Malta Freeport Terminals Ltd.

PROJECT DESCRIPTION STATEMENT

Date 29th October 2007

DEVELOPMENT OF FUEL STORAGE FACILITIES FOR BUNKERING

PA NO. 4963/07

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1. COMPANY INFORMATION:

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2. PROJECT BACKGROUND

Malta Freeport Terminals Ltd intends to construct storage tanks of total capacity 49,700 m^3 and related facilities for the storage of Class III fuel oil (HFO and IFO) gas oil and diesel. The tanks will be used as a bunkering facility to supply fuel to vessels calling at and offshore Malta.

The project will comprise civil works, tank storage facilities, pipeline network, boiler, fire safety, ancillary plant and other developments necessary to interface the proposed facility to the existing quayside berths already outfitted and licenced for the handling of petroleum products.

An area of around 13,600 m^2 located within Malta Freeport Terminals Ltd. will be developed for the erection of tanks. The storage capacity of the proposed development, consisting of five to seven tanks, will not exceed 49,700 m^3. The tankage facility will be designed to store only Class III petroleum products as neither Class I (eg. petrol) nor Class II (eg Jet fuel) products will be stored in the tanks. Heating systems will be installed and used depending on viscosity of product and storage requirements.

The proposed facility does not form part of the Oiltanking Terminal and the facility will be operated as a stand alone facility independent of Oiltanikng. The proposed tank facilities will be connected to the quay infrastructure at Oiltanking and unloading / loading will take place on any one of the four Oiltanking berths..

Oil products will be discharged from vessels delivering the required fuel products from various refineries in the Mediterranean and subsequently loaded into bunkering barges will, in turn, supply fuel to vessels either berthed at Malta Freeport or offshore at areas dedicated for such activities by the Malta Maritime Authority.

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3.0 PROJECT OBJECTIVES

3.1 Business Objectives

Malta Freeport is presently one of the leading transshipment hubs in the Mediterranean handling approximately 2 million containers and 1,500 vessels per annum. The high volume of containers being handled is a result of Malta Freeport Terminal Ltd.'s track record and the positive international recognition that the Company enjoys with shipping lines as being a reliable and credible terminal. This investment will mean that Malta Freeport can continue to provide value added services to shipping lines thus ensuring that it remains competitive with other Mediterranean transshipment hubs.

3.2 Environmental Objectives

A number of environmental objectives have also been set to minimize the proposed development's impact on the environment. The objectives are consistent with the relevant Maltese and EU practice and legislation.

- The prevention of contamination of the ground water;
- The prevention of soil contamination
- Prevent emissions into the air

3.3 Regulatory requirements

The following statutory and regulatory requirements shall be considered during the design , construction and operation of the tankage facility.

<u>European Union Directives</u>

- Regulation (EC) no. 725/2004 on enhancing Ship and Port Facility Security
- Seveso II Directive , 96/82/EC on the control of major accident hazards.
- 76/464/EEC, water pollution by discharges of certain dangerous substances
- 80/68/EEC, on the protection of groundwater against pollution by certain substances
- 2000/60/EC , Water framework directive
- Council directive 68/414/eec (amended by Directive 98/93/EC) obliging Member States to keep minimum stocks of crude and/or petroleum products.

<u>Local regulations</u>

- The marine pollution Act (Prevention and Control) CH 271)
- The Malta Resources authority Act (Ch 423)
- The Environment Protection Act (Ch 435)
- The Clean Air Act (Ch 200)
- Regulations for the Environmental Management of Construction Sites
- Work Place (Minimum Health and Safety Requirements for Work at Construction Sites) Regulations
- Dangerous cargo ships, marine terminals and facilities and bunkering regulations
- Other relevant regulations

3.4 Project Programme

- Basic Engineering (up to 4 months from confirmation of proposed project)
- Construction phase (to start at least 4 months after confirmation of proposed project)
- Construction (18 months)

Mobilization is to commence on the 8th March 2008 and the facility is expected to be operational by the end of 2009.

