TP-4.0 Purpose and Objective
This plan will describe how the City of Eden will respond to uncontrolled loss or leak of Chlorine gas. Chlorine is a toxic gas and an uncontrolled loss or leak can threaten the health and property of the population near the City’s Water Treatment Facilities on Mebane Bridge Road. Chlorine is used as a disinfecting agent at the Robert Harris Water Filtration Plant and the Mebane Bridge Wastewater Treatment Plant. Chlorine is received and used at these facilities in one-ton cylinders. All efforts are made at these facilities to use and handle chlorine according to the established standards and practices of the Chlorine Institute. The purpose of this plan is to provide an organized response should chlorine ever be released because of human error or mechanical failures. Should there be a chlorine release, the primary objective of the City will be to protect public health.

TP-4.01 Annual Review Date
The plan is to be reviewed and updated on an annual basis on the effective date.

TP-4.1 Invoking the Response Plan
Water Treatment Facilities employees will begin the response plan following an affirmative report by a Chlorine Leak Confirmation Procedure or there is other evidence that confirms a leak is occurring. Employees will begin to implement this response plan as soon as it is positively confirmed chlorine is leaking. As quickly as possible, all employees on site should be accounted for. Any personnel on the Police Firing range will be instructed to leave the area immediately.

TP-4.2 Command System and Responsibility
City facility personnel will take charge of the site initially. The ranking member of staff on site shall take charge and begin to implement the response plan. As staff personnel come on site, they will assume command and the command will be handed up as more senior management personnel arrive. Ultimately, incident command will rest with the Fire Chief or the On Duty Fire Chief when they arrive. The safety officer on site will be a staff member of the plant where the problem exists. The safety officer will advise the incident commander throughout the incident with working knowledge of the facility. The safety officer will have the authority to stop the operation should they feel that any personnel would be endangered by the actions of the operation.

TP-4.3 Notification of Appropriate Agencies to Response
(Agency numbers are on the last page.)
The North Carolina State Regional Response Team stationed in Greensboro will be contacted through the County Fire Marshal’s Office via 911 as the primary response unit for a Chlorine Release or Hazard Situation. Harcros Chemicals, the City’s chlorine supplier, should be contacted. The backup for the NC Regional Response Team for Haz Mat services is A & D Environmental Services, Inc. or Shamrock Environmental Services. They should be notified immediately and appraised that a response is needed.
If the leak is severe enough that people and/or property offsite are endangered, call 911 and begin a response of the police department to control the offsite areas threatened. Wind direction should be determined before calling to advise responding agencies which direction to approach the facilities. The police department is to be notified to send two officers to the facilities for control of traffic or evacuation of people if the need arises. The fire department is to be notified such that they can be on site with SCBA support equipment. Eden Rescue Squad is to be requested to send one ambulance to provide medical monitoring of responding personnel and provide care for any personnel who may need treatment for chlorine inhalation.

**TP-4.4 Crowd Control and Relocation/Evacuation**
Once the situation has been evaluated, a determination should be made for the safety of adjacent residents and other people in positions of possible exposure. Wind direction and speed will be considered in this decision. The humidity in the summer can influence the dispersion of the chlorine. A high humidity usually presents in low wind conditions and increases the concentration of the chlorine downwind. If possible, the information should be processed through the CAMEO computer program on site to determine the areas for potential hazardous exposure. The predominating wind in the area is to the Northeast. Potential areas to Northeast to protect people would be the Eden Solid Waste Transfer Station, Heat and Air Controllers, Dents and More, Rockingham Chiropractic Center, Roll-About, Eden Veterinary Hospital, State Employees' Credit Union, Sport's Medicine Clinic and Eden Family Dentistry Office. To the west the Golf Course grounds keeper’s resident and people on the golf course should be alerted to the hazard. If the chlorine leak is at the Wastewater Treatment Plant, the Water Plant should be on alert if the wind direction is northerly. If the chlorine leak is at the Water Plant, the Wastewater Treatment Plant should be alerted if the wind is calm or Southerly. Because of the lower elevation of the Wastewater Treatment Plant, chlorine will tend to settle to lower areas if the wind does not disperse it. Two police officers should take positions with one on each end of Mebane Bridge Road to control access to the response site.

