

Aegis Vopak Terminals Ltd. is a Leader in terminalling of LPG gases (LPG, Propane & Butane) in India.



VALUATION REPORT

OF

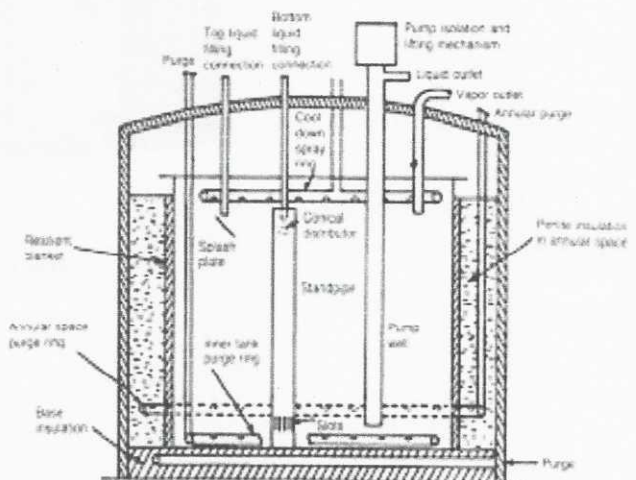
AEGIS VOPAK TERMINALS LIMITED

FOR: AXIS TRUSTEE SERVICES LIMITED for the benefit of Lenders.

BY: SANJAY DAYAL, REGD. VALUER



ARIEAL VIEW OF PORT & TERMINAL

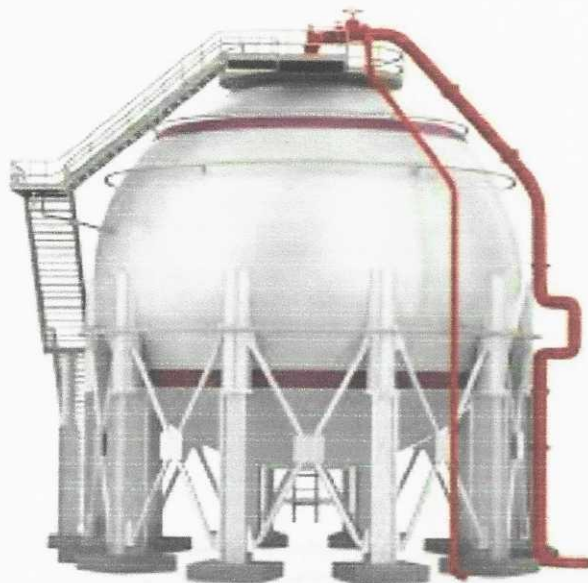


SCHEMATIC DIAGRAM OF CRYOGENIC TANK

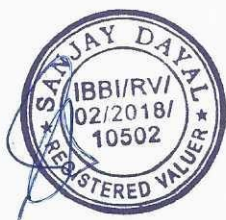
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CRYOGENIC TANK



MOUNDED TANK



Ref.: SD/VAL/ATSL/AVTL/2025/025

27.10.2025

Axis Trustee Services Ltd

The Ruby, 2nd Floor, SW,
29, Senapati Bapat Marg,
Dadar west, Mumbai – 400 028

Sub: Estimate of Market Value of P & M Assets of Aegis Vopak Terminal Ltd. Mangalore

Dear Sir,

This is in reference to our engagement through a mail dated 27.10.2025 to estimate the asset value comprising of Equipment used at Aegis Vopak Terminal Ltd (AVTL), Mangalore for handling Gases (Propane and Butane) at the Terminal. The Tanks, Pumps, Pipelines, loading bays etc. at AVTL, Mangalore are used for evacuating Propane and Butane from vessels using LTCS (Low Temperature Carbon Steel) Pipes at Sub Zero Temperature and stored as liquid in Two API 620 grade tanks suitable for storing liquid gases. The gases stored in the tanks are discharged in Bullet tanks for onward transportation. To arrive at a broad value, we visited the terminal on 23 & 24 instant and inspected the assets listed in the FAR shared with us.

