

File No.: VIS (2024-25)-PL213-180-237

Dated: 25.07.2024

# TECHNO-ECONOMIC VIABILITY STUDY REPORT

OF

PVC FLEX BANNER & PVC/WPC FOAM BOARD

MANUFACTURING PLANT

(16,800 MTPA & 3,500 MTPA)

VALUERS & TECHNO ENGINEERING CONSULTANTS (P) LTD.

SETUP BY

M/S APOLLO POLYVINYL PRIVATE LIMITED

- Corporate Valuers
- Business/ Enterprise/ Equity Valuations
- Lender's Independent Engineers (LIE)
- Techno Economic Viability Consultants (TEV)
- Agency for Specialized Account Monitoring (ASM)

REPORT PREPARED FOR

PNB, MCC BRANCH, HARIDWAR, UTTARAKHAND - 249401

- Project Techno-Financial Advisors
- Chartered Engineers

*Important - In case of any query/ issue or escalation you may please contact Incident Manager  
Valuers@rkassociates.org. We will appreciate your feedback in order to improve our services.*

- Industry/ Trade Rehabilitation Consultants
- NPA Management

CORPORATE OFFICE:

D-39, 2nd floor, Sector 2, Noida-201301

Ph - +91-0120-4110117, 4324647, +91 - 9958632707

E-mail - valuers@rkassociates.org | Website: www.rkassociates.org

- Panel Valuer & Techno Economic Consultants for PSU Banks

**IMPORTANT NOTICE**

**COPYRIGHT FORMAT:** This report is prepared on the copyright format of R. K. Associates Valuers & Techno Engineering Consultants (P) Ltd. (R. K. Associates) to serve our clients with the best possible information and analysis to facilitate them to take rational business decisions. Legally no one can copy or distribute this format without prior approval from R. K. Associates. It is meant only for the advisory/ reference purpose for the organization/s as mentioned on the cover page of this report. Distribution or use of this format or report or any of its content/ information/ data by any organization or individual other than R.K Associates will be seen as an unlawful act and necessary legal action can be taken against the defaulters.

This report is intended for the sole use of the intended recipient/s and contains material that is **STRICTLY CONFIDENTIAL AND PRIVATE**.

**DEFECT LIABILITY PERIOD:** In case of any query/ issue or escalation you may please contact Incident Manager at [valuers@rkassociates.org](mailto:valuers@rkassociates.org). Though adequate care has been taken while preparing this report as per its scope, but still we can't rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within 15 (Fifteen) days in writing from the date of issuance of the report, to rectify these timely, then it will be considered that the report is complete in all respect and has been accepted by the client up to their satisfaction & use and further to which R.K Associates shall not be held responsible in any manner.

**Part O: R. K. Associates Important Disclaimer and Remarks** are integral part of this report and Feasibility assessment is subject to this section. Reader of the report is advised to read all the points mentioned in these sections carefully.





**TABLE OF CONTENTS**

SECTIONS	PARTICULARS	PAGE NO.
<b>Part A</b>	Report Summary	4
<b>Part B</b>	<b>INTRODUCTION</b>	
	1. About the Report	6
	2. Executive summary	6
	3. Purpose of the Report	8
	4. Scope of the Report	8
	5. Methodology/ Model Adopted	9
	6. Data Information received from	9
	7. Documents/ Data Referred	9
<b>Part C</b>	<b>Company Profile</b>	
	1. Company Overview	11
	2. Overview of the Successful Resolution Applicant	11
	3. Promoters/Directors Profile of the Successful Resolution Applicant	13
<b>Part D</b>	<b>Infrastructure Details</b>	
	1. Location	16
	2. Google Map Location	16
	3. Google Map Layout	17
	4. Land Details	18
	5. Site pictures	20
	6. Building & Civil Works	25
	7. Plant and Machinery/ Equipment details	25
	8. Utilities	28
<b>Part E</b>	<b>Project Technical details</b>	
	1. Capacity of PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant	29
	2. Production Process	29
	3. Process Flow Chart	34
	4. Technical Specification of the Plant	34
	5. Technology Used	34
	6. Technological Assessment	35
	7. Testing/ Quality Assurance	35



# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

	8. Manpower	36
<b>Part F</b>	<b>Product Profile</b>	
	1. Introduction	37
	2. Product Category	37
	3. Pricing Strategy	39
	4. Marketing Plan	40
<b>Part G</b>	<b>Feedstock Analysis</b>	41
<b>Part H</b>	<b>Industry Overview &amp; Analysis</b>	44
<b>Part I</b>	<b>SWOT Analysis</b>	48
<b>Part J</b>	<b>Project Cost and Means of Finance</b>	50
<b>Part K</b>	<b>Project Schedule</b>	52
<b>Part L</b>	<b>Statutory Approvals   Licences   NOC</b>	54
<b>Part M</b>	<b>Company's Financial Feasibility</b>	56
<b>Part N</b>	<b>Conclusion</b>	73
<b>Part O</b>	<b>Disclaimer   Remarks</b>	75

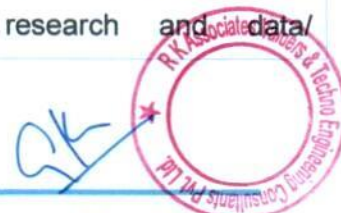




**PART A**

**REPORT SUMMARY**

S. No.	PARTICULAR	DESCRIPTION
1.	<b>Name of the Company:</b>	M/s Apollo Polyvinyl Private Limited
2.	<b>Registered Address:</b>	No. 6, 3 <sup>rd</sup> Street, Balaji Nagar, Royapettah, Chennai, Tamil Nadu - 600014
3.	<b>Project Name</b>	PVC Flex Banner & PVC/WPC Foam Board Manufacturing Plant
4.	<b>Project Location:</b>	District No. 28, Siruvada Village, Gummdipoodi Taluk, Thiruvalluvar District, Tamil Nadu - 601202
5.	<b>Project Type:</b>	PVC Flex Banner & PVC/WPC Foam Board Manufacturing Plant
6.	<b>Project Industry:</b>	Printed Signage & Interior Decoration
7.	<b>Product Type / Deliverables:</b>	PVC Flex Banner (PVC/WPC Foam Board unit has been leased out)
8.	<b>Report Prepared for Organization:</b>	Punjab National Bank (PNB), MCC Branch, Haridwar, Uttarakhand - 249401
9.	<b>TEV Consultant Firm:</b>	M/s. R.K Associates Valuers & Techno Engineering Consultants (P) Ltd.
10.	<b>Report type:</b>	Techno-Economic Viability Report
11.	<b>Purpose of the Report:</b>	To assess Technical & Economic Viability for the purpose of seeking external financial assistance to start a brown field Project.
12.	<b>Scope of the Report:</b>	To assess, evaluate & comment on Technical, Economical & Commercial Viability of the Project as per data information provided by the client, independent Industry research and social data/



		information available on public domain.												
13.	Date of Report:	25 <sup>th</sup> July, 2024												
14.	Documents referred for the Project:	<div><div>A. PROJECT INITIATION DOCUMENTS:</div><div><div>1. Financial Projections of the Project</div><div>2. Project proposed Schedule</div></div><div>B. PROCUREMENT DOCUMENTS:</div><div><div>1. Fixed Assets Schedule</div><div>2. Process Flow Chart</div><div>3. Sanctioned map of the site</div><div>4. Sale deeds of the Land</div><div>5. Information Memorandum</div><div>6. Approved Resolution Plan</div></div><div>C. STATUTORY APPROVALS, LICENCES &amp; NOCs</div><div>a. Factory License</div></div>												
15.	Means of Finance:	Equity & Debt (D/E Ratio 2.58)												
16.	Key Financial Indicators:	<table><tr><th>Key Indicators</th><th>Value</th></tr><tr><td>Average DSCR (FY26-FY32)</td><td>1.62</td></tr><tr><td>Average EBITDA Margin</td><td>9.34%</td></tr><tr><td>Avg. PAT Margin</td><td>3.82%</td></tr><tr><td>NPV &amp; IRR</td><td>INR 18.14 Cr. &amp; 20.73%</td></tr><tr><td>Payback Period</td><td>4.60 years</td></tr></table>	Key Indicators	Value	Average DSCR (FY26-FY32)	1.62	Average EBITDA Margin	9.34%	Avg. PAT Margin	3.82%	NPV & IRR	INR 18.14 Cr. & 20.73%	Payback Period	4.60 years
Key Indicators	Value													
Average DSCR (FY26-FY32)	1.62													
Average EBITDA Margin	9.34%													
Avg. PAT Margin	3.82%													
NPV & IRR	INR 18.14 Cr. & 20.73%													
Payback Period	4.60 years													

**Note:** Above financial indicators are based on the financial projections of the proposed project provided by the firm and assessment and analysis of the same done by us.

*Signature*

**R.K. Associates Valuers & Techno Engineering Consultants Pvt. Ltd.**



**PART B**

**INTRODUCTION**

**1. ABOUT THE REPORT:**

This is a Techno-Economic Viability Study Report of the already established PVC Flex Banner (16,800 MTPA) & PVC/WPC Foam Board (3,500 MTPA) Manufacturing Plant at District No. 28, Siruvada Village, Gummdipoodi Taluk, Thiruvalluvar District, Tamil Nadu - 601202.

