

Attachment-7-7-1 Stormwater Monitoring

1.0 CONTROL MONITORING

The only bulk chemicals stored onsite is fuel, predominantly used for the emergency back-up generators. Control measures (i.e., bunds, tanks with level alarms, hydrocarbon interceptors with level alarms) are located at the sources of storage and transfer. See Attachment 4-8-1 Operational Report for further information.

Rainwater runoff from impermeable areas of the site is collected via the onsite storm water drainage network in accordance with DCC Planning Refs. 3641/21 (extended Installation) and DCC Planning Refs. 2979/13, 2688/13 and 3534/11 (existing Installation). This network conveys the stormwater via Hydrocarbon Interceptors to one of 3 no. attenuation systems (See Drawing 21_123F-CSE-00-XX-DR-C-1100). The attenuated stormwater discharges offsite at 3 no. Emission Points (SW1, SW2 and SW3). SW1 connects to a 450 mm business park storm sewer, and SW2 and SW3 connect to a 900 mm diameter business park storm sewer that is located along the main entrance road to the Business and Technology Park that flows north to south. The stormwater passes through Hydrocarbon Interceptors on site to ensure that the quality of the stormwater discharge is controlled. This network is shown on Drawing 21_123E-00-XX-DR-C-1100 Surface Water Layout Plan.

The stormwater drainage network is equipped with hydrocarbon interceptors to capture any diesel spillages to hardstanding areas, as well as fuels from vehicles using the internal road network.

The hydrocarbon interceptors are equipped with an oil warning system that connect to the BMS/EPMS critical alarm. These will be used to capture any hydrocarbons that have entered the stormwater network. See Attachment 4-8-1 Operational Report for further information.

The bulk diesel tanks have probes, connected to an alarm, within the sump of the concrete bund to detect any fuel inside of the bund. The bunds are constructed of suitable concrete and have undergone testing for their integrity during the commissioning phase. All bunds and pipelines are integrity tested following installation by vendor.

The containerised emergency backup generator housing includes retention bunding in the base of the container, there are leak detection systems within the bund, should hydrocarbons be detected in the base of the container the system sends an alarm signal to the Building Management System (BMS) to alert Engineering Operations Technicians (EOTs). The onboard controller for individual generators is connected to the Building Management System (BMS).

2.0 MONITORING OF EMISSIONS

No online monitoring of the stormwater discharge is proposed. The only bulk chemicals stored are hydrocarbons; adequate control measures are in place to monitor any potential leaks or spills of hydrocarbons at source.

It is proposed that the monitoring specified by the existing Licence (P1186-01) is undertaken for the extended Installation, i.e. weekly monitoring for pH, TOC,

Temperature and Conductivity, and a visual inspection undertaken daily for discolouration and odour. The monitoring will be undertaken upstream of the stormwater discharge points (Monitoring Points SW1-1, SW2-2 and SW3-1). Due to the limited storage of bulk chemicals (fuel only) on site, and the robust control measures outlined above, it is considered that no further monitoring or control methods are required for storm water.