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

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>TRADE NAME(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel</td>
<td></td>
</tr>
</tbody>
</table>

**PREPARING FOR THE INVESTIGATION**

**Know the Agent**

- Nickel is a hard, silvery-white metal.
  - Read about nickel in the Nickel 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 Environmental Quality [N.C. DEQ], and U.S. Environmental Protection Agency [U.S. EPA] if applicable).

**Identify Route of Human Chemical Exposure**

- Identify route of exposure:
  - Inhalation (as dust)
  - Ingestion
  - Dermal (skin) & eye contact
- Interview responders and/or exposed individuals to obtain additional information about the nickel exposure within 24 hours.
| Describe Exposed Population | • Determine the following:  
  o Geographic area affected  
  o Population affected (general population, employees and residents)  
  o How population exposed (in vicinity, inhalation or direct contact)  
  o Define cases within the exposed population.  
  o Contact OEEB (919.707.5900) to assist in developing a risk assessment to be shared with officials.  
  o 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/businesses of the nickel exposure through local emergency notification system, local TV and radio. Important points to include:  
  o Location of release/exposure  
  o Geographic area affected  
  o Shelter-in-place instructions  
  o Where to evacuate if needed  
  o Where to find shelter  
  o 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/businesses.  
  o The local incident management team will determine when residences/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

#### Case Finding
- During the course of the investigation, interview other exposed individuals for symptoms related to the nickel exposure.
  - Work with your local medical facilities, local incident management team and/or the first responders to compile the exposed persons’ information.
  - Contact local hospitals to determine total number injured, hospitalized, ED visits and deceased.
  - Contact N.C. DETECT, North Carolina’s state syndromic surveillance system for additional information: 919.843.2361.
- Advise symptomatic individuals, especially children, to see their healthcare provider immediately for evaluation.

#### Routine Precautions
- Communicate the following control measures with residents/business owners.
  - Remove all ignition sources from the immediate area.
  - Use a high efficiency particulate arrestor (HEPA) or charcoal filter to minimize the amount of nickel dust in the air and ventilate the area.
  - People not wearing personal protective equipment (PPE) should be restricted from the affected area.
Nickel waste should be disposed of in a sealed container in a sanitary landfill.

### SPECIAL CONSIDERATIONS

**Risk Communication**

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

### ADDITIONAL INFORMATION

**Glossary of Terms**

| DEQ: Department of Environmental Quality |
| ED: Emergency Department |
| EHS: Environmental Health Specialist |
| EPA: Environmental Protection Agency |
| OEEB: Occupational and Environmental Epidemiology Branch |
| PHP&R: Public Health Preparedness & Response |