**2. EXECUTIVE SUMMARY:**

M/s Apollo Polyvinyl Private Ltd was incorporated on 17<sup>th</sup> May 2011 under the Company's Act, 1956 as per information provided by the client to carry on the business manufacturing and trading of printing materials such as Printing Flex, Foam Board & Celuka Board. The erstwhile promoter of the Company was Mr. Sunil Kapoor.

As per information shared by the client, Mr. Sunil Kapoor, the promoter of Kapoor Imaging Pvt Ltd who has been in the supply of consumable to the printing industry expanded into importing and supplying Polyvinyl flexible sheets for making banners and looking at the response contemplated a backward integration to go for manufacture of the sheets and set up this company. PVC/WPC boards is a related and ancillary business. The company went into production in 2017 and the turnover in the best years were INR 47.37 Cr and INR 49.94 Cr for FY2018 and FY2019 respectively.

The production stopped shortly thereafter with ban on the use of PVC flexes in Tamil Nadu which was followed by Kerala and Karnataka.

In 2019 the company had leased out the PVC/WPC foam board production facility to a company called M/s Konita Industries Pvt Ltd and the extended lease period ended in January 2024. The PVC Flex unit has thus remained unutilized for the past 5 years or so.

The company had availed credit facility from Canara Bank and State Bank of India. Subsequently the loan became an NPA, and the banks began recovery proceedings. SBI declared the company as a wilful defaulter.

An application CP (IB)/226(CHE)/2022 was filed under Section 7 of Insolvency and Bankruptcy Code, 2016 read with Rule 6 of the Insolvency and Bankruptcy (Application to Adjudicating Authority) Rules, 2016 by State Bank of India, SAMB, Chennai as the Financial Creditor to commence the Corporate Insolvency Resolution Process (CIRP) against M/s



Apollo Polyvinyl Private Limited on the ground that the Company committed default in paying Financial debts falling due.

The said application for initiation of Corporate Insolvency Resolution Process was admitted by Hon'ble National Company Law Tribunal (NCLT), Chennai Bench, Court II vide its order dated 24<sup>th</sup> April 2023, wherein the CIRP of Company was commenced and Mr. Ashok Seshadri was appointed the Interim Resolution Professional (IRP) and was later confirmed as the Resolution Professional (RP).

An invitation for Expression of Interest ("Eoi") for submitting resolution plans, in terms of Form G was issued as per Section 25(2)(h) of the IBC, 2016 read with Regulation 36A of the IBBI (CIRP) Regulations, 2016. Pursuant to the publication of the Form G by the Resolution Professional, the RP received Eoi's from 16 Prospective Resolution Applicant (PRAs). However, only 6 of them provided detailed Expression of Interest. The information memorandum ("IM") was issued by the Resolution Professional to those 6 PRA's. The final list of PRAs included the names of 6 applicants viz.

- a) Subbulakshmi Investment Advisory Private Limited
- b) Navratan Speciality Chemicals LLP
- c) Siddivinayak Steels
- d) Cleena Industries Private Limited
- e) SPSS Infrastructure Private Limited
- f) Nakshatra Corporate Advisors Limit

The Resolution Plan of M/s Cleena Industries Private Limited along with addendum dated 19<sup>th</sup> December 2023 was approved by the Committee of Creditors (CoC) in the 9th CoC meeting on 19<sup>th</sup> December 2023 with 100% voting. The Resolution Plan was approved by Hon'ble National Company Law Tribunal (NCLT), Chennai Bench, Court II vide its order dated 24<sup>th</sup> June 2024 with the Resolution Plan value being INR 29.58 Crores.

M/s Apollo Polyvinyl Private Ltd has proposed to takeover this Brownfield project at Siruvada Village in Tamil Nadu, for PVC Flex Banner production. The PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant is proposed to be taken over at a total investment of INR 4,060.82 Lakhs, which is proposed to be funded through promoter's equity of INR 600.00 lakhs, unsecured promoter loan of INR 535.82 lakhs and term loan of INR 2,925.00 lakhs.

QK





Brief snapshot of the financial position of M/s Apollo Polyvinyl as per the financial statements of FY2021 shared by the client is as under:

Snapshot of Financial Position of M/s Apollo Polyvinyl as of 31 <sup>st</sup> March 2021	
Particulars	Amount (INR Cr)
Net worth	(24.22)
Property, plant & equipment	53.67
Total borrowings	65.63
Total Assets	60.45
Revenue for FY21	0.31
Profit after tax for FY21	(8.87)

As per information provided by the client, the plant has not been in operation for more than five years. The installed capacity of The PVC Flex Banner unit and WPC/PVC Foam Board is 16,800 MTPA and 3,500 MTPA respectively. In 2019, the Company had leased out the WPC/PVC Foam Board production facility to M/s Konita Industries Private Ltd and the extended lease period ended in January 2024. Current status of WPC/PVC Foam Board unit has not been provided to us by the new management.

As per information shared by the client/company, the erstwhile promoters had purchased ~35 acres of land at Siruvada village, Gummdipoondi Taluk, Thiruvallur District, Tamil Nadu. We have provided with sale deeds for ~33.76 acres only. As per information provided to us, factory building of ~80,000 Sq. Ft. is constructed and rest is surplus land. As per our technical assessment, built-up area of factory building is ~68,000 Sq. Ft only.

As per data/information provided to us, the company had obtained some Statutory Approvals/NOC's such as Factory License etc. from the respective authorities (*Refer the section Statutory Approval in the later part of the report*).

During the site visit, we found that condition of building & civil works and plant & machinery is good and major refurbishment is not required. Few items of plant and machinery were found missing at site (*Kindly refer the site pictures captured during the survey attached in the later section of the report*).

The power connection was surrendered to obviate the recurring demand charges. The lessee using the WPC/PVC foam board unit has taken a new power connection suitable for their use. The PVC Flex Banner unit plant needs about 1,200 Kw of power at full capacity to meet process energy requirement. Currently, the company is in the process to apply for





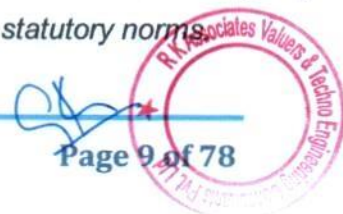
increase in power load connection. Company has planned to achieve the C.O.D by 01<sup>st</sup> November 2024.

At present, the company is in discussion with bank to fund the project through a term loan of INR 2,925 lakhs and working capital limit of INR 3,000 lakhs. In this regard Punjab National Bank (PNB), MCC Branch, Haridwar has appointed R.K. associates to assess the Techno-Economic Viability of the PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant for PVC Flex Banner & WPC/PVC Foam Board at District No. 28, Siruvada Village, Gummdipoodi Taluk, Thiruvalluvar District, Tamil Nadu - 601202. The company plans to achieve the financial closure by July 2024 (expected).

3. **PURPOSE OF THE REPORT:** To assess Project's Technical and Financial Feasibility for lender's requirement.
4. **SCOPE OF THE REPORT:** To only assess, evaluate & comment on Technical & Financial Feasibility of the PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant being set up by M/s Apollo Polyvinyl Private Limited as per the information provided by the Company.

**NOTES:**

- *Project status is taken as per the Site inspection carried out by our survey team.*
- *Scrutiny about the M/s Cleena Industries Private Limited (Acquiring Company) and M/s Apollo Polyvinyl Private Limited (Acquiree Company), background check, and credibility, credit worthiness of the company or its promoters is out-of-scope of this report.*
- *Any verification of the documents/ information from originals/ source is out-of-scope of this report.*
- *This report is only an opinion in respect to Technical and Financial Feasibility of the project as per the future Projections provided by the firm and independent analysis done by us and doesn't contains any recommendations including taking decision on the loan or any other financial exposure.*
- *This is not an audit activity of any kind. We have relied upon the data/ information shared by the company in good faith.*
- *Any review of the existing business of the new promoters (M/s Cleena Industries) is out of scope of this report.*
- *Detailed cost estimation or detailed cost vetting is out of scope of the project.*
- *This is not a Detailed Project Report or a detailed design or architecture document. Land and property details mentioned in the report is only for illustration purpose as per the information provided to us by the client. The same doesn't tantamount for taking any responsibility regarding its legality, ownership and conforming to statutory norms.*





**5. METHODOLOGY/ MODEL ADOPTED:**

- Data/ Information collection.
- Review of Data/ Information collected related to TEV study.
- Independent review & assessment of technology used and financial projections provided by the company.
- Projections of Revenue, P&L, Balance Sheet, Working Capital Schedule, Depreciation Schedule, Loan Schedule as per the inputs given by the company and assessed by us.
- Calculation of key financial indicators and ratio analysis including DSCR, NPV & IRR and payback period of the project.
- Report compilation and Final conclusion.

**6. DATA/ INFORMATION RECEIVED FROM:** All the data/Information has been received from Mr. Tushar Bansal and the required details about him shown in the below table:

Particulars	Details
Name	Mr. Tushar Bansal
Company	M/s Cleena Industries Private Limited
Email Address	<a href="mailto:catusharbansal@cleenaind.com">catusharbansal@cleenaind.com</a>
Contact No.	+91-7060200262

**7. DOCUMENTS / DATA REFERRED:**

- Financial Projections of the project up to FY 2033.
- Audited Financial Statement of M/s Apollo Polyvinyl for FY21
- Information Memorandum
- Approved Resolution Plan
- Promoter's Details.
- Total project cost & Production flow chart
- Sale deeds of the land, Fixed Assets Schedule
- Approved Site/Layout Plan.
- Certificates of Statutory approvals/NOC's.



