

Proposed bunding of effluent tank farm at Princes – Long Sutton

1. Introduction

- 1.1 The proposal is to construct a dwarf wall around the perimeter of the Effluent Tank Farm and to combine this with a “dry lined basin” to fully contain the volume of effluent that may be generated by a catastrophic failure of the primary containment of effluent tanks volume to be stored will be in accordance with EA requirements e.g., the greater of 110% of the volume of the largest tank or 25% of the volume of all the tanks enclosed by the bund.
- 1.2 This document is to be read in conjunction with Princes operating procedure and HBPW construction drawings.

2. Bullet point answers to queries

- The effluent from a failure of tanks will not enter the Anglian Water Authority foul water drainage. Manhole covers to the foul water drainage which occur within the bunded area will be replaced with “sealed” covers to prevent any effluent entering the foul sewer.
- Effluent from an accidental surcharge will not enter the Anglian Water Authority stormwater sewers at any time. Pumps installed to evacuate rainwater from the bunded area, and the dry basin will not operate automatically. The pumps will require a positive decision by Princes personnel in accordance with written procedures to operate the pumps.

Effluent in the dry basin will in all cases be returned to the effluent treatment plant or will be removed from site in tankers of a registered contaminated waste contractor

- The provision of the bunded area and the dry basin will in fact reduce the current non attenuated hardened impermeable area draining to the Anglian Stormwater Drains
- Clean stormwater from the following storm return periods will be evacuated at the following rates and sent to Anglian Water Authority:
 - 1: 1 year 1.86 litres per second
 - 1: 30 years + climate change 5.24 litres per second

- 1:100 years + climate change 7.62 litres per second

The total plan area of the bunded area and dry basin is 1.46 hectares.

The volume of the dry basin exceeds the required volume for attenuating the above storm events including considering the worst case of zero outflow.

It is reiterated that the pumps to evacuate stormwater from the dry basin will require manual intervention by Princes personnel in accordance with agreed operating procedures and it is possible that there will be zero outfall from the basin during a storm event

- The floor of the dry basin will be laid to a fall to prevent shallow puddles forming in the base of the dry basin.
- All existing stormwater drainage gulleys and outlets etc. within the bunded hardstanding will be capped off and sealed to prevent any effluent discharge into Anglian Water Authority stormwater sewers. New stormwater drainage will be installed gulleys and outlets will be installed in the bunded hardstanding to eliminate ponding and to direct effluent to the dry basin. There will therefore not be any effluent entering the Anglian stormwater drainage system.