Terminal is spread over 13.84 Acres. The equipment is erected / stalled following all strictures stipulated for handling such hazardous material with all necessary compliances. The huge Cryogenic (refer) tanks used for storage of gases in subzero temperature. At AVTL terminal propane and butane are stored in near atmospheric pressure unlike its storage in Bullet Spherical tank where low volume is stored at high pressure involving higher cost of storage and risk of leakage. The low temperature storage allows over 40,000 MT of Propane / Butane in one tanks against 1200 MT in Mounded Tanks. The high storage and normal pressure involves state of art Infrastructure at the terminal, facilitating easier ESG (Environment Social & Governance) compliances.

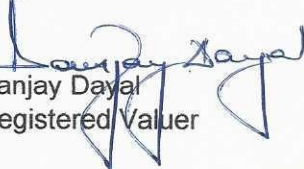
This valuation report has been prepared as per the requirements of the financial institutions, Banks or any other regulatory or statutory authority as may be required. It is made in accordance with the IVSC standards, Regulations and guidelines required for an impartial valuation of Terminal assets. This valuation entails computation of Equipment Capitalization Value, Age, usefulness built in, attributes stitched for Terminal operation, using Market Approach with amenities. We have used services of reputed and recognized entities in the industry and have applied appropriate considerations with sustainable assumptions for an infrastructure asset for use as Industrial Hub & Logistics Park in the proximity of a Port acclaimed as Gateway to the Futuristic tomorrow. Based on the Services offered by Terminal and limited Land Availability judiciously divided for installation equipment and accessories.

With the objective to reckon the contemporary value we researched the internet, website, various reports, media briefing, permits and permission obtained etc. to form our opinion for the justification regarding input in the asset value. of Terminal resources. Terminal has several premium amenities such as Truck Loading bays, supply chain services, connectivity with Port, Internal Road, effluent treatment plant, Power and water availability etc.



The opinion on the valuation is prepared for the use of the Axis Trustee and their associates. We take no responsibility and/or liability to any third party for the whole or any part of this report. Valuer shall not be held responsible or liable for indirect or consequential damages arising from socio economic development.

Regards.