*Handwritten signature/initials in blue ink.*

**PART C**

**COMPANY PROFILE**

**1. COMPANY OVERVIEW:**

M/s Apollo Polyvinyl Private Ltd was incorporated on 17<sup>th</sup> May 2011 under the Company's Act, 1956 as an unlisted company limited by shares as per information provided by the client to carry on the business of manufacturing and trading of printing materials such as Printing Flex, Foam Board & Celuka Board. Below table shows the incorporation details of the company:

Incorporation Details of the Company	
Particular	Description
Company / LLP Name	M/s Apollo Polyvinyl Private Limited
Date of Incorporation	17 <sup>th</sup> May 2011
CIN	U74990TN2011PTC080650
Company Category	Unlisted Company limited by Share
Company Subcategory	Non-govt. company
ROC	Tamil Nadu
Registered Address	No .6, 3 <sup>rd</sup> Street, Balaji Nagar, Royapettah, Chennai, Tamid Nadu - 600014
Authorized Capital	INR 16,00,00,000/-
Paid up Capital	INR 5,23,13,600/-

**Source:** Ministry of Corporate Affairs (MCA) website

As per Data/ Information provided by the company, the erstwhile promoter of the company was Mr. Sunil Kapoor and directors are Mr. Thiruvengadam Arumugham and Mr. Sadakathulla Khan Janijahankhan (powers suspended).

**2. OVERVIEW OF THE SUCCESSFUL RESOLUTION APPLICANT:**

M/s Cleena Industries was incorporated on 29<sup>th</sup> February 2016 under the Company's Act, 2013 as an unlisted company limited by shares as per information provided by the client to carry on the business of manufacturing of PVC Flex Sheeting used in displays (indoor and outdoor advertising), banners, building murals and in-store displays and exhibition booth decorations etc. with an installed capacity of 12,000 MT. pa. Below table shows the incorporation details of the company.





# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

Incorporation Details of the Company	
Particular	Description
Company / LLP Name	M/s Cleena industries Private Limited
Date of Incorporation	29 <sup>th</sup> February 2016
CIN	UJ74900D12016PTC291860
Company Category	Unlisted Company limited by Share
Company Subcategory	Non-govt. company
ROC	Delhi
Registered Address	House No. 98, First Floor, Pocket 12, Sector 24, Rohini, New Delhi - 110085
Authorized Capital	INR 10,00,00,000/-
Paid up Capital	INR 9,35,00,000/-

**Source:** Ministry of Corporate Affairs (MCA) website

As per Data/ Information provided by the company, the promoters of the Company are Mr. Manoj Agarwal, Mrs. Rakhi Agarwal, Mr. Naman Agarwal, Mr. Sharad Gupta, Mrs. Alka Gupta, Mr. Anugrah Gupta, Mrs. Tanu Gupta, Mr. Ruchir Gupta, Mr. Pankaj Mittal and Mrs. Shivani Mittal. Directors of the Company are Mr. Anugrah Gupta (DIN: 08067597), Mrs. Alka Gupta (DIN: 06970531), Mr. Naman Agarwal (DIN: 07379508), Mr. Pankaj Mittal (DIN: 01111116), Mrs. Shivani Mittal (DIN: 01499722) and Mr. Praveen Kumar (DIN: 09363342). As per the data/information provided by the client, current shareholding pattern is as below:

Shareholding Pattern of M/s Cleena Industries		
Name of Shareholder	No. of shares held	% of holding
Mr. Manoj Agarwal	15,07,500	16.12%
Mrs. Rakhi Agarwal	2,30,000	2.46%
Mr. Naman Agarwal	6,00,000	6.42%
Mr. Sharad Gupta	12,97,500	13.88%
Mrs. Alka Gupta	7,50,000	8.02%
Mr. Anugrah Gupta	2,90,000	3.10%
Mrs. Tanu Gupta	20,00,000	21.39%
Mr. Ruchir Gupta	3,37,500	3.61%
Mr. Pankaj Mittal	19,75,000	21.12%
Mrs. Shivani Mittal	3,62,500	3.88%



### 3. KEY PROMOTER'S/DIRECTORS PROFILE OF THE SUCCESSFUL RESOLUTION APPLICANT:

The details of key promoters and directors of the successful Resolution Applicant, i.e., M/s Cleena industries Private Limited is given as under:

(A) Directors/Promoters Details					
Name	DIN	Age	Address	Designation	Contact Details
Mr. Sharad Gupta	06934424	59	419, Civil Lines, Roorkee	Promoter	+91 9897966545
Mr. Pankaj Mittal	01111116	52	304, Civil Lines, Roorkee	Promoter/ Director	+91 9012803695
Mr. Manoj Agarwal	00365337	66	200, Civil Lines, Roorkee	Promoter	+91 9837032355
Mr. Naman Agarwal	07379508	33	200, Civil Lines, Roorkee	Promoter/ Whole-Time Director	+91 9503311860
(B) Education & Experience					
Mr. Sharad Gupta	<ul style="list-style-type: none"> <li>Promoter of M/s Cleena Industries Private Limited.</li> <li>As per data/information shared by the client, he is an entrepreneur with post graduate degree in commerce.</li> <li>He has 26-year experience of running businesses like trading &amp; manufacturing and also running college in Roorkee.</li> <li>He has sound net worth.</li> </ul>				
Mr. Pankaj Mittal	<ul style="list-style-type: none"> <li>Promoter of M/s Cleena Industries Private Limited</li> <li>Appointed as Director on 29<sup>th</sup> February 2016.</li> <li>As per data/information shared by the client, Mr. Pankaj Mittal has done MBA.</li> <li>He has 20-year experience in running businesses.</li> <li>He has dealership of Maruti and have 5 showrooms in India which are running successfully.</li> <li>He has sound net worth.</li> <li>He is also a Director in Shakumbari Autowheels Private Limited.</li> </ul>				
Mr. Manoj Agarwal	<ul style="list-style-type: none"> <li>Promoter of M/s Cleena Industries Private Limited.</li> </ul>				







# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

### MR. MANOJ AGARWAL

S. No	Company Name	Designation	Original Date of Appointment	Date Of Appointment at Current Designation
1	Khushhal Fertiliser Limited (CIN: U24122UR1983PLC006219)	Director	29 <sup>th</sup> September, 2018	29 <sup>th</sup> September, 2018
2	Humanix Lifesciences Private Limited (CIN: U24303DL2016PTC300216)	Director	01 <sup>st</sup> March, 2024	01 <sup>st</sup> March, 2024
3	Prominent Fibres Private Limited (CIN: U20299UR2021PTC014612)	Director	04 <sup>th</sup> February, 2021	04 <sup>th</sup> February, 2021

**Source:** Information extracted from MCA website & public domain.

### MR. NAMAN AGARWAL

S. No	Company Name	Designation	Original Date of Appointment	Date Of Appointment at Current Designation
1	Cleena Industries Private Limited (CIN: U74900DL2016PTC291860)	Director	01 <sup>st</sup> April, 2017	01 <sup>st</sup> April, 2017

**Source:** Information extracted from MCA website & public domain.





**PART D**

**INFRASTRUCTURE DETAILS**

**1. LOCATION:**

The PVC Flex Banner & WPV/PVC Foam Board Manufacturing Plant was set up by M/s Apolly Polyvinyl Private Limited Limited at District No. 28, Siruvada Village, Gummdipoodi Taluk, Thiruvalluvar District, Tamil Nadu - 601202, which is spread over an area ~35 acres as per the information provided to us by the company.

The property is having the proximity to the civic amenities such as school is situated ~0.8 km away, hospital is situated ~6 km away, market is situated ~6 km, railway station is situated ~19 km away and airport is situated ~71 km away from the plant location. Adjoining lands are agricultural lands. Connectivity Details of the Location is shown below:

Table: Connectivity Details of the Location	
Connectivity	Details
Road	Uthukottai-Gumudipoodi Highway- ~2.5 km away
Rail	Gummidipoondi Railway Station - ~26 km away
Airport	Chennai International Airport - ~73 km away

Source: Google Map.

**LOCATION MAP:**

- a) **Google Map Location:** The PVC Flex Banner & WPV/PVC Foam Board Manufacturing Plant is set up at District No. 28, Siruvada Village, Gummdipoodi Taluk, Thiruvalluvar District, Tamil Nadu – 601202 with GPS coordinates 13°23'56.9" North and 79°59'51.0" East as per the Google map attached below:





- b) **Google Map Layout:** Demarcation of the land using Google Maps is shown below. Exact Plant Boundary could not be demarcated as the plant is not demarcated by a permanent boundary wall. It is demarcated partially by wire fencing only.



