

Attachment-7-7-1 Stormwater Monitoring

1.0 CONTROL MONITORING

The only bulk chemicals stored onsite is diesel fuel for the emergency back-up diesel 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 the SDCC Planning Ref. SD11A/0116, SD14A/0091, SD14A/0232 and SD17A/0469. This network is shown on Drawing 21_123E-00-XX-DR-C-1100 Surface Water Layout Plan. The stormwater discharges offsite at 6 no. Emission Points (SW1, SW2, SW3, SW4, SW5 and SW6).

The stormwater drainage network is equipped with hydrocarbon interceptors (with the exception of SW4 and SW6) to capture any diesel spillages to hardstanding areas, as well as fuels from vehicles using the internal road network. The stormwater network discharging to SW6 collects surface water from roof run off from Building B. The stormwater network discharging to SW 4 includes general site drainage from a car parking area to the north of Building A.

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 diesel probes, connected to an alarm, within the sump of the concrete bund to detect any diesel 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 hydrocarbon be detected in the base of the container the system sends an alarm signal to the BMS to alert 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 weekly visual inspections for discolouration and odour are undertaken upstream of the stormwater discharge points (Monitoring Points SW1-1, SW2-1, SW3-1, SW4-1, SW5-1 and SW6-1).

Due to the limited storage of bulk chemicals (diesel 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.