Sanjay Dayal
Registered Valuer



**VALUATION REPORT
OF
STORAGE CRYOGENIC TANKS, PLANT & MACHINERY
(GAS TERMINAL DIVISION)**

Ref. No. SD/VAL/ATSL/AVTL/2025/025

ANNEXURE - I

Sr. No.	Description of Machine (Technical Specifications)	Qty	Make / Supplier	Capitalization Value (In Lakhs)	Year of Installation	Life of the Asset in Yrs	Depreciation Factor	Depreciated Value as on 25/10/2025 (In Lac)	Total Market Value as on 20/06/2025 (In Lac.)
1	2	3	4	5	5	6	7	8	9
1	Refer (Cryogenic) Tank alongwith accessories, LTCS Pipes & related facilities for Storage & Delivery of Hydrocarbon. Tanks are fabricated at site using 620 API Design with specialized material & construction techniques to handle cryogenic temp.								
	Storage Tank for Buten - 41000 MT	1	Local Fabrication	57775.9	2025	40	0.98	56,620.38	50,958.34
	Storage Tank for Propayne - 41000 MT	1	Local Fabrication						
	Vapour Absorption system with vaporiser coulmn, Suspended Lid, 1 Internal and Two External Pump	1 Set	Covered Tanks						
2	Fire Water Tank Cap. 10,300 KL	2		1066.4	2025	40	0.98	1,045.07	940.56
3	20" LTCS Jetty Pipeline Length : 3000 metres each to recive products from jetty (3000 X 2 = 6,000 m). Pipe Thickness 9.5MM, with 150MM Puff & Casing	2		5125.9	2025	50	0.982	5,033.63	4,530.27
4	Marine Loading arms at jetties Size : 16 inch with Hydraulic Extension	4		2378.3	2025	40	0.98	2,330.73	2,097.66
5	Truck Loading Facilities/Loading Gantry comprising of : LPG truck loading gantries comprising 8 bays each, with 16 numbers of liquid loading arms and 16 numbers of vapour loading arms. Stilt Structures Discharge arrangement at 2 nos. of LPG Gantris	2 Stn		4713.8	2025	30	0.97	4,572.39	4,115.15
6	Internal Pipeline								
	Internal LTCS pipelines of various size and lengths and steel support racks for laid pipelines. Pipe rack supports, supports for pipes, cable trays 103083 mtrs. (of various sizes)	Lot		7835.7	2025	50	0.982	7,694.66	6,925.19
7	Mounded Vessels, MV1 & MV 2- 105 MT each	2		1305.5	2025	50	0.982	1,282.00	1,153.80
	CP system for Mounded Vessel	Lot							
	Ethyl Mercaptane Dosing system	1 Set							
8	Electronic Weigh bridge,; Capacity : 100 MT . With Least Count of 10Kgs	2	Rice Lake Weighing System Limited	95.1	2025	40	0.98	93.20	83.88
9	Intank Pumps, Submersible Cap. 250 KW each	2		1297.8	2025	40	0.98	1,271.84	1,144.66
10	LPG Pumps and pumping system								
	LPG Pumping system comprising of 4 Nos of Transfer pumps having 425 HP each & 1 No. of 15 HP Chilling Pump along with Two product Heat exchangers, One Air Fin heater	4+1	C.G. / Sulzer	1276.6	2025	40	0.98	1,251.07	1,125.96
11	Compressors and accessories								
	Reliquification system comprising of 2 Nos of Flash Off gas compressors having 700 KW, 2950 RPM Motor (Screw type) and 2 Nos. of Boil Off gas compressors having 315 KW Motor RPM : 2950 with condensors, recievers and subcoolers.	4	Frick India Ltd.	4189.8	2025	40	0.98	4,106.00	3,695.40
12	Cooling Towers having 4 Nos. of 215 hp motor & pump Cap. 750 cub. Mtr./Hour with accessories	1	C.G. / Wilo	937.6	2025	40	0.98	918.85	826.96
a	Nitrogen Plant	1 Set							
	PSA nitrogen plant of capacity 65 NM3/Hr, consisting of vessels of different sizes for holding air, nitrogen and with two air generation screw compressors Two heat exchanger and one subcooler.								
	Screw Compressor	2	Atlas Capco						
	Model : GA45								
	FAD : 148.8 L/S								
	Motor : 45 KW								



Contd.									
13	DG Set Cap. : 750 KVA each with Panel including civil structures	2	Kirloskar	247.9	2025	40	0.98	242.94	218.65
14	Electrical Installation comprising of:	Lot	Voltamp Transformer & Others	7091.5	2025	40	0.98	6,949.67	6,254.70
	33 KV HT board, 3.3 KV Ht Board, Soft starter panels 2 Nos, 3 Nos Distribution transformers (2 Nos of 2MVA and 1 No. of 3 MVA) , VFD panel 2 Nos, PMCC panel 2 Nos, MLDB panels 2 Nos, APFC panels 2 Nos, Auxillary panel 1 No, UPS panel and distribution board 1 No, Battery bank , IRP panels , Cathodic protection panel. 2.Control room: Fire and control panel 3.Entire Plant: PA systems, Motors (both HT and LT) for various equipments alongwith local control stations, Light fittings and distribution boards , alongwith cables.								
15	Fire Fighting System comprising of								
	Fire extinguisher	62							
	Fire Detector System	2							
	Fire Alarm System (MCP & MSD)	1 Lot							
	Fire water pump with 215 hp Motor each	7	C.G.						
	Deisel Engine Pump, Cap. 169.1 kw each	7							
	Jockey Pump with 75 KW Motor each	2							
	fire fighting hydrant lines of various size throughout the plant.	50,000		163.6	2025	40	0.98	160.33	144.30
a	Gas Detector system	45							
b	Security systems - CCTV	1 Lot							
16	Instrumentation equipments	Lot		365.9	2025	40	0.98	358.58	322.72
	DCS panels with processors and IO cards, 3 nos, of desktop consoles with one 65 inch monitor,								
	Entire Plant : 6 Servo guages and 2 radar guages, 8 multipoint temp transmitters mouted on tank, Control valves of various sizes (2inch to 20 inches), Transmitters for pressure, flow , temperatures and levels.								
	Tank lorry Gantry: 16 sets Batching unit with MFMs,on/off valves , GDS and FDS								
17	Instrumentation equipments	Lot							
a	Public address system and Electric Siren								
b	Laboratory Equipments								
	Gas Chromotograph Model : Nucon 5775 & 5700 with six numbers of nitrogen, Air and hydrogen cylinders	2							
c	Utilities comprising of								
	Air Dryers	4							
	Deluge system	6							
	Sprinkler System	1 Lot							
	utility piping	1 Lot							
	Utility Building of 3 floors								
	Vent Stack of 40 metre height	1							
18	Furnitures & Fixtures	Lot	Local	77.5	2025	40	0.98	75.95	68.36
				96778					
TOTAL OF ANNEXURE I :								94,899.59	85,409.63
SAY :								94,900.00	85,400.00
Total Market Value of Storage Cryogenic Tanks, Plant & Machinery (Annexure I) as on 27/10/2025 Cap Value Rs.967.78Cr				Mkt Value Rs.854.00Cr					
(Rupees Nine hundred sixty seven crores Seventy eight lakhs only)				Rupees Eight Hundred Fifty Four Crores					