## 2. LAYOUT PLAN:

As per the data/information provided by the client/Company, the layout plan was prepared by the engineer Mr. A. Ravi. Approved layout plan has not been provided to us. For reference, layout plan provided to us has been attached below:







### 3. LAND DETAILS:

As per information shared by the client/company, the erstwhile promoters had purchased ~35 acres of land at Siruvada village, Gummdipoondi Taluk, Thiruvallur District, Tamil. We have been provided with sale deeds for ~33.76 acres only. Land details as per the sale deeds are mentioned below:

Land Details:								
S.No	Date	Document Type	Document No	Location	Survey No	Nature of Land	Area	Consideration (INR)
1	02-08-2012	Sale Deed	4233/2012	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No. 305	20/48, 25/1A, 39/1C, 28/2B, 28/2B, 12/2	Punja	3 Acres 73 Cents	14,92,000
2	02-08-2012	Sale Deed	4234/2012	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No. 105	27/2A, 39/1A, 39/2E, 40/2C	Punja	56 Cents	2,24,000
3	02-08-2012	Sale Deed	4235/2012	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No. 287	6/2, 6/3, 6/4, 6/5, 6/6, 6/7, 6/8, 6/9, 6/10, 6/11, 6/12, 6/13, 6/14, 6/15, 6/16, 6/17, 6/18, 6/19, 6/20, 6/21, 6/22, 7/3	Punja	7 Acres 56 Cents	30,24,000
4	02-08-2012	Sale Deed	4236/2012	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No.	28/1E, 25/2C, 21/3	Punja	1 Acre 04 Cents	4,16,000
5	02-08-2012	Sale Deed	4237/2012	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No. 304	35/3B, 27/5, 8/10, 25/2A, 8/1D, 25/2A, 8/1B, 8/1F, 25/2B, 27/8, 27/7, 27/9, 34/2, 28/5, 28/4C, 8/1A Part, 34/11A, 10/4	Punja	5 Acres 49 Cents	21,96,000
6	02-08-2012	Sale Deed	4239/2012	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No. 303	11/3D, 11/5, 11/6A, 11/6B5, 11/6B9, 10/1, 39/2C, 40/3B, 40/1, 40/3D, 39/2A, 10/2, 10/3, 40/3C, 39/2B, 40/3A, 39/2D, 20/2C, 20/3A, 19/1, 20/4A, 38/4B3, 39/2F, 29, 24/1A, 24/1B, 24/2, 25/1B, 27/3A, 28/7, 28/1, 28/3A, 27/10, 26/1, 27/3D, 27/10, 27/4, 27/3C, 39/3, 27/1B, 27/2C, 40/2A, 27/2B, 39/1B, 40/2B, 9A, 11/2A, 11/2C, 11/4A, 11/6B4, 11/6B6, 11/6C, S.No.24/2, 27/10, 39/3 - Three Well Value	Punja	14 Acres 38.5 Cents	56,55,500
7	31-10-2012	Sale Deed	6009/2012	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No. 36	11/1A, 11/1C, 11/1D, 11/3A, 11/3B, 11/3C, 11/7A, 11/7C	Punja	88 Cents	3,52,000
8	06-12-2013	Exchange Deed	6475/2013	Thiruvellore District, Kummipoondi Circle, No. 16, Poovalampedu, Patta Nos 128 & 4	9/81, 9/82, 9/83, 9/84, 9/85, 9/86, 9/87, 9/88, 9/89	Punja	2.31 Cents	9,24,000
9	13-02-2014	Sale Deed	603/2014	No 28, Siruvada Village, Gummidipoondi Taluk, Thiruvellore District, Patta No. 36	11/6E	Punja	09 Cents	36,000
<b>33 Acres &amp; 75.8 Cents</b>								<b>1,43,19,500</b>

As per the audited financial statements of the company for the financial year 2021 shared with us, cost of land capitalised in books is ~INR 4.49 Cr. We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date.

As per land sale deeds shared with us, INR 1.43 Cr is the consideration for cost of land. Company has considered INR 7.00 Cr as market value for computing project cost. However, client has not provided any cost breakup of the same. As per our technical assessment, fair market value of ~33.76 acres of land is ~INR 10.13 Cr after considering guideline rate of INR 30 lakhs per acre.





Guideline Search

Search Criteria :

Zone:  
Guideline Village:  
Revenue District:  
Street/Survey Number:

CHENGALPATTU  
SIRUVADAL  
KANCHEEPURAM  
11

Sub Registrar Office:  
Revenue Village:  
Revenue Taluka:

SUNGUVARCHATTTRAM  
SIRUVEDAL  
KANCHEEPURAM

11 items found, displaying 1 to 10  
[FirstPrev] 1, 2 [NextLast]

Sr.No.	Survey Subdivision No.	Guideline Value (₹) (Hrsh Value)	Guideline Value (₹) (Metric Value)	Land Classification	Effective Start Date	Go To Download
1	11/1	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
2	11/16	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
3	11/2	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
4	11/3	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
5	11/4	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
6	11/5	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
7	11/6	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
8	11/7A	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
9	11/7B	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-
10	11/8	3000000/ Acre	7413000/ Hectare	Wet Lake Irrigation Single Crop Type - I	01-Jul-2024	-

Back

4. **SITE PICTURES:** Site pictures were captured during the site survey on 17<sup>th</sup> July 2024, for reference few of the pictures are attached below:









# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED





# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED







## 5. BUILDING & CIVIL WORKS:

According to the information shared by the client, the plant is spread over an area of ~80,000 sq. ft. As per evaluation done by us during site survey on 17<sup>th</sup> July 2024, built-up area of factory building is ~68,000 sq. ft. only.

Description	Type of Structure	Total Floors	Built-up Area(Sqm)	Built-up Area (Sqft)	Height (Mtr)
Main Shed	GI Shed	1	3,267	35,166	12
Main Shed RCC Block	RCC	G+2	827	8,902	5
Boiler	Shed	1	420	4,521	13
Panel Room	RCC	1	201	2,164	5
PVC Foam Boad Shed	GI Shed	1	1,604	17,265	9
			<b>6,319</b>	<b>68,018</b>	





Approved building layout plan (building permit) has not been shared with us. As per the audited financial statements of the company for the financial year 2021 shared with us, the depreciated cost of factory building is ~INR 4.49 Cr. We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date. Company has considered INR 10.08 Cr as market value for computing project cost, however client has not provided any cost breakup of the same.

As per our technical assessment, fair market value of building having built up area of ~68,000 sq. ft. is ~INR 9.95 Cr. Thus the cost of Building & Civil works is in the line with benchmark based on the prevailing market rates.

Description	Type of Structure	Total Floors	BUA (Sq.m)	Height (Mtr)	YoC	CoC/sqft	Eco. Life	Sal. Value	Age	RCN	Dep.	DRC
Main Shed	GI Shed	1	3,267	12	2016	1800	45	90%	8	6,32,98,778	1,01,27,805	5,31,70,974
Main Shed RCC Block	RCC	G+2	827	5	2016	2000	60	90%	8	1,78,03,656	21,36,439	1,56,67,217
Boiler	Shed	1	420	13	2016	1200	45	90%	8	54,25,056	8,68,009	45,57,047
Panel Room	RCC	1	201	5	2016	1500	60	90%	8	32,45,346	3,89,442	28,55,904
PVC Foam Boad Shed	GI Shed	1	1,604	9	2016	1600	45	90%	8	2,76,24,730	44,19,957	2,32,04,773
<b>Total</b>			<b>6,319</b>							<b>11,73,97,566</b>	<b>1,79,41,650</b>	<b>9,94,55,916</b>

During the site visit, we found that factory building is in good order and no major repair cost would be required.

## 6. PLANT & MACHINERY/ EQUIPMENTS DETAILS:

As per the audited financial statements of the company for the financial year 2021 shared with us, the depreciated cost of plant and machinery, electrical equipment, furniture and office equipment, computers, vehicles etc. is ~INR 33.40 Cr.

However, company has considered INR 12.50 Cr as market value of existing machinery & equipment for computing project cost. We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date or other details such as equipment name, manufacturer name, specification/capacity, landed price, age of the plant & machinery, etc.

The company's management has estimated cost of refurbishment and installation of old machines and new equipment as INR 5.00 Cr. But we have not been provided the details of equipment, plant & machinery along with expected cost and suppliers or any quotations for the same. List of main machinery and equipment as per the Information Memorandum is shown below:





List of Main Machinery and Equipment		
S. No.	Equipment	Supplier
1.	Flex film unit, year of manufacture 2016 complete with mixures, mixing roll machines, strainer extruder, Calender machine, post calendar cooler, and winding unit	Forward Machinery Industrial Corp., Taiwan
2.	Flex film laminator, consisting of main heating roller and a cooling roller. Year of manufacture 2016	Gaoming Hongyi Machinery Co Ltd, China
3.	Thermic Fluid heater. Year of manufacture 2017	Thermo Tech, India
4.	Air cooled Chiller, Year of manufacture 2016	Kirloskar, India
5.	Flex printing inkject printer. Year of commissioning 2017	Kenjet
6.	Transformer, Year of manufacture 2016. Present condition – power disconnected. Requires attention	Schneider Electricals
7.	Foam Board machinery along with die set. Two in number. One not working and the other one is used by the lessee	Quingdao Sanyi Plastic Machinery co Ltd, China
8.	Air compressors- two units. Year of Manufacture 2016	Atlas Capco, India
9.	Air receivers, plastic grinding machine, cooling tower, ETP,EOT and Fixed cranes, material lift, 250 KVA Generator	Various

**Source:** Data/information provided by the client.

Note: one foam board machinery is not working, and the other one is being used by the lessee (M/s Konita Industries Pvt Ltd).

