

PART-A General Information

Please complete all sections. Mark with an X in spaces where applicable. If the space provided is insufficient, the required information may be submitted in the form of a memorandum. Attach required maps and sketches. Graphics must be clear, labelled and, where applicable, should include a true north arrow and scale.

EIA Reference

Construction or Modification Date:	
EIA Reference Number:	
Competent Authority:	
Have you been issued with an Environmental Authorization?	No
Date of Receiving an Environmental Authorization:	
If no, please explain:	No modifications or changes made that required an Environmental Authorisation over past 5 years.
Project Description:	None

If you have been issued with an “Environmental Authorization”, please upload it in the “Attachment” section.

A.1 Application Information

Current Atmospheric Emission Licence Number:	WCCT044		
<input type="checkbox"/>	New Application	<input type="checkbox"/>	Transfer
X	Renewal	<input type="checkbox"/>	Variation/Amendment Review
<input type="checkbox"/>	Section 22A	<input type="checkbox"/>	

Licensing Authority:	City of Cape Town Metropolitan Municipality
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A.2 Facility Information	
Facility/Property:	FFS Refiners (Pty) Ltd - Cape Town
Original ID:	WCCT027
Facility Address 1:	Eastern Mole
Facility Address 2:	Port of Cape Town
Province:	Western Cape
District Municipality:	City of Cape Town Metropolitan Municipality
Local Municipality:	11
Cell Phone Number:	
Zip:	8000
Email:	AlisonO@ffs.co.za
Company Registration Number:	1986/003962/07
After Hours Contact Details:	0836526113

Land Use Zoning as per Town Planning Scheme:	Port
Latitude:	-33.9107674
Longitude:	18.4392708
Phone Number (55-555-5555 Ext.):	031-459-5300
Fax:	
Does your facility have a complaint's register? *If "To Be Initiated" is selected, then additional requirements will be added to the attachment section at the end of the application.	Yes
SIC Code:	517 (Description: Petroleum and Petroleum Products)

A.3 Location & Extent of Plant

Latitude of Approximate Centre of Operations:	-33.9107674
Longitude of Approximate Centre of Operations:	18.4392708
Extent (km ²):	0.018687
Elevation Above Mean Sea Level (m)	4
Designated Priority Area (if applicable):	

Description of surrounding land use (within 5 km radius):

Attach map(s), satellite image(s) and/or aerial photograph(s) detailing location of premises in relation to surrounding community.

The maps should preferably be in both electronic format and hard copy format showing the entire site with the areas surrounding the site, thus a regional map / aerial photo.

The FFS facility is located on New Portnet Road on the Eastern Mole at the Cape Town Harbour. The Eastern Mole is situated between the Duncan and Ben Schoeman Docks. The harbour is in an industrial zone, and is the second largest container port in the country. The port consists of a large number of reclaimed spits which jut out in a north-westerly direction into the Atlantic Ocean. The port is situated in Table Bay approximately 2km southeast of the V&A waterfront and approximately 2km north of Cape Town central business district. The port is situated on one of the world's busiest trade routes and remains a strategic and economic importance for South African economy.

The petroleum company, Chevron, operate a fuel storage tank farm at the base of the mole, nearest to the mainland. The land to the northwest and south east of the site is occupied by Burgan Oil. Pipelines which feed into the various tank facilities traverse the western edge of the spit to the debunkering station to the south of the Mole, named 'Tanker Basin 1'.

A.4 Nature of Process

Overview Facility-wide Process Description:

Process flow diagram is required, please go to the Attachment page to upload.

Slops are collected from the ships by the FFS and independent slops collection company permitted by TNPA. The slops are then transferred to a bulk tank on the FFS Cape Town Harbour site for intermediate storage. The slops are then offloaded from tank 15 and transferred by road tanker to the nearby FFS Refiners Cape Town processing facility, where it is recycled into a final product heating fuel. The purpose of the storage is to facilitate the logistics of the various road transfers that have to occur.