4.0 LOCATION / SURROUNDINGS

The proposed site is located on the coastline at Benghajsa point l/o Birzebbuga at the southern headland of Marsaxlokk bay within the Freeport Zone as defined in the Malta Freeports Act. It is located in the hinterland between the warehouses on Terminal 1 and the Medserv Area bordering the access road to Medserv.

The predominant land use within the vicinity of the site is industrial. The land is within the designated Industrial Area of the Malta Freeport . A plan outlining the proposed tankage facility is seen in Appendix I – drawing number 008440-Site Layout.

Photograph of the site are attached as Appendix II

5.0 ALTERNATIVES

There is no need to seek alternative sites because the proposed land is adequate and the non-availability of any other existing space at Malta Freeport terminals Ltd. makes this location as the only viable option.

6.0 TECHNICAL DECSRIPTION OF FACILITY

6.1 Standards

The following national and international standards and codes do apply for the design and construction of herein specified infrastructure enlargement:

- European Model Code of Safe Practice in the Storage and Handling of Petroleum Products, Part II Design, Layout and Construction
- American Petroleum Institute (API), various codes
- NFPA 11, 15 and 24
- API 650 Tank erection code
- IEC Regulation for Electrical and Instrumentation Works

The above Codes and Standards shall be considered only as main Standards and Requirements.

6.2 Infrastructure

A layout of the proposed facility is shown in Appendix III

The proposed development will include the following and other elements:

- Dome Roof tanks situated within liquid tight tank farm;
- Pump Station and adequate Piping System;
- Adequate heating facilities to maintain bunker fuel operation;
- Infrastructure such as Buildings, electrical Substation, Oil-Water Separator, Fire – Fighting System and control instrumentation;
- Electrical & Instrumentation.

These tanks will be equipped with fixed roofs and shall be built in accordance to Class III fire risk standards. The tanks shall be equipped with a fire fighting facility and waste-water treatment.

<u>Areas to be occupied</u>

Total area of facility– approx. 13,600 m^2
Offices – 217 m^2
Boiler room – 60 m^2
Substation and switch room – 66 m^2

6.3 Basic Design Criteria

Dome roof tanks for Bunker Fuel operation (Qty 5 –optional additional 2) :

Code	*Net Volume (m³)*	*Heating Coils*	*Material*
API 650	various	Yes *	S235JR

All tanks shall have the minimum design criteria:

Suction Rate:	500 m³/h
Filling Rate:	1.500 m³/h
Internal design pressure:	+20/-5 mbar(g) at max +80 °C
Specific Design Gravity:	1.0
Seismic Load:	API 650 appendix E Zone 2A
Flammable Liquid classification:	Class III
Heating system*	heating coils with 179°C steam entry

All tanks shall have interconnection tank bridges as well as tank gauging system. To allow homogenisation of temperature the tanks shall be equipped with mixing nozzle and air spider system. *Tank dedicated for diesel will not require heating.

Specifications of the facility are outlined in more detail in Appendix IV.

6.4 Plans and Layout

The Layout of the proposed development shall be as indicated in the plans. All relevant plans have been submitted in hard copies as per MEPA requirements .

7.0 LAND USE AND ENVIRONMENTAL CHARACTERISTICS OF THE SITE

7.1 Land use

This area has been used mainly for the storage of empty containers and container handling equipment and is within the Malta Freeport Terminals Ltd. site.

7.2 Geology

The rock section exposed within the site and along the coastline nearby from the base to the top consists of:

- Lower Coralline Limestone formation
- Globigerina Limestone Formation

7.3 Geomorphology

The main geomorphologic units to the southwest and west of the site are:

- The low coastline and coastal cliffs
- Seacaves
- Wied ix-xoqqa
- The terraced slopes of L-Imwadar and Ix-Xoqqiet

The site itself is presently asphalted. There is no soil.