As per our technical assessment, fair market value of existing machinery and other equipment basis the audited financial statements of financial year 2021 is ~INR 28.61 Cr.





# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

S.No.	PARTICULARS	GB 31-03-2021	NB 31-03-2021	NB 31-03-2019	Type	YoC	Status	Category-4	Net Index	Age	EL	SV	RCN	Dep.	CRC	FMV
1	Flex Machinery	40,45,46,192	30,72,02,027	33,15,29,412	Movable	2,016	Seen	(R). MANUFACTURE OF MACHINERY AND EQUIPMENT	1.20	6.89	15	90%	48,73,19,699	20,15,06,696	28,58,13,003	25,72,31,703
2	Building - Factory	17,86,63,585	15,76,97,341	16,30,77,795	Building		Seen									
3	Land at Gummudipoondi - HOF	3,25,25,718	3,25,25,718	3,25,25,718	Land		Seen									
4	Transformer	1,34,18,968	37,26,050	61,48,174	Movable	2,016	Seen	Transformer	1.23	6.89	12	90%	1,65,64,661	85,61,859	80,02,802	72,02,522
5	Land and Development - HOF	1,23,67,972	1,23,67,972	1,23,67,972	Land		Seen									
6	PVC Foam Sheet Machine	93,64,960	66,45,730	72,08,891	Movable	2,017	Seen	Printing machinery	1.15	6.89	12	95%	1,07,83,893	58,83,587	49,00,306	44,10,275
7	Electrical & Fittings	90,68,937	24,54,827	41,18,845	Movable	2,017	Seen	(Q). MANUFACTURE OF ELECTRICAL EQUIPMENT	1.21	6.89	15	95%	1,09,36,794	47,73,607	61,63,187	55,46,869
8	Electricals & Fitting - Factory	82,72,687	23,42,682	38,35,902	Movable	2,017	Seen	(Q). MANUFACTURE OF ELECTRICAL EQUIPMENT	1.21	6.89	15	95%	99,76,546	43,54,485	56,22,061	50,59,855
9	PVC Foam Sheet Machine 3MM	54,84,564	38,49,911	41,79,724	Movable	2,017	Seen	Printing machinery	1.15	6.89	12	95%	63,15,558	34,45,707	28,69,851	25,82,866
10	Boiler - Factory	26,18,162	20,06,959	21,64,402	Movable	2,017	Seen	Boilers	1.00	6.89	12	95%	26,06,379	14,22,015	11,84,364	10,65,928
11	UPS & Batteries - Factory	20,39,094	6,88,749	10,45,255	Movable	2,017	Seen	UPS in Solid State Drives	1.16	6.89	12	90%	23,74,181	12,27,155	11,47,026	10,32,324
12	Generator - Power Factory	18,17,493	5,15,182	8,43,239	Movable	2,017	Seen	Generators & Alternators	1.19	6.89	12	90%	21,67,796	11,20,480	10,47,317	9,42,585
13	Furniture & Fixtures - Factory	15,45,637	10,10,144	11,49,634	Movable	2,017	Not Seen	Light, medium & heavy commercial vehicles	1.00	6.89	8	95%	15,51,089	12,69,389	2,81,700	-
14	Eicher Lorry - TN 06 F 6901 - HOF	15,20,694	76,035	1,15,201	Movable	2,017	Not Seen	Light, medium & heavy commercial vehicles	1.00	6.89	8	95%	15,26,058	12,48,904	2,77,154	-
15	Eicher Pro 1059XP - Factory	10,61,621	5,81,048	7,00,863	Movable	2,017	Not Seen	Passenger vehicles	1.17	6.89	12	90%	12,42,261	6,42,094	6,00,167	-
16	Mahindra Bolero Car TN 06 K 8655 - HOF	8,73,850	1,64,637	2,63,260	Movable	2,017	Not Seen	Passenger vehicles	1.17	6.89	12	90%	10,22,540	5,28,525	4,94,014	-
17	Flex Printer KM NX 3200 - Factory	7,87,500	2,16,718	3,58,862	Movable	2,017	Not Seen	Printing machinery	1.15	6.89	15	95%	9,06,818	3,95,801	5,11,017	-
18	Polo Car TN 06 H 2293 - HOF	7,11,657	35,583	95,622	Movable	2,017	Not Seen	Passenger vehicles	1.17	6.89	12	90%	8,32,749	4,30,427	4,02,322	-
19	Labour Quarters - Factory	6,95,869	6,26,054	6,47,010	Building		Seen									
20	Foam Board - Door Mould(80 MM)	6,90,247	5,90,951	6,32,459	Movable	2,017	Seen	(R). MANUFACTURE OF MACHINERY AND EQUIPMENT	1.22	7.89	12	95%	8,39,993	5,24,791	3,15,201	2,83,681
21	Electricals & Fitting Staff Quarters - Factory	6,75,044	2,15,037	3,36,882	Movable	2,017	Seen	(Q). MANUFACTURE OF ELECTRICAL EQUIPMENT	1.21	6.89	15	95%	8,14,077	3,55,322	4,58,755	4,12,880
22	Air Conditioners - Factory	4,25,223	1,17,403	1,94,156	Movable	2,016	Not Seen	Air conditioner	1.07	6.89	8	95%	4,56,790	3,73,830	82,960	-
23	Camera & Biometric - Factory	3,53,630	1,09,694	1,73,524	Movable	2,017	Not Seen	a. Manufacture of electronic components	1.14	6.89	5	100%	4,02,101	4,02,101	-	-
24	Electronic Weighing Scale - Factory	2,59,549	75,383	1,22,314	Movable	2,017	Seen	e. Manufacture of measuring, testing, navigating and control equipment	1.16	7.89	10	95%	3,01,230	2,25,835	75,395	67,856
25	Air Conditioners - HOF	2,20,331	59,488	99,258	Movable	2,016	Not Seen	Air conditioner	1.07	6.89	8	95%	2,36,687	1,93,702	42,986	-
26	ETO Crane - Factory	2,02,050	1,56,163	1,68,312	Movable	2,017	Seen	Cranes	1.39	6.89	12	95%	2,80,097	1,52,818	1,27,279	1,14,551
27	Computer Unit - Factory	1,83,692	9,185	16,287	Movable	2,017	Not Seen	Personal Computer (P.C.)	1.00	6.89	5	100%	1,83,692	1,83,692	-	-
28	RO Water - Factory	1,66,500	74,707	1,04,760	Movable	2,017	Not Seen	(R). MANUFACTURE OF MACHINERY AND EQUIPMENT	1.20	6.89	6	95%	2,00,567	1,90,539	10,028	-
29	Motor - Factory	1,57,970	67,377	95,892	Movable	2,017	Seen	A C Motor	1.24	6.89	8	95%	1,96,124	1,60,505	35,619	32,057
30	Factory Equipment	1,55,874	65,014	93,149	Movable	2,017	Seen	f. Manufacture of other fabricated metal products	1.25	6.89	8	95%	1,94,375	1,59,073	35,301	31,771
31	Computer Unit - HOF	1,40,570	7,028	19,535	Movable	2,017	Not Seen	Personal Computer (P.C.)	1.00	6.89	5	100%	1,40,570	1,40,570	-	-
32	Lift	1,11,600	84,921	91,632	Movable	2,017	Seen	Material handling, lifting and hoisting equipment	1.15	6.89	12	95%	1,28,646	70,188	58,458	52,612
33	Walkie Talkie(Alinco) - Factory	82,440	22,981	37,861	Movable	2,017	Not Seen	c. Manufacture of communication equipment	1.26	6.89	5	100%	1,03,690	1,03,690	-	-
34	Furniture & Fixtures	73,584	53,979	60,619	Movable	2,017	Not Seen	a. Manufacture of furniture	1.27	6.89	8	95%	93,481	76,504	16,978	-
35	Honda Active TN 06 V 0957 - HOF	67,112	48,310	54,367	Movable	2,017	Not Seen	Scooters	1.24	6.89	8	90%	82,903	64,276	18,627	-
36	Honda Active 4G TN 06 U 6703	66,596	46,886	52,896	Movable	2,017	Not Seen	Scooters	1.24	6.89	8	90%	82,266	63,782	18,484	-
37	TVS Jupiter TN 06 U 7545 - Factory	66,300	45,282	51,266	Movable	2,017	Not Seen	Scooters	1.24	6.89	8	90%	81,900	63,498	18,402	-
38	Laptop - Manoj	58,490	2,925	2,925	Movable	2,017	Not Seen	Laptops	1.10	6.89	5	100%	64,197	64,197	-	-
39	Super Splendor TN 06 E 9922 - HOF	57,450	7,386	12,844	Movable	2,017	Not Seen	Motor cycles	1.40	6.89	8	90%	80,266	62,231	18,035	-
40	RO water 100 LPH - Factory	53,357	14,771	24,402	Movable	2,017	Not Seen	(R). MANUFACTURE OF MACHINERY AND EQUIPMENT	1.20	6.89	6	95%	64,274	61,061	3,214	-
41	Tools - Factory	42,552	12,663	20,343	Movable	2,017	Seen	f. Manufacture of other fabricated metal products	1.25	6.89	8	95%	53,062	43,425	9,637	8,673
42	Laptop - Khezan	40,339	2,017	12,640	Movable	2,017	Not Seen	Laptops	1.10	6.89	5	100%	44,275	44,275	-	-
43	UPS - Hosur - HOF	35,000	1,750	5,607	Movable	2,017	Not Seen	UPS in Solid State Drives	1.16	6.89	8	95%	40,752	33,351	7,401	-
44	Blue Star Water Cooler - Factory	32,000	9,656	15,432	Movable	2,017	Not Seen	f. Manufacture of domestic appliances	1.08	6.89	6	95%	34,621	32,890	1,731	-
45	Water Cooler Machine - Factory	20,800	5,034	8,788	Movable	2,017	Not Seen	f. Manufacture of domestic appliances	1.08	6.89	6	95%	22,504	21,378	1,125	-
46	EPABX BOARD - HOF	16,962	848	2,173	Movable	2,017	Not Seen	(P). MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	1.12	7.89	8	95%	19,072	17,873	1,199	-
47	Whirlpool Cooling Machine - Factory	10,782	4,619	6,565	Movable	2,017	Not Seen	f. Manufacture of domestic appliances	1.10	7.89	6	95%	11,909	11,313	595	-
48	Cooler M-301 - Factory	9,000	7,383	7,924	Movable	2,017	Not Seen	f. Manufacture of domestic appliances	1.08	6.89	6	95%	9,737	9,250	487	-
	<b>Total</b>	<b>69,18,60,203</b>	<b>53,66,52,208</b>	<b>57,49,00,593</b>									<b>56,13,90,880</b>	<b>24,07,16,690</b>	<b>32,06,74,190</b>	<b>28,60,79,007</b>