Currently tanks HTF1 to 5 are being used for the storage of Jet kerosene (Diesel, Marine Gas oil, Marine Diesel Oil, Industrial Paraffin, Ship slops, LCO, LO10), which is supplied to Eskom for use in their emergency peaking power stations. The JK is delivered to the tank farm via ships that berths at the South of the site. The JK is transferred via a 20" pipeline and into the storage tanks that has a combined capacity of 15 100 m3 (2 x 5400 m3, 1 x 1 800 m3, 1 x 1 300 m3 and 1 x 1 200 m3). The tank farm is also capable of receiving JK via road tankers. The JK is stored and when required, is delivered via independently owned road tanker to Eskom.

Additional storage tanks with the total storage capacity of 8862m3 (authorised by Department of Environmental Affairs & Rural Planning (E12/2/4/1-A2/75-3067/10) on 03/02/2012) capable of storing hydrocarbon oils and bitumen (Residual Oil No 6). Two 0.5MW oil fired heaters (using a typically paraffinic type burner fuel at 0.8 m3/day is stored in a 23m3 tank) are used to heat the bitumen tanks (Environmental Authorisation issued on the 29/08/2013).

Other portion of site (previously CTBS) is a storage and blending facility, comprised of 3 x 520m3; 1x1062m3, 1x 1400m3 storage tanks, 2 x 2500m3 and 1 x 500m3 and a 750 m3 fire water tank. These tanks are currently used to store various fuel oils (Jet kerosene, Residual Oil no 6 and Distillate Oil No 2) for use in the manufacture and supply of bunker and industrial heating fuels. The product is stored at the tank farm, and when required is delivered via road tanker or pipeline to the customer.

Products/Raw Materials (including ship slops) are weighed over two weighbridges with 5 loading/offloading bays. Various pipelines also service the quayside to allow for marine to land receipts and bunkering activities to ocean going vessels.

Many of the products share common properties but differ by name. In order to simplify use of the storage tanks, common products have been modelled under the generic names associated with the product vapour pressure using the EPA Tanks version 4.09d (EPA Tanks) program (report attached). In this regard residual oil no.6 (Residual fuel oil - RFO) of a vapour pressure of 0.00054 kPa at 25 C is used to describe such products as HFO, Bunker Oil, FO150, FO180, FO380, HFF, Bitumen or burner fuel to name a few synonyms. Jet Kerosene (vapour pressure of 0.093 kPa at 25 C) has the higher vapour pressure than distillate fuel oil no.2 (vapour pressure of 0.075 kPa) and was selected to represent all hydrocarbon oils with vapour pressure between 0.00054 kPa and 0.093 kPa at 25 C under the generic name Distillate Fuel Oils - DFO. Typical fuels and synonyms for fuels in this category of vapour pressure are kerosene, Jet Kerosene, industrial paraffin, IK, IP, illuminating paraffin, automotive diesel, marine diesel, marine gas oil, gas oil, diesel, ship slops, LO10, LCO and light cycle oil.

FFS also custom blend a number of bunker fuel oils (Blended Fuel oil – BFO) to various viscosities between straight run DFO and RFO. To ensure the BFO is modelled correctly in EPA Tanks the worst-case scenario of distillate fuel oil no.2 was used in modelling. Synonyms for BFO are IFO and then suffix with the viscosity, for example IFO80 or IFO30.

Bitumen has an incredibly low vapour pressure such that it is not listed in the EPA Tanks modelling software, thus to model Bitumen it has been classified under RFO.

The total number of tanks on site is 19 and are all fixed roofed tanks. FFS also provides bunkering services at the Port of Cape Town.

A.5 Facility Wide Listed Activities with Regulatory Applicability

Facility Wide Activities with Regulatory Applicability:

SEC21 Code	Category Name	Subcategory Name	Description	Application
SA0204	2. Petroleum Industry	2.4 Storage of Petroleum Products	Petroleum product storage tanks and product transfer facilities, except those used for liquefied petroleum gas.	

Facility Wide Air Pollutant Emissions:

Specify whether or not an Allowable Limit is being requested. Enter the rest of the row if applicable.

SEC21 Subcategory	Pollutant Name	Minimum Emissions Standards (mg/Nm3) (Existing)	Minimum Emissions Standards (mg/Nm3) (New)	Reference Conditions
SA0204	VOC	150.00	150.00	