7.4 Hydrology and hydro-geology

No watercourses are developed in the environs of the site. Wied ix-Xoqqa itself does not form part of a drainage system. The coastal watershed is that of Wied il-Buni and lies some 1000m to the north at Birzebbugia.
Under the proposed site, no mean sea level aquifer can develop that is capable of storing groundwater because of the close presence of seawater.

7.5 Excavation

The site has already been leveled and no excavation will be required for the proposed development.

8.0 SURROUNDING LAND USE AND ENVIRONMENTAL CHARACTERISTICS

Immediately adjacent to the site, separated by a road way, is the terminal operated Oiltanking . To the north-west of the site beyond Medserv and the external roadway there is some agricultural land which is being used, whilst to the east of the site there is the sea. The closest residential areas are found approximately 1.5 km from the proposed extension and a number of farmhouses in the vicinity seem to be abandoned.

Rdum tan-Nofsinhar, a scheduled Special Area of Conservation, starts around 150m away from the proposed development and continues along the coast northwards towards Benghajsa.

An extensive cutting to the west of the proposed site is earmarked for the new gas bottling plant proposed by the Enemalta Gas Division.

The proposed site is only 3m above mean sea level which is much lower than all surrounding land of the Freeport Hinterland.

9.0 DESCRIPTION OF SERVICES

9.1 Water

The development will be integrated into the existing potable water supply of Malta Freeport. No major additional water demand will be created by the development.

9.2 Electricity

The electrical supply of the newly proposed infrastructure will be ensured via the Malta Freeport main supply, to be connected to the tank facility's main substation. Apart from the said supply emergency functions, mainly fire fighting and emergency shut down of system, shall be connected to a new emergency generator system, which will allow stand by services.

10.0 EMPLOYMENT

Third party contractors shall be selected for the execution of the development. Namely one for civil works, one for tanks construction and one for associated pipe works. It is envisaged that total manpower on site combined by all contractors will not exceed at total of 40 at any time during execution of works.

Once operational, it is expected that up to 15 personnel will be employed at the facility.

11 RAW MATERIALS, MACHINERY AND WASTE GENERATION

11.1 Raw Materials

All materials such as steel, pipelines, cables and steel structures will be imported and surplus will have to be disposed via licensed companies or kept as spare material on MFT premises.

As the site is already leveled there will be no rock cutting.

11.2 Machinery

Standard construction machinery shall be used during the construction phase. During construction all vehicles and mechanical plant used on site should be maintained in good and efficient working order to minimize emission of pollutants. Equipment should be switched off, or idled down to a minimum, when not in use and located away from the sensitive receptors wherever possible.

11.3 Waste

Construction waste

During construction, the following waste material is expected to be generated:

- Approx. 45 Tonnes of Mild Steel / Metal off-cuts (basis 5% of 900Tonnes total material);
- Very small quantities of other wastes from processes such as wiring & painting.

Waste generation during operation

Once in operational status, the following waste is expected to be generated:

- Hydrocarbon residues from tank cleaning
- Contaminated PPE (with hydrocarbons)

Both of the above are considered as Hazardous Waste by Environment Protection Act (LN 337 – 2001). This waste will be temporarily securely stored on the premises (bounded containment areas) and then exported for certified disposal via a local recognized agent and in accordance with all local and EU Legislation

The expected total hazardous waste generation due to the proposed development will be between 3 tonnes and 5 tonnes per year.

Additional waste generated by the proposed development shall be handled in line with a Waste Disposal Policy in accordance with local legislation.

Waste Water

All surface water run-off and storm water drainage shall be treated with a water treatment system. This will consist of 2 multistage separators, complete with a discharge automatic analyzer. Only water with 5ppm or less of hydrocarbons will be discharged to the sea (As per accepted threshold limit for industrial port).

Waste Management Plan

A waste management plan will be adhered to, which will include documented information on waste quantities, storage, handling and disposal methods for each waste type.

