



EMERGENCY PUMPING POLICY



League City, TX

1 Overview

This document describes the procedure, methods, and considerations for the operation of emergency pump(s) to assist the draining of a leveed subdivision with controlled discharge structures during excessive rainfall and flooding events. Such use of pumps is intended only to supplement the subdivision's permanent drainage system, since the permanent system must continue to function to provide the much greater proportion of the drainage capacity for the subdivision. Pumps are subject to mechanical failure, interruption of power, and theft/vandalism, and even when functioning properly, the pump(s) is not expected to prevent the flooding of houses in a catastrophic rainfall or flooding event.

2 Scope/Application

The procedures contained in this document are to be used by field personnel when using emergency pumps during excessive rainfall and flooding events. On the occasion that City of League City field personnel determine that any of the procedures described in this section cannot be safely implemented, alternative procedures will be considered and documented to the Director of Public Works along with a description of the circumstances requiring the alternative procedure(s).

3 Safety

Proper safety precautions must be observed when mobilizing and operating the emergency pumps described in this section.

4 Equipment and Materials

At a minimum a trailer mounted six inch (6"), Diesel-Driven, Dry Prime Pump capable of pumping water at a rate of 800 to 1,200 gallons per minute (GPM) with applicable suction and discharge piping.

5 Procedure

A rain gauge, flood depth gauge, and two (2) staging pads must be installed. Each staging pad must be constructed of an all-weather surface and be at least 20' by 30' in size. The rain gauge must be installed on a 4"x4" post at least 4' in height with a concrete base either at the closest adjacent sanitary sewer lift station or other City of League City owned site. The flood depth gauge must be permanently installed at the low point of the detention pond.

The emergency pump is to be pre-staged at the detention pond upon the occurrence of any of the following:

1. At least 24 hours prior to the expected landfall in the League City area, as forecast by the National Weather Service, a Hurricane or Tropical Storm;
2. At least 24 hours prior to a rain event forecast by the National Weather Service that is expected to produce in excess of eight inches (8") of rainfall within a 24-hr time-period; or

3. A judgement of the Director of Public Works or designee, based upon direct field observations that the mobilization of a pump is warranted.

The emergency pump will be activated at the detention pond when the Director of Public Works or designee, observes a minimum of five feet (5') of water in the detention pond (*equivalent to 9' mean sea level*). This depth will be visually determined using the permanently installed flood depth gauge.

Once activated, the emergency pump will be monitored at a minimum of every 2 hours to ensure safe and efficient operation.

The pump will be turned off when there is two feet (2') or less of water within the detention pond as indicated by the flood depth gauge. The pump will remain pre-staged on site until the storm event has passed as determined by the Director of Public Works, or designee.

The rain gauge will be checked after every event that the pump is pre-staged and a record of all readings will be maintained.

The pad sites will be inspected annually and also after every event the pump is pre-staged and maintenance records will be maintained.

6 Procedure Review

This procedure should be reviewed at a minimum of once every four (4) years but may be reviewed at any time.

Revisions to the procedure should be reviewed and approved by the Director of Public Works or designee.