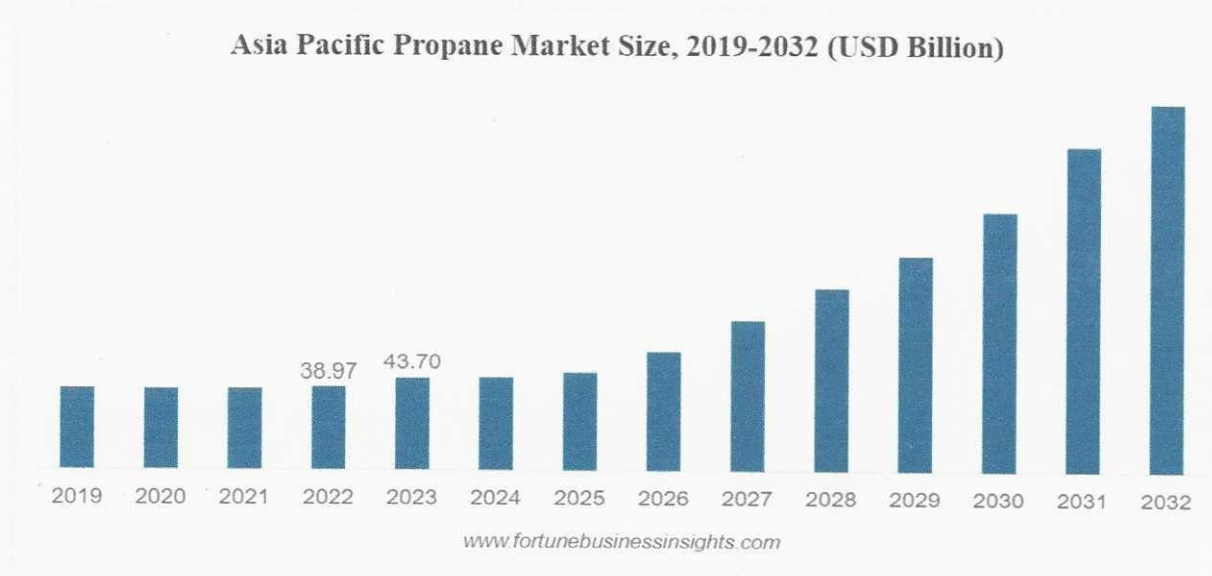
1.Executive Summary

Aegis Vopak Terminals Ltd., a joint venture between [Aegis Logistics Limited India](#) and [Royal Vopak](#) of the Netherlands, operates 20 tank terminals across 6 key Indian ports like Haldia, Kandla, Pipavav, JNPT(upcoming), Mangalore, and Kochi. With a robust storage capacity of **1.7 million cbm for Liquid storage**, and **201K MT for LPG** using cutting edge facility of Cryogenic (Refer) tanks at Mangalore.

The Mangalore gas terminal has two large Refer Tanks each of 41000 MT capacity fully operational. These tanks are used to store Propane & Butane at around -42°C & -4°C respectively. At this low temperature the gas transform into liquid facilitating cost effective storage of and faster turn around while evacuation the material from vessel and discharging the same in bullet tanks. The faster turnaround equips the terminal to handle 85 times its installed capacity to leverage higher revenue and lower fixed cost.