12 ACCESS AND PARKING

Access to and from site shall be arranged for via Freeport gates and internal roads, parking shall be provided on site. During operation it is envisaged to access via existing road infrastructure of Malta Freeport, parking requirements for operators shall be taken care of on site.

13 ENVIRONMENTAL IMPACTS

13.1 Impacts during construction

During construction the site would look like a normal building site and if good construction practice is observed, pollution should be minimal.

The coastal features of geomorphologic importance would not be affected as they are cut off from the proposed development by existing tank farms and the container terminal.

13.2 Visual Assessment

Both the current Malta Freeport container terminal and the Oiltanking facility characterize the landscape, mostly by the vertical elements of the Malta Freeport gantry cranes and the mostly cylindrical elements of Oiltanking tanks. The proposed structures are identical to those that already exist on the Oiltanking site and the height of the proposed tanks will not exceed the height of the tanks operated by Oiltanking.

The site is barely visible from popular viewpoints such as Pretty Bay, Birzebbugia Promenade and Marsaxlokk Bay. As the site is behind the existing infrastructure and equipment at Malta Freeport and adjacent to the Oiltanking tanks, it should hardly be visible from Delimara Point. Due to the existing OTM facility, the proposed development will not alter on the existing landscape to any significant degree.

The resultant impact is considered to be a negligible impact and resultant landscape impact is considered to be a negligible impact.

Any enhancement within the site would be considered as futile due to existing uses of the surrounding sites.

13.3 Air Quality

The following emissions may arise during construction:

- Emission of gases and particulars from vehicle and boiler combustion emissions;
- Emission gases/ vapours from handling and storage of fuels temporarily exposed to the atmosphere during handling or due to accidental spillages;
- Emission of vapours and odours during the surface coating of the tanks.

The volume of traffic expected to use the facility is expected to be low enough to be considered irrelevant for monitoring its volume. Most of the vehicles will be light vans and cars. The projected volume of traffic is insignificant compared to the 300 or so heavy transport trucks commuting along the road leading to the Malta Freeport Terminals Ltd. main access gate.

The proposed tank farm shall not increase the number of sea vessels calling at Malta Freeport as the vessels call to load and discharge containers.

Dust particles are unlikely to be emitted during the commissioning and operations of the Tank Farm and therefore these emissions shall be insignificant. Dust emission patterns at the site during maximum construction operations shall be quite variable. However since the construction operations will consist of normal techniques, with good practice the most likely dust emissions are not expected to cause any health concerns.

The specifications of the boiler will be such that emissions will be within EU regulations limits.

13.4 Water quality

Fuel oil spillages on unsurfaced ground in Malta would be absorbed by the porous rock which is primarily composed of limestone. The risk is minimal at the proposed facility because:

- All fuel supply connections will have collecting troughs to contain spillages;
- Spillages may be diverted to collecting sumps adjacent to the jetties as well as being contained by sand along parts of the jetties;
- The proposed facility will adopt internationally recognized procedures for un/loading;
- Routine staff training programmes will be implemented;
- Agreements with a fuel spillage-control contractor will be established for immediate mitigation.

During the operation of the site, the volumes of waste oils shall also be low. An impervious working ground should avoid the penetration of oils into the aquifers.

13.5 Mitigation of Negative Effects of the Development

The following plans will be established to ensure that mitigation techniques will be in readiness to prevent any negative impacts:

- Ground Water Monitoring Plan
- Oil Spill Response Plan
- Fire Response Plan
- Periodic monitoring of gas combustion emissions

13.6 Potential impacts

The facility will be fully equipped for controlling fires and / or explosions and spillages.

13.7 Public health

A public health concern may arise with regards to the discharge of oil and grease into the marine environment. There are two bathing areas in Birzebbugia : Pretty Bay and St. George's Bay. The proposed development is not expected to increase the discharge of treated waste-water into the sea significantly.

13.8 Secondary and cumulative impacts

The main potential secondary impacts are associated with a proportional increase in vessel traffic to the facility. However, this is expected to be negligible as vessels will not call at the facility simply to load bunker fuels as such a service is provided offshore Malta.