**TP-4.5 Establishment of a Command Post**
The Command Post (CP) shall be established approximately 100 yards from the leak source. The CP should be established at a location where the leak can be viewed by Incident Command to insure operational safety. Wind direction and relative wind speed shall be evaluated if necessary to establish the CP closer than 100 yards from the leak to control the operation. The CP shall be set up in such a way as to be ready to move on a moment’s notice if conditions change. Only personnel who have been trained for chlorine haz mat response will be involved in the response activity. Personnel job assignments should be made as soon as an appropriate number of responders arrive. Once Emergency Response Team Personnel are on site, their personnel shall direct the activities for the operational response to contain the chlorine leak. The MSDS (Material Safety Data Sheet) for chlorine should be reviewed as a quick refresher of the properties of chlorine for any personnel involved in the response.

**TP-4.6 Address rescue of any down person**
At this point in coordinating a response, consideration should be given to immediate retrieval of any salvageable personnel in the hot zone. All effort should be directed to the retrieval of personnel unless the chlorine leak threat is severe enough to cause concern for other people in the surrounding area.

**TP-4.7 Notify / alert emergency medical facilities**
The local hospital's emergency room should be notified of the situation and the possibility that there may be personnel injured in the response activity to be treated at the hospital facility.
**TP-4.8 Decontaminate personnel and equipment**

Decontamination of personnel who enter the hot zone should consist of a thorough water wash down. Water hose from a fire truck or water supply may be used. The responder should be thoroughly washed down before removing the class A suit. Because chlorine is a gas, there should be little residual chlorine on the responder’s suit. Decontamination personnel should require no special protection if the responder is thoroughly hosed down with water prior to touching the suit. Containment of the wash down water will not be necessary. Should a responder suit be torn or damaged during a response, the responder would need to thoroughly wash with water and remove all exposed clothing that may have adsorbed chlorine. Extreme care should be taken when coming off air supply because residual chlorine in responder clothing could be concentrated enough to cause respiratory problems.

**TP-4.9 Follow-up / Incident Wrap-up**

The incident shall be concluded when the leak situation is no longer a threat and a process is in place to return the chlorine to vendor or the chlorine can be used up in plant process. A meeting to critically review the response should be scheduled quickly to assess the response’s effectiveness and suggest improvement could be made.

**TP-4.10 Emergency Contacts**

Numbers Area Codes are 336 unless otherwise given

<table>
<thead>
<tr>
<th>Contact</th>
<th>Title</th>
<th>Cell Phone</th>
<th>Home Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terry Shelton</td>
<td>ES Director</td>
<td>932-0419</td>
<td>623-1950</td>
</tr>
<tr>
<td>Dena Reid</td>
<td>Water Plant Supt.</td>
<td>932-5206</td>
<td>552-4217</td>
</tr>
<tr>
<td>Melinda Ward</td>
<td>Wastewater Supt.</td>
<td>616-4755</td>
<td>276-632-2385</td>
</tr>
<tr>
<td>Melanie Clark</td>
<td>Water Plant Chief Operator</td>
<td></td>
<td>613-8473</td>
</tr>
<tr>
<td>Joel Freeman</td>
<td>Wastewater Chief Operator</td>
<td>613-6973</td>
<td>267-9148</td>
</tr>
<tr>
<td>Eden Fire Dept.</td>
<td></td>
<td>911</td>
<td></td>
</tr>
<tr>
<td>Eden Police Dept.</td>
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<td>Eden Rescue Squad</td>
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<td>County Emergency Medical Services</td>
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<td>911</td>
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</tr>
<tr>
<td>County Fire Marshal</td>
<td></td>
<td>634-3000 or 911</td>
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</tr>
</tbody>
</table>

**Environmental Service that will respond to chlorine emergencies**

- A & D Environmental Services, Inc. 336-434-7750 or 800-434-7750
- Shamrock Environmental Corporation 800-881-1098

**CHLORINE SUPPLIER**

- Emergency Numbers
  - HARCROS Thomasville 336-475-1391
    - Donald Darnell Residence 336-316-0311
    - Jerry Kanoy Residence 336-475-8969
  - Chemtrac 800-424-9300
  - Morehead Memorial Hospital 623-9711

**Notify the City Manager if the Respond Plan is activated through the Police Department.**