Propane mixed with butane transforms as LPG is a vital fuel primarily used in **domestic cooking and industrial heating**, Its use as Auto fuel is also growing driving its consumption. The India propane market was **16.90 million tons in 2024** and is projected to reach 22.00 million tons by 2033, with a 2.70% growth rate. India's LPG consumption is rising, with a substantial increase in domestic customers due to government initiatives promoting clean cooking. In FY2023-24, domestic consumption reached approximately 180.6 Crore Cylinder.

Asia Pacific Propane Market Size, 2019-2032 (USD Billion)



The global propane market size was valued at USD 98.50 billion in 2023. The market is projected to be worth USD 109.77 billion in 2024 and reach USD 278.60 billion by 2032, exhibiting a CAGR of 12.3% during the forecast period.



2 Background of Engagement

Axis Trustee Limited has vide mail dated 27.10.2025 has appointed us to carry out the valuation of Aegis Vopak Terminal Limited (AVTL) to evaluate the value of equipment used at their Mangalore Terminal for assessing its value for Security Purpose

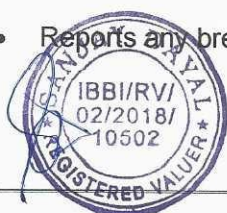
For the Purpose we were shared the FAR (Fixed Asset Register) by the Company comprising of Tanks, Marine Arms for Unloading from Vessels, Truck loading facility, Pipe line to jetty and internal units & Equipment, Compressor, Generators, & related accessories used at the said gas terminal for evacuation and delivery to base the evaluation of the inventory which has been put to use since June 2025. At the time of our visit, we could witness loading of trucks at two gantries which had 8 bays each duly covered. We also inspected two jetties from where the Propane and Butane are unloaded from vessels and stored in the two Cryogenic (Refer) Tanks. On the day of our visit no ships were unloading.

3 Purpose of Valuation

Axis trustee acting as Debenture Trustee had engaged us to value the assets installed and functional to discharge the following obligation

The **Debenture Trustee** has a role in safeguarding the interests of NCD holders under SEBI regulations. Appointed by the issuer, the trustee ensure compliance, monitor asset security, and intervene in case of default with following objectives

- Acts on behalf of debenture holders to ensure their rights are upheld.
- Monitors issuer's compliance with terms of the debenture trust deed and SEBI regulations.
- Verifies that the assets backing **secured NCDs** are properly charged and registered.
- Ensures the issuer maintains adequate asset cover throughout the tenure of the debentures.
- Reviews offer documents, credit ratings, and financials.
- Confirms that the issuer is not in default and meets SEBI's eligibility criteria.
- Monitors timely payment of interest and principal.
- Tracks financial covenants, asset cover ratios, and credit rating changes.
- Reports any breach or adverse developments to SEBI and investors.



- Facilitates grievance redressal and communicates material events to debenture holders.
- May convene meetings of debenture holders if required.
- Initiates recovery proceedings or enforcement of security if the issuer defaults.
- Can approach courts or tribunals to protect investor interests.

4 About Company and Assets

Aegis Vopak Terminals is India's largest third-party tank storage operator for LPG and liquid products, with plans to expand LPG capacity to 200,800 tonnes by FY26.

Aegis Group

The promoters of the company are Aegis Logistics Limited with its allied venture Huron Holdings Limited, Trans Asia Petroleum INC, Asia Infrastructure Investment Limited, Vopak India B.V., and Koninklijke Vopak N.V. Sudhir O Malhotra, Chief Executive Officer, Aegis Logistics Ltd. Other promoters of the company include Huron Holdings Limited, Trans Asia Petroleum INC, Asia Infrastructure Investment Limited, and Vopak India B.V.

The revenue stands at ₹1,719.41 crore, reflecting a quarter-on-quarter *(QoQ) increase of 0.84 per cent from ₹1,705.04 crore.

AVTL has several key projects underway. These include expanding its cryogenic LPG terminal capacity in Mangaluru by acquiring a new terminal with 82,000 MT capacity in June 2025. This was partly funded by their IPO. AVTL is also developing a large LPG import terminal at JNPA in Navi Mumbai with a storage capacity between 82,000 and 100,000 metric tonnes.

