

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 will be collected via the onsite stormwater drainage network in accordance with FCC Planning Ref. FW17A/0025 and FW19A/0087 and ABP Ref. L06F.248544.

This network will convey the stormwater collected from data storage facility buildings and internal roadways via hydrocarbon interceptors to 2 no. offline stormwater detention basins and 1 no. online stormwater detention basin (See Drawing 21_123H-CSE-00-XX-DR -C-1100). The attenuated stormwater discharges offsite at 1 no. Emission Points (SW1) at greenfield runoff rates.

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 which is connected to the BMS to alert EOTs to warn of high hydrocarbon, liquid and silt levels in the separator. These hydrocarbon interceptors are used to capture any hydrocarbons that have entered the stormwater network. See Attachment 4-8-1 Operational Report for further information.

The top up tank bund and delivery bay associated with Building A has a sump with pumping system that discriminates between hydrocarbons and water. The sump pump activates as required to remove only water from the bund, when hydrocarbons are detected the sump pump shuts off. There are hydrocarbon level alarms that will send signal to the BMS to alert EOTs if the sump is full of hydrocarbons. The sump pump for the top up tank bund at Building A connects to foul water via A hydrocarbon interceptor. The hydrocarbon interceptors are equipped with an oil warning system which is connected to the BMS to alert EOTs to warn of high hydrocarbon, liquid and silt levels in the separator.

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 point (Monitoring Point SW1-1 and SW1-2). 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.

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