The impact of the proposed development on the quality of life of people living in Birzebbugia should also be minimal considering the existing Freeport activities.

Trusting the above to be to your satisfaction. Please advise should you require further information.

Joe Bugeja A&CE

APPENDIX I – dwg 844-0 SITE LAYOUT

APPENDIX II- PHOTOGRAPHS OF SITE

North West View

NORTH VIEW

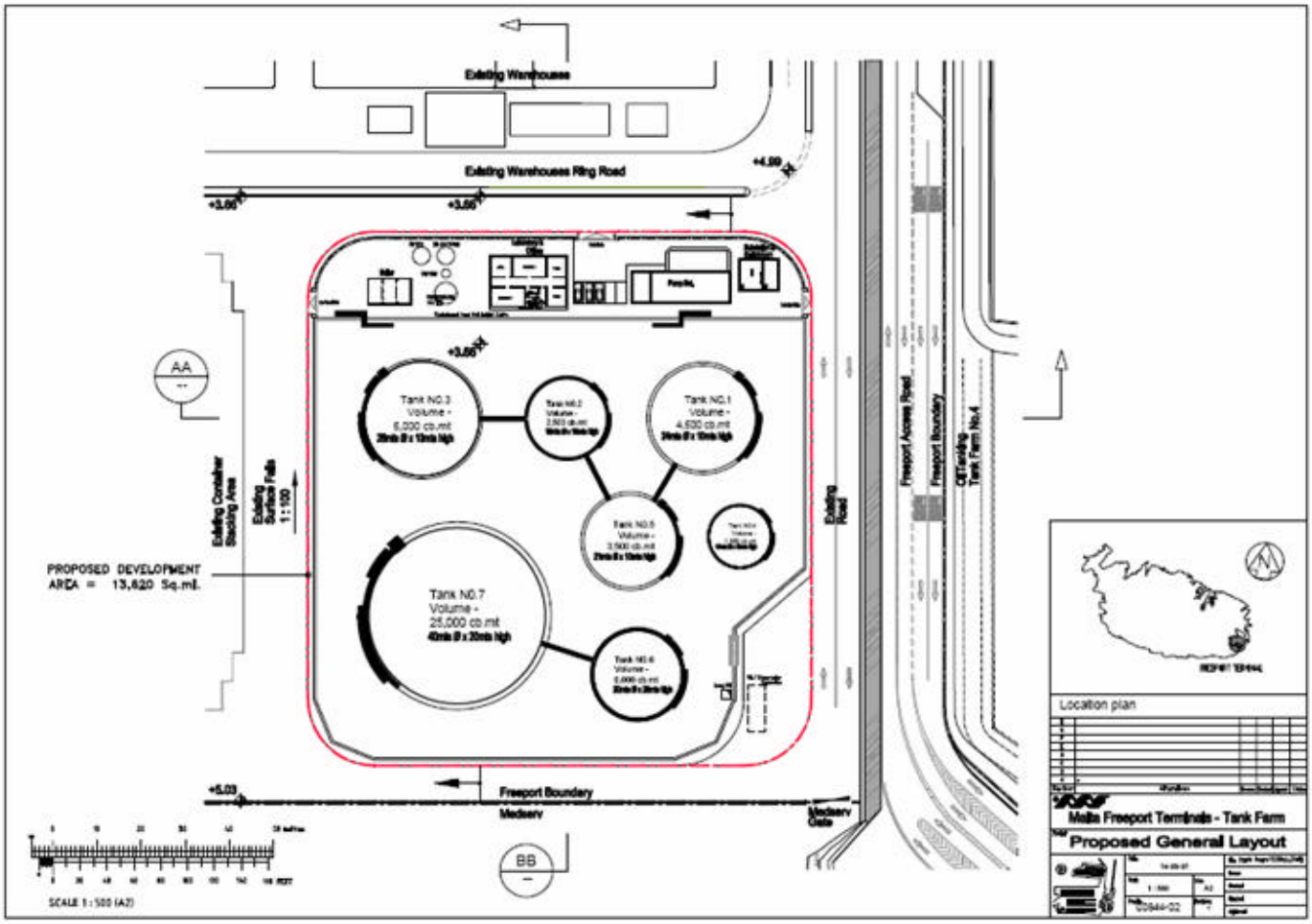
EAST VIEW

SOUTH EAST VIEW

SOUTH WEST VIEW

APPENDIX III – LAYOUT OF PROPOSED FACILITY – DWG 0844-02

All relevant plans have been submitted in hard copies as per MEPA requirements .



APPENDIX IV - OUTLINE OF TECHNICAL SPECIFICATIONS

1. Dome Roof Tanks and Tank Farm

Dome roof tanks for Bunker Fuel operation (Qty 5 –optional additional 2) :

Code	*Net Volume (m³)*	*Heating Coils*	*Material*
API 650	various	Yes *	S235JR

All tanks shall have the minimum design criteria:

Suction Rate:	500 m³/h
Filling Rate:	1.500 m³/h
Internal design pressure:	+20/-5 mbar(g) at max +80 °C
Specific Design Gravity:	1.0
Seismic Load:	API 650 appendix E Zone 2A
Flammable Liquid classification:	Class III
Heating system*	heating coils with 179°C steam entry

All tanks shall have interconnection tank bridges as well as tank gauging system. To allow homogenisation of temperature the tanks shall be equipped with mixing nozzle and air spider system. *Tank dedicated for diesel will not require heating.

A tank will be dedicated for the storage of Gas Oil / Diesel with a capacity up to 1500 m³.

2. Tank Farm

The tanks shall be grouped within a liquid tight tank farm (inter distance between tanks in conjunction with prevailing code). All tanks shall be built on reinforced concrete ring foundation which acts as a containment area in case of spillage. The group of tanks shall be further protected within a tank farm made out of concrete floor (chopped glass fibre reinforced) with at least 150 mm thickness. The entire containment area shall be built out of reinforced concrete bund walls (approximate height of 2,50-3 m) enabling the contamination of the biggest tank plus 10 % reserve capacity.