Aegis Major Cryogenic Terminals for Propane & Butane in India

1. Mumbai Gas Terminal (Maharashtra)
 - Operator: Aegis Group
 - Capacity: 2 × 10,500 MT cryogenic tanks
2. Haldia Terminal (West Bengal)

Operator: Aegis Logistics Ltd.

Capacity: 2 × 12,500 MT cryogenic tanks



3. Mangalore Terminal (Karnataka)

- Operator: Aegis Vopak Terminal Ltd
- Capacity: 2 x 41000 MT Cryogenic Tanks.

Aegis after successfully operating 3 terminals at Mumbai, Haldia have ventured to start the largest terminal at Mangalore. The plant has been started in collaboration of a reputed player in the field Royal Vopak of Netherland.

Vopak Netherland

Royal Vopak has over 400 years of experience in global tank storage, operating more than 70 terminals across 21 countries. It is a leading independent infrastructure provider for storing essential liquids and gases, including chemicals, oil, LNG, LPG, and biofuels.

5 PROJECT

AVTL has several key projects underway. These include expanding its cryogenic LPG terminal capacity in Mangalore by constructing a new terminal with 82,000 MT capacity in June 2025. This was partly funded by their IPO. AVTL is also developing a large LPG import terminal at JNPA in Navi Mumbai with a storage capacity between 82,000 and 100,000 metric tonnes, capable of handling a full Very Large Gas Carrier (VLGC). The JNPA project has a strategic location for serving key demand areas and an approved capital expenditure of ₹1,675 crore.

Dedicated to facilitating India's transition to more sustainable energies, AVTL adheres to the highest standards in health, safety, and environmental practices, ensuring our operations consistently provide the most efficient and reliable storage and logistics solutions.

6 Products & Storage

Incorporated in 2013, Aegis Vopak Terminals owns and operates storage terminals for liquefied petroleum gas (LPG) and various liquid products. Aegis Vopak Terminals Ltd. (AVTL), a joint venture between Aegis Logistics Limited and Royal Vopak..



Propane & Butane Gas:

In India, the storage of propane and butane gases is strictly regulated under the Gas Cylinder Rules 2016 and safety standards issued by the Petroleum and Natural Gas Regulatory Board (PNGRB) and Petroleum & Explosives Safety Organisation (PESO). These rules govern the design, installation, operation, and safety of storage facilities. At Refer Tanks as the storing of large volumes happens in a safe environment several compliance mandatory in Bullet / Mounded Tank installation is not crucial at Mangalore Terminal site.

Key Regulatory Framework

- Gas Cylinder Rules 2016 (PESO): Governs the manufacture, testing, and storage of compressed gases including propane and butane. It mandates licensing, approved cylinder types, and periodic inspections.
- PNGRB Safety Standards: Covers LPG (which includes propane and butane) storage, handling, and bottling facilities. It defines vessel types (bullets, spheres), area classification, fireproofing, earthing, and bonding requirements.
- SMPV(U) Rules 2016: Applies to storage of gases in pressure vessels exceeding 1000 liters. It includes design pressure, filling ratio, and fire safety protocols.

Storing propane and butane in cryogenic tanks offers superior safety, efficiency, and purity compared to conventional pressurized vessels, especially for large-scale industrial applications.

Key Advantages in Cryogenic Storage of Propane & Butane

1. Enhanced Safety
2. Higher Storage Efficiency
3. Improved Purity
4. Longer Shelf Life
5. Versatile Infrastructure
6. Global Logistics Compatibility

7 Funding Arrangement:

Aegis Vopak Terminals Ltd is funding its cryogenic LPG terminal in Mangalore primarily through proceeds from its ₹2,800 crore IPO launched in May 2025. ₹671.3 crore of the IPO funds are allocated specifically for this acquisition.