During our site visit on 17<sup>th</sup> July 2024, we found that most of the machinery and equipment are in good order and no major repair would be required. But few items of machinery and equipment out of the fixed assets schedule from the audited financials for FY2021 were found missing at site basis on our broad observation as shown below:



Items of Machinery and Equipment Missing at Site as on 17 <sup>th</sup> July 2024		
S. No.	Particulars	Net Block as on 31 <sup>st</sup> March 2021
1.	Laptop - Manoj	2,925
2.	Camera & Biometric - Factory	1,09,694
3.	Furniture & Fixtures - Factory	10,10,144
4.	Super Splendor TN 06 E 9922 - HOF	7,386
5.	Honda Activa TN 06 V 0957 - HOF	48,310
6.	Honda Activa 4G TN 06 U 6703	46,886
7.	TVS Jupiter TN 06 U7545 - Factory	45,282
8.	Walkie Talkie(Alinco) - Factory	22,981
9.	Eicher Lorry - TN 06 F 6901 -HOF	76,035
10.	Polo Car TN 06 H 2293 - HOF	35,583
11.	Mahindra Bolero Car TN 06 K 8655 - HOF	1,64,637
12.	Eicher Pro 1059XP - Factory	5,81,048
	<b>Total</b>	<b>21,50,911</b>

**7. UTILITIES:** Details of Water, Electricity and other utilities are described as below:

**a. ELECTRICITY:**

As per the data/information provided to us by the client, Company current has power connection of 33 KVA power load. The Company would be needing 1200 KVA at full capacity. The Company would be applying for increase in capacity in near future before the COD date.

**b. WATER:**

We have not been provided with expected water consumption and water connection details by the client.

Thus, ~INR 0.25 Lakhs per metric ton will be the CAPEX for taking over the PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant including GST and pre-operative expenses.

However, as a TEV consultant, estimation/vetting of the project cost is out of scope of this TEV report, and we have relied upon the data/information provided by the client regarding Total Project cost.





**PART E**

**PROJECT TECHNICAL DETAILS**

**1. CAPACITY OF THE PVC FLEX BANNER & WPC/PVC FOAM BOARD MANUFACTURING PLANT:**

As per the data/information provided by the client, the PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant is set up with a designed capacity of 2,800 MT per month.

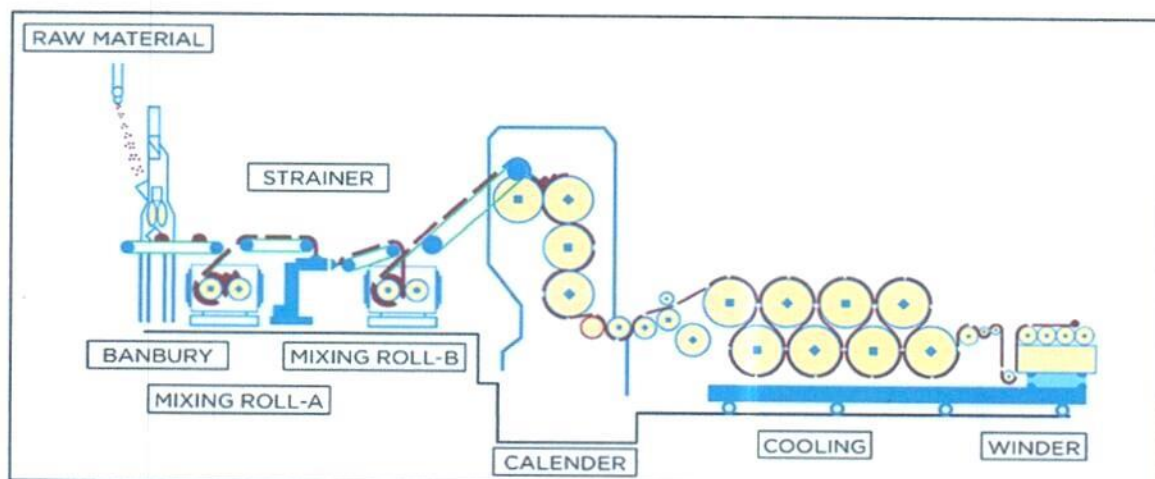
Capacity of the PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant	
Particular	Capacity
PVC Flex Banners	12,800 MTPA
WPC/PVC Foam Boards	3,500 MTPA

**2. PRODUCTION PROCESS OF PVC FLEX BANNERS:**

The different steps involved in the production of the Flex banners are schematically shown below:

**a) FABRICATION OF THE PVC FILMS:**

The sequence of the various processes associated with the manufacture of the compound PVC films is illustrated below:



*Production of the PVC Films*  
 Source: Life Cycle Study of Flex Banner and Its Impact on The Environment, IIT Delhi

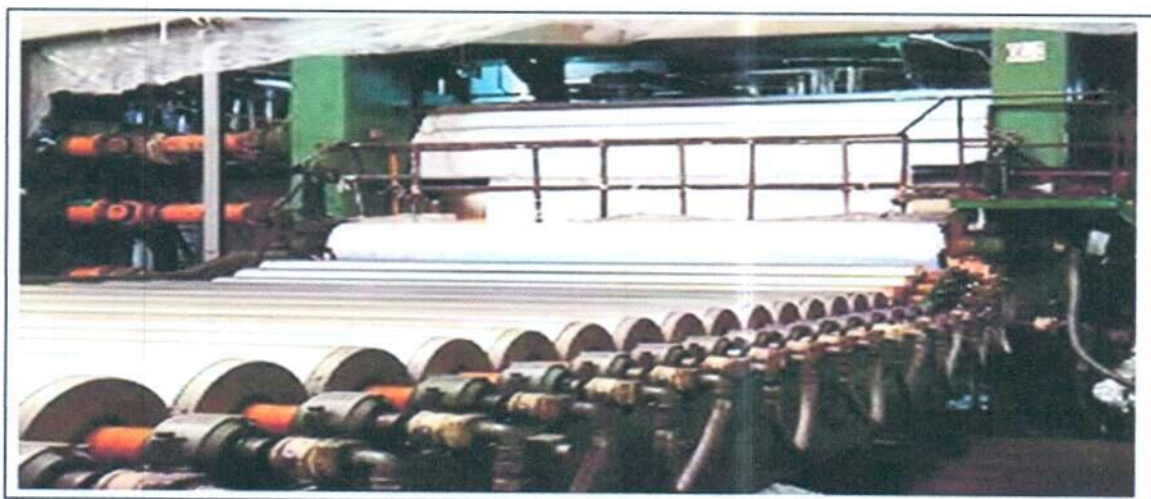
The basic raw materials viz., CaCO<sub>3</sub>, PVC resin, additives and plasticizers are uniformly blended with the help of high-speed mixers so as to improve the processing quality. For further homogenization, the compound is fed into the Banbury mixer wherein it is



subjected to high pressure and temperature. The Banbury mixer is a tangential mixing machine which has two slightly spiralled counter rotating rotors for proper mastication.

A rolling/reduction mill consists of rolls, gear box, motor, bearings, speed control devices and hydraulic systems. The basic configuration of a rolling mill is the two-high non-reversing wherein the rolls turn in only one direction. The two-high reversing mill has rolls that can rotate in both the directions so that the workpiece can be fed from either direction. The heated lump discharged from the Banbury mixer is placed in the nip formed between the rolls and the compound is mixed by cutting it off the rolls and re-feeding it into the nip. The compound gets thoroughly blended in the roll mill at high shear resulting in complete homogenization and degassing. The material is then pressed between the two rolls to yield a thick sheet whose thickness depends on the gap between the rolls.