The tank farm is connected to the oil water separator as the terminal shall be divided into contaminated (operational areas) as well as none contaminated (none operational areas) areas.

3. Pump Station and Pipeline System

The intake of product shall be guaranteed via OTM Jetty 1 to 4 and the interconnection pipeline system from bunker tank farm to OTM Pump TF 4 (manifold for connection to jetty shoreline) consists of:

DN 500/20" pig gable line, insulated and electrical heat traced (508 x 6,3 mm; API 5L Grade B pipeline;150 lbs)

The outtake of product shall be handled via bunker fuel pump station directed to OTM Jetty 1 (in case of availability also via OTM Jetty 2 to 4). The pipeline will be approximate 400 m long and shall be routed next to the intake line. For maintenance purpose the line shall be fully pig gable and connectable to a mobile pig station.

DN 300/12" pig gable line, insulated and electrical heat traced (323,9 x 6,3 mm; API 5 L Grade B pipeline; 150 lbs)

Respective suction and filling line from tanks to pump station shall be designed in correlation to the respective flow rates and following services / operation can be rendered within the system:

- Emptying the tanks at 500 m³/h
- Stripping tanks and pipeline system
- Blending / mixing of tanks
- Pumping from one tank to the other
- Pumping to OTM Jetty 1 (optional OTM J 2 to 4)
- Pumping to OTM (either OTM tanks or Jetty 1..4)
- Receiving Product from OTM Jetty 1…4

The pump station shall be equipped with the following equipment:
Positive Displacement Pumps

500 m³/h - 240 kW 2 units
125 m³/h – 44 kW 2 units
20 m³/h – 25 kW 2 units

Pumps shall be equipped with electrical motors in EExe II T3.
The pumps shall be installed within a liquid tight pump station made out of reinforced concrete and sufficient concrete foundation.