Funding Breakdown for Mangalore Terminal

- Total Capex for Mangalore Terminal: ₹968 crore
- Funding Source: Initial Public Offering (IPO) of Aegis Vopak Terminals Ltd
- IPO Size: ₹2,800 crore (fresh issue of 11.91 crore equity shares)
- Allocation to Mangalore Terminal: ₹671.3 crore

8 Valuation Methodology

For Assets having substantial high balance life almost full life of over 50 yrs is estimated using Cost Approach especially where no recent sales transactions for similar properties—especially for specialized assets like gas terminal is reported. At such facilities where the cost of Refer tanks and its accessories are over 70% of the total value of P & M and are fairly new for Valuation we have considered the capitalization cost of the assets to base of valuation evaluation. These assets are part of new technology and do not have parallel for analogy and data of income the income approach at this stage is not the right option.

For assets rarely traded / sold such as the huge Tanks which are specifically designed for the project are not typically traded in the open market, such as entire plant, capitalised value stated in FAR provides a rational estimate of value for security purpose.

When the asset's value is primarily in its utility and the economic value lies in the asset's ability to provide service of desired quality and quantity rather than its resale potential, DCRC approach is another way to evaluate the value.

The Valuation of specified Gas Storage Tanks is carried out by using capitalised value suitably depreciated for the since its construction & now in operation. We have used cost method a subset of cost approach of valuation. In this case as asset have substantially higher life and is not even a year old in operation, low depreciation is considered on the capitalised value to arrive at net value of the assets which is further factoring for selling cost to arrive at Market Value. Though the asset has been in use for less than a quarter however the Refer Tanks and other installation may have been ready to use much before June 25.

Accounting Standards Say:

- **IND AS 16:** "Depreciation of an asset begins when it is available for use, i.e., when it is in the location and condition necessary for it to be capable of operating in the manner intended by management."
- **IFRS:** Same principle — depreciation starts when the asset is ready, not when it's first used.



Such sensitive assets handling grade 2.1 hazardous material generally undergo rigorous cold and hot runs before it is put to use. Cost of Cold & Hot run and other trial and logistics cost add up to Capitalization value over the Invoice Value of the Components.

9 ESG COMPLIANCES

Group is mindful of its responsibilities on ESG compliances. Sustainability is about meeting the needs of the present without compromising the ability of future generations to meet their own needs. Vopak is working to help future generations meet their needs and contribute to a more sustainable economy by developing infrastructure that will support the introduction of essential products for the future.

Gas terminals in India must comply with ESG standards across environmental, social, and governance dimensions, primarily guided by SEBI's Business Responsibility and Sustainability Reporting (BRSR) framework and sector-specific safety and environmental laws.

Environmental Compliance

- **Emission Control:** Terminals must monitor and reduce greenhouse gas emissions, including methane and VOCs from storage and transfer operations.

Propane and butane are cleaner-burning fossil fuels compared to coal and gasoline, but they still contribute to greenhouse gas emissions and pose environmental risks through leaks, spills, and extraction processes.

With low temperature and low pressure, the terminal is fairly safe of any leakage generation of any greenhouse gas emission.

- **Waste Management:** Safe disposal of hazardous waste, oil sludge, and wastewater is mandatory under CPCB and MoEFCC norms.

During visit we did not find much of waste getting generated. The Terminal campus was reasonably clean. We have asked the Company to give us the details of steps taken in handling of waste and effort to minimise its generation.

- **Environmental Impact Assessment (EIA):** Required for new terminals under the EIA Notification, 2006, including public hearings and mitigation plans.

Have requested to share details of any public grievance and the mitigation proposed.

Social Compliance



- **Worker Safety:** Adherence to OISD (Oil Industry Safety Directorate) standards for fire protection, emergency response, and PPE usage.

While visiting the Terminal the terminal under their policy provided the Safety gears to comply with worker safety requirements. All people working in the terminal were wearing safety gears,

- **Community Engagement:** CSR initiatives under the Companies Act, 2013, including local employment, health, and education programs.

Have request to submit the report to be added with the report.

Aegis & Vopak excel in managing ESG risks, achieving strong MSCI ESG Ratings.



ESG Rating

ESG Rating

AA

AAA

ESG Risk Rating Score

ESG Risk Rating Score

38.6

25.1



Solid management of ESG risks

Industry leader in ESG risk
Management

Have copied it from the company website showing their awareness and compliance of ESG parameters.

Trust you will find the report useful in context explained and for purpose it is warranted.

Regards


Sanjay Dayal

Registered Valuer

IBBI/RV/02/2018/10502

