

Appendix 4a – Bulk Storage and Containment Measures (including all risks and controls) – Please refer to Main table in SCR Section 5.1. for full list of tank contents

Zone	Contains	Activity	Pollution potential/Risk Scenario	Records of Pollution	Pollution prevention measures	Primary containment	Secondary containment	Testing/ inspection
Zone 1								
Odour control chemicals	Bulk Tanks and IBCs	Transport and unloading	Spillage on installation roads discharging to land through defects in hardstanding	No evidence/records of spillage	Yes	Road Tanker/Site Roads	Bunded tanks and pallet bunded IBCs	Visual inspection – All deliveries supervised
		Decanting/ Movement (IBCs)	Spillage from forklift (from storage in zone 5) via site roads, across sensitive drains.	No	Yes	IBCs	Hardstanding	Visual inspection
		Storage	Failure of primary containment. Risk of release to ground.	No	Yes	Storage tanks/IBCs	Bunds	Visual inspection
Zone 2								
Effluent Treatment	Effluent tanks Below ground collection sump	Overfilling	Spillage onto concrete hardstanding Back up into process effluent system. Potential to accumulate in yard area.	No Has occurred.	Yes	Effluent tank	Float level controls Process water system – backs up into spare capacity.	Pump tested (emergency surface water pump)
		Storage	Failure of containment leading to spillage to ground (concreted)	No evidence or records	Yes	Effluent tank	None	NA
ABP Storage	Fat (5 Tanks) - separate areas	Filling	Failure of pipework/overtopping	No visual evidence of overfilling	Yes	Tank	Hardstanding	Daily checks for tanks. Capability of manually moving storage into another tank
		Storage – 1-3	Failure of containment leading to spillage to hardstanding/ foul system/ land (area of unmade ground near these tanks).	No	Not fully	Tank	Hardstanding	Daily recorded checks of tanks
		Storage - 4-5	Failure of tanks, release to concreted ground.	No	Yes	Tank	Hardstanding	Daily recorded checks of tanks
Boiler Chemicals	Small tanks (300 litre)	Storage	Failure of small storage tank, release to ground.	No evidence or records of spillage	Yes	Tank	Bund	Daily recorded checks of area
Zone 3								
Cooling Tower Chemicals	IBCs	Storage	Failure of containment leading to spillage to land	No evidence or records of spillage	Yes	IBC	Bunded pallet	NA

Odour control (Scrubber 3)	IBCs	Unloading	Spillage on installation roads. Entering road drainage, hence surface water drainage system	No evidence or records of failure	Yes	Road tanker/IBC container	Hardstanding/Drains	Supervised delivery
		Storage	Failure of containment leading to spillage to land	No evidence or records of spillage	Yes	IBCs	Newly installed hardstanding area	Visual inspection
Zone 4								
Internal Tanks	Some ABP tanks and odour chemical storage	Internal Storage	Contained drainage – processed by ETP	No evidence or records of spillage	Yes – not further assessed.	Tank	Closed Drainage	N/A
Zone 5								
Diesel Tank(s) 2 x 2500 litres	Vehicle Diesel	Unloading	Spillage on installation roads. Discharge to concrete roads. No drains in area	No evidence or records of failure	No drains in area	Road tanker	Concrete ground.	Supervised delivery
		Storage	Failure of containment leading to spillage to land	Some visible historical drips to ground.	Yes – Compliance to OSR.	Second skin of tank	Concrete ground.	Daily recorded checks.

Table 4b – Further Controls for Bulk Containment.

Zone	Substance(s)	Tertiary containment	Testing/ inspection	Adequacy of pollution prevention measures	Reasonable Risk of pollution?
Zone 1					
Odour control chemicals	Bulk Tanks and IBCs	Area surrounding – contained drains discharge to effluent treatment plant forward to sewerage system.	Visual inspection	Yes	No
		Area surrounding movement from Zone 5 – contained drains; discharge to effluent treatment plant forward to sewerage system.	Visual inspection	Some	Very low – Some risk to soakaway area – vehicle crossing. (Although drainage channels provided with alarmed interceptors).
		Area surrounding – Contained drainage arrangements. Discharge to effluent treatment plant forward to sewerage system.	Visual inspection	Yes	No
Zone 2					
Effluent Treatment	Effluent tanks (above and below ground)	'Backed' up collection sump water has capability to be by-passed to S1.	Pump checks – transfer pipework checks	Yes	No - Adequate by-pass arrangements. -
ABP Storage	Fat Tanks 1 – 3 Fat Tanks 4 - 5	Hardstanding drains in area (to one site)	Daily visual checks in area	No	Yes – one side of tank area is unmade ground. No protection for accidental release or emergency malfunction of tank.
		Hardstanding drains discharge to effluent treatment plant	Daily visual checks in area	No	No. Contained drainage in overfill scenario.
Boiler Chemicals	Small tanks (300 litres)	Drains in area (if spill would reach this far) are contained – discharge to ETP.	None recorded	Yes	No. Contained drainage in overfill scenario.
Zone 3					
Cooling Tower Chemicals	IBCs	Newly installed hardstanding area, fully serviced by contained drains.	Daily visual checks in area.	Yes	No.
Odour chemicals					
Zone 4					
Not applicable. Internal areas					

Zone 5					
Diesel Tank(s) 2 x 2500 litres	Vehicle diesel storage	No tertiary containment.	Yes	Some	Some - Evidence of fuel drips to ground. Fill point is within bunded area which is compliant with OSR.