The material (in the form of a strip) is transported from the roll mill to the strainer extruder for further mixing and segregation of the impurities. It enters into the hopper and comes in contact with a rotating screw which pushes the material into the barrel towards the head of the extruder. The barrel is heated using the heating elements, the head is periodically cleaned and the sieves are changed accordingly.



*Calendaring Machine*

*Source: Life Cycle Study of Flex Banner and Its Impact on The Environment, IIT Delhi*

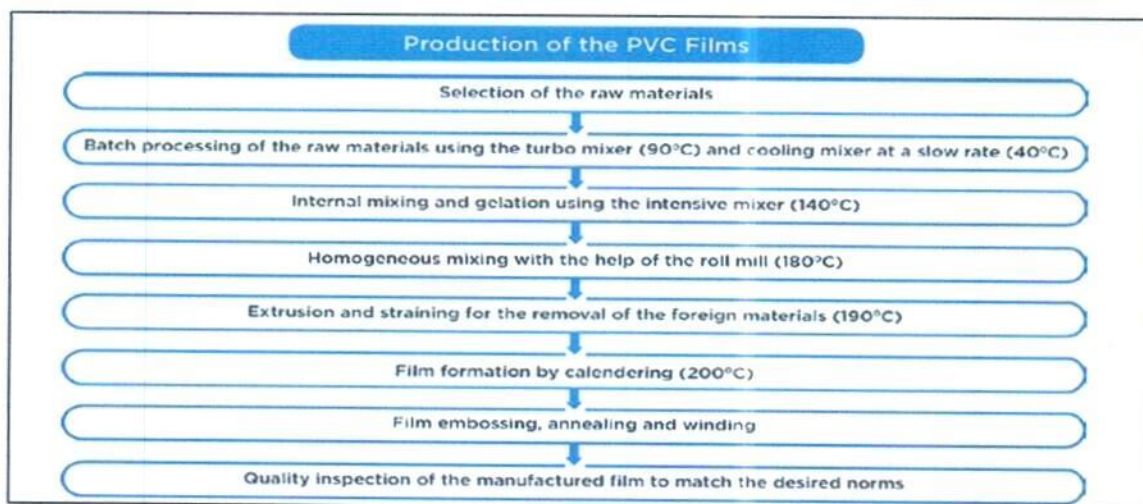
The five main components of an extruder are screw, extruder drive, barrel, feed hopper and die (tubing/ flat film). The helical screw is the most important part of an extruder which is employed for the transport, heating, melting and mixing of the plastics. The extruder drive is an electric motor that supplies power to rotate the screw. The stability and quality of the products are highly dependent on the design of the screw. The outer barrel is responsible for the heating and cooling functions. The feed hopper holds the



plastic pellets and ensures that they flow steadily into the barrel through the feed throat. The die is placed at the end of the extruder which determines the shape of the product. An additional roll mill is provided for better mixing thereby, improving the quality of the film.

The well mixed compound of PVC and calcium carbonate (feed stock) are transported to the calendering machine through a conveyor. Calendering is the process of compression of a thermoplastic material between two or more steel rolls at a particular temperature and pressure in order to fabricate sheets/films of required thickness and width. The temperature and the speed of the rolls influence the properties of the produced film. The film is then embossed, cooled using a series of cooling rolls and wound at an ambient temperature in the winding unit.

The calendering process is unique in its ability to manufacture very thin films possessing high quality, enhanced lustre, smooth surface, reduced air porosity and a large width of 4-6 m.



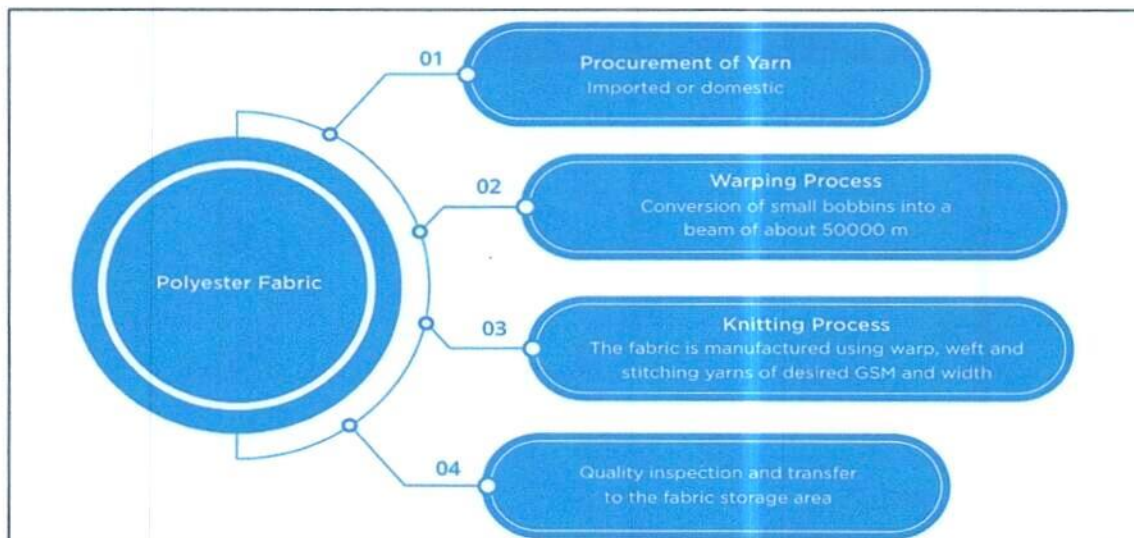
Source: Life Cycle Study of Flex Banner and Its Impact on the Environment, IIT Delhi

## b) PRODUCTION OF THE POLYESTER FABRIC:

Knitting is the process used for the manufacture of the polyester fabric in the form of a series of intermeshed loops from the industrial or fully drawn yarns. The knitted fabrics are more stretchable than the woven fabrics. The fabric is made of weft and warp yarns of 150-200 D and stitching yarns of 70 D. The loops (building blocks) are formed from each yarn and are present along the length of the fabric. The parallel warp yarns are supplied in the form of sheets that are extracted from a single or multiple warp beams. The stitching yarns are fed to the needles using guide bars which swing laterally.







*Sheet Fabrication Technique*

*Source: Life Cycle Study of Flex Banner and Its Impact on The Environment, IIT Delhi*



*Knitting of the Polyester Fabric*

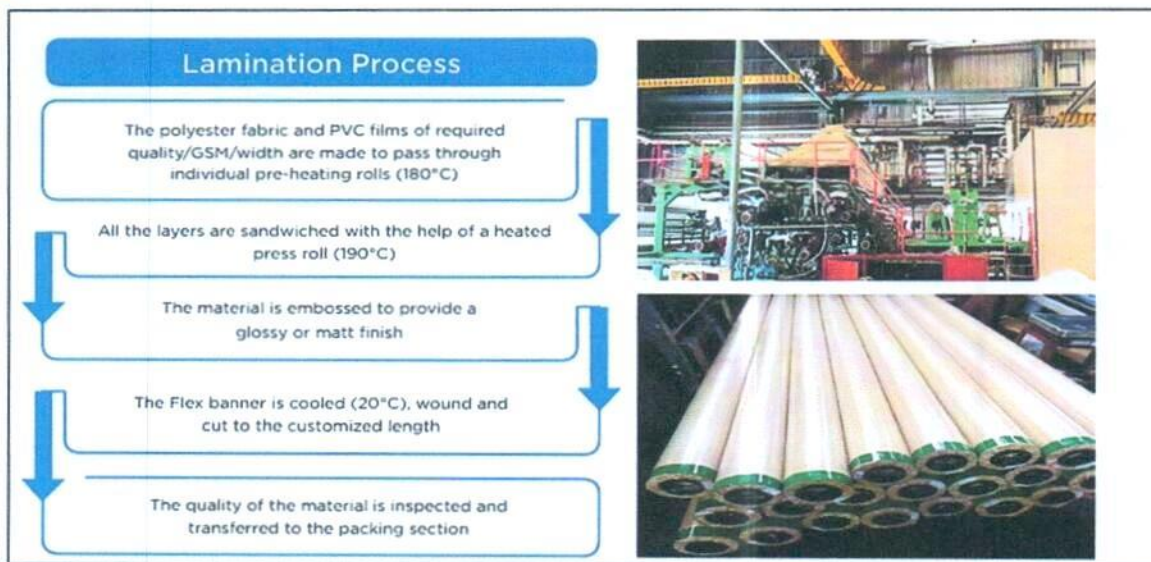
*Source: Life Cycle Study of Flex Banner and Its Impact on The Environment, IIT Delhi*

### c) LAMINATION:

The polyester fabric is sandwiched between the two compounded PVC films by the thermal fusion process. The composite material hence obtained is the Flex banner which possesses improved strength, stability, insulation, appearance, surface and other important properties.