4. Heating System

The bunker fuel terminal shall be equipped with an independent steam boiler (approximate 6 MW steam output or alternative with a thermal oil boiler). The boiler firing medium shall be from light to heavy oil. The equipment shall contain:

- water softening unit (1)
- dearator / degasser container (1)
- a boiler built in accordance to PED
- sufficient potable water capacity (1)

NB: 1) Equipment is redundant in case of thermal oil boiler procurement.

* The tanks shall be equipped with so called "fin tube" heating coils to maintain the respective services. All pipelines shall be electrical heat traced to allow individual caloric values.

In terms of insulation specification the pipelines shall be insulated with Rockwood and aluminium sheet metal cladding. Thickness of insulation between 80 and 100 mm which depends on the pipeline diameter.

The tanks shall be presently not insulated – all external mounted tank equipment shall allow for future tank insulation up to 100 mm thickness.

**Tank dedicated for diesel will not require heating.*

5. Infrastructure

The following infrastructure shall be made available for terminal operations:

Admin Building
The admin building and related office as well as control room features

Work Shop / Boiler Building
The work shop building contains changing rooms, a work shop, room for spare parts and the boiler room.

Substation
An electrical substation shall be built to incorporate the following equipment:

- one transformer
- various LV panels for electrical motors / lights
- an UPS system
- HV – separate room with HV – Switchgear
- A metering room with separate metering cell

Oil / Water Separator
As the terminal will be divided into contaminated and non- contaminated areas the areas of concern shall be connected via above and underground pipeline system.

The system shall consist of a rain-water pool which collects all rain water. The water shall be further pumped to one oil / water separator (above ground containerized equipped) with corrugated skimming plates allowing a gravity separation of the potential oil / water emulsion. The separation rate shall be at 10 ppm and recovered oil sludge shall be stored in smaller tanks for further disposal.

The equipment shall be self monitoring by means of overfill detection, flow meter, and oil monitor sensor cell. The entire system shall have a separation rate of up to 150 m^3/h.

Others
The terminal shall be equipped with primary and secondary road system made out of asphalt and sufficient rain water drainage system.The entire terminal shall be fenced off and the main entrance shall be equipped with a manned guard house.

6. Electrical & Instrumentation

The terminal shall be equipped with a two type voltage system (220 V / 400 V) which are fed by the main HV system (11kV grid of Malta Freeport Terminal Ltd. Area) and further stepped down by sufficient transformer capacity:

One transformer with 1250 kVA (11kV/0.4 kV) shall be provided.

An independent UPS system (80 kW) shall guarantee the minimum function of the computer / fail safe system and emergency systems.

The terminal shall be equipped with sufficient fire alarm and emergency shut down push buttons equally spread around the terminal.

All roads and main accesses to the tank farm as well as tanks are to be equipped with sufficient lighting.

The instrumentation shall have the following function and equipment:

- ESD/Fire Alarm panels
- Software and PLC system
- Tank Gauging Inventory System
- Camera system (at least two)
- Remote operation of pumps, actuator and flow process

All other features such as emergency generator, tank gauging inventory system, duplicate of instrumentation system shall be provided.

7. Standard & Codes

The following standards shall be kept during design and purchasing of equipment:

1) NFPA 10 to 25 (Fire Fighting System and Appurtenances)
2) ASME Code (Piping and related Fittings)
3) European Model Code of Safe Practice in Handling of flammable Products (spacing, hazardous areas)
4) API 650 Welded Steel Tanks for Oil Storage
5) API 610 / 676 Centrifugal & Positive Displacement Pumps
6) AP2610 Design, Construction, Operation of Tank Terminal
7) Various IP Codes (for electrical design)
8) PED (Pressure Equipment Directive) for documentation et cetera
9) ATEX – Guide for electrical apparatus classification
10) Other Tank-Building Specification when applicable.