrounding communities.
- The environmental health specialist should consult with OEEB to discuss next steps to ensure no additional individuals are exposed.
- Inform residents and businesses of the chlorine dioxide exposure through local emergency notification system, local TV and radio. Important points to include:
  - Location of release/exposure
  - Geographic area affected
  - Shelter-in-place instructions
  - Where to evacuate if needed
  - Where to find shelter
  - Where to seek medical care
- For more information, please listen to your local radio station or watch your local news channel.
- Work with your local incident management team and local health director to determine steps to be taken to re-enter residences and
businesses.

- The local incident management team will determine when residences and businesses are acceptable for re-entry and alert the local health director, who will then participate in the final decision.
- Your local health director will then communicate with the on-scene coordinator.
- The on-scene coordinator will then communicate to the community when they are permitted to return home or to their place of employment.

### INVESTIGATION RESULTS

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<th>Case Finding</th>
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<td>• During the course of the investigation, interview other exposed individuals for symptoms related to the chlorine dioxide exposure.</td>
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<th>Routine Precautions</th>
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<td>• Communicate the following control measures with residents/business owners:</td>
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<td>Wash any areas that have been exposed to chlorine dioxide (only with water) and remove clothing that were exposed to the chemical to prevent the tracking of chemical to other areas.</td>
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**SPECIAL CONSIDERATIONS**

**Risk Communication**

- N.C. DHHS Communications Office 919. 855.4840 is available to assist local health departments with communication efforts as needed.

**ADDITIONAL INFORMATION**

**Glossary of Terms**

- **DENR**: Department of Environment and Natural Resources
- **ED**: Emergency Department
- **EHS**: Environmental Health Specialist
- **EPA**: Environmental Protection Agency
- **OEEB**: Occupational and Environmental Epidemiology Branch
- **PHP&R**: Public Health Preparedness & Response