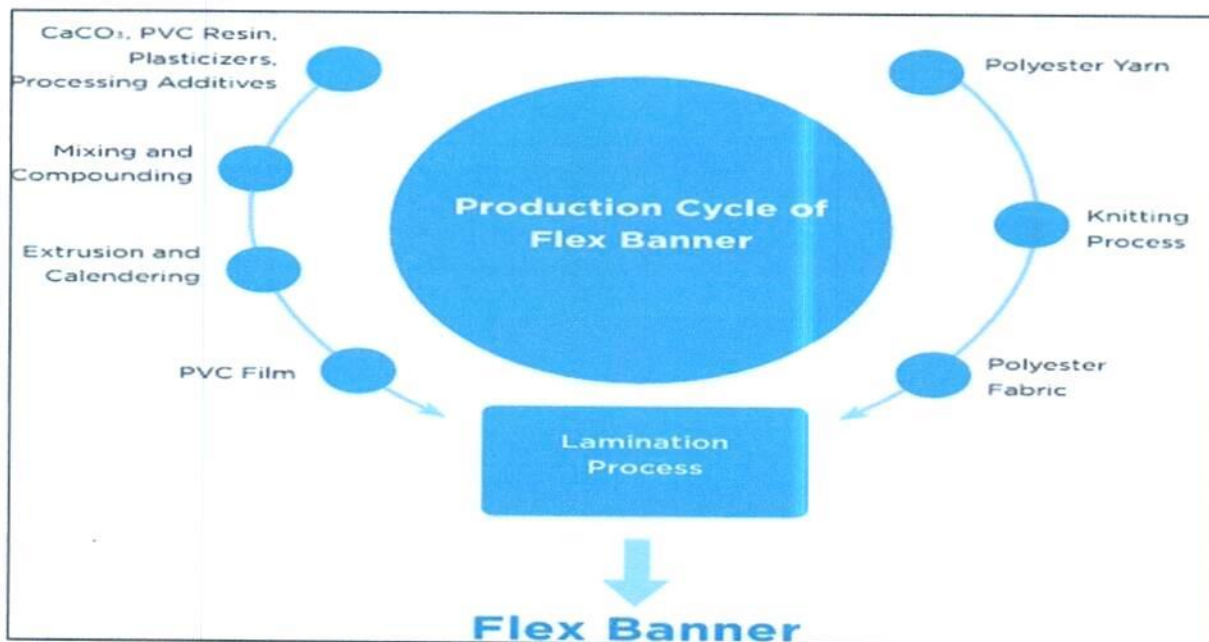




Lamination Process

Source: Life Cycle Study of Flex Banner and Its Impact on The Environment, IIT Delhi

### 3. PROCESS FLOW CHART OF PVC FLEX BANNER:



Source: Life Cycle Study of Flex Banner and Its Impact on The Environment, IIT Delhi

### 4. TECHNICAL SPECIFICATIONS OF THE PLANT:

We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date or other details such as equipment name, manufacturer name, specification/capacity, landed price, age of the plant & machinery, etc. Hence, we are unable to verify the technical specifications of the plant.





## 5. TECHNOLOGY USED:

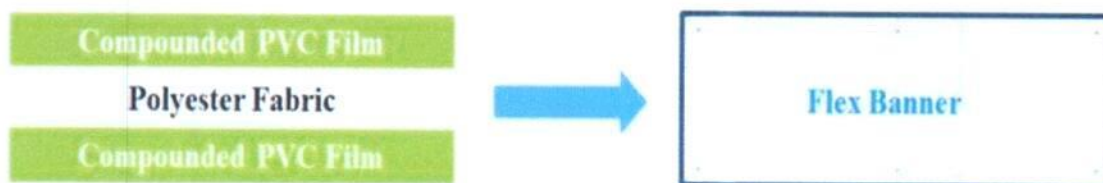
### a) TECHNOLOGY SUPPLIER:

List of Main Machinery and Equipment		
S. No.	Equipment	Supplier
1.	Flex film unit, year of manufacture 2016 complete with mixures, mixing roll machines, strainer extruder, Calender machine, post calendar cooler, and winding unit	Forward Machinery Industrial Corp., Taiwan
2.	Flex film laminator, consisting of main heating roller and a cooling roller. Year of manufacture 2016	Gaoming Hongyi Machinery Co Ltd, China
3.	Thermic Fluid heater. Year of manufacture 2017	Thermo Tech, India
4.	Air cooled Chiller, Year of manufacture 2016	Kirloskar, India
5.	Flex printing inkjet printer. Year of commissioning 2017	Kenjet
6.	Transformer, Year of manufacture 2016. Present condition – power disconnected. Requires attention	Schneider Electricals
7.	Foam Board machinery along with die set. Two in number. One not working and the other one is used by the lessee	Quingdao Sanyi Plastic Machinery co Ltd, China
8.	Air compressors- two units. Year of Manufacture 2016	Atlas Capco, India
9.	Air receivers, plastic grinding machine, cooling tower, ETP,EOT and Fixed cranes, material lift, 250 KVA Generator	Various

Source: Information Memorandum shared by the client

### b) TECHNOLOGY USED:

As informed to us by the client, the Company used to and is expected to produce PVC Flex Banner by laminating a polyester fabric between two compounded PVC films using hot rollers as shown below:



Adhering to the PVC flex banner, the upper and lower layers are formed into a PVC film, which is heated and pressed under the pressure of a heat roller to the middle of the light guide fiber web, and then cooled and formed. The biggest feature of this process is that it has excellent ink absorption and strong colour expression.



## 6. LATEST TECHNOLOGY/TECHNOLOGICAL ASSESSMENT:

Based on the production process, PVC flex banners are classified as

- **Knife scrapping method:** In this method PVC slurry is uniformly applied on both sides of base cloth (polyester) with a number of anti-squeegee blades and then combined them through a drying process and followed by cooling.
- **Calendaring method:** In the calendaring process, PVC powder and liquid plasticizer are mixed together, and then bonded with the base cloth by using a hot roller under pressure.
- **Legal flex banner:** The upper and lower layers of PVC films are bonded to the middle of the base fiber web under pressure using heated rollers and the final flex is formed by cooling.

Most of the flex banners that are available in today's market are prepared by laminating the PVC film on polyester cloth from both sides using hot rollers. The Company used to and is expected to produce PVC Flex Banner using the same technology.

Thus, as per the above technical assessment, M/s Apollo Polyvinyl is using the appropriate technology, which is a going on, recognized and trending in the market at present. It can be commented positively that the plant will be running smoothly. Technology & specification of the plant are matching with the need to run the plant smoothly and achieve the economies of scale.

## 7. TESTING STANDARDS FOR PRODUCTION:

As per communicated by client, company will be having a quality control Laboratory, wherein, they check the entire range on defined parameters like design, quality and finish. Production shall be done as per Standard Operating Procedures (SOP) of M/s Cleena Industries which shall be implemented in this plant as well. The Company expected to achieve quality management using the following process:







Source: <https://cleenaind.com/quality-management.aspx>

## 8. MANPOWER:

Salary & Wages Expenses for the entire plant has been estimated by the client at INR 50.00 lakhs per month. Hence, annual salary & wages comes to INR 600.00 lakhs. Increment of 10% has been being assumed each year thereafter.

We have not been provided with an estimate of manpower requirement in terms of labour force required for operation of the plant by the client. We recommend the the bank to advice the client to submit a proposed manpower requirement for running the plant efficiently.





**PART F**

**PRODUCT PROFILE**

**1. INTRODUCTION:**

Flex banners are highly preferred for low cost outdoor marketing of products/brands and promotion of events all over the world, including the developed economies viz., United States, European Union and Japan which have much stricter environmental policies and regulations. They are digitally printed with a wide range of rich colours to attract the attention of the people. They can be hung from an existing fixture, fixed to a wall or free standing.

Flex banners are made up of Polyvinyl chloride (PVC) and Polyester material. These flex banners are commonly called as vinyl flex banners. Flex banners have many advantages such as light in weight, good mechanical performance, low cost and widely used for indoor and outdoor signage, building signs and in store displays, trade show displays, outdoor displays and screen printing and billboard.

**2. PRODUCT CATEGORY:**

The Company is expected to have the same product line as M/s Cleena Industries as mentioned below:

**a) FRONTLIT FLEX BANNER:**

Frontlit flex banner material is used when you have lights pointing in the front of the banner.

Frontlit Flex Banner		
Specification	Product Features	Application
• Available gsm: 240 gsm onwards	• White opaque substrate for frontlit display	• Displays (Indoor & Outdoor)
• Width: 1.02 – 3.20 mtr	• Temperature / Weather (Uv, Rain and Frost) Resistant	• Building Signs & In Store Displays
• Standard roll length: 50 / 70 mtr	• Soft & delicate surface	• Screen Printing & Billboards
• Surface: gloss/matte	• Stable ink absorption	• High-Resolution Posters
• Lamination: hot / cold	• Excellent Surface Smoothness	
	• Excellent Capability for All Kind Of Digital Printing Machine	

Source: <https://cleenaind.com/frontlit-flex-banner.aspx>





**b) BACKLIT FLEX BANNER:**

Backlit flex banner material is used when you have lights pointing in the back of the banner as shown below. It is white opaque substrate with high transmittance. They are specially coated for digital printing. They can be used outdoor and indoor with ease as they are weather resistant and water proof. More clear and visible image with back-light due to lower translucency.

Backlit Flex Banner		
Specification	Product Features	Application
• Available gsm: 480 gsm onwards	• Temperature / Weather (Uv, Rain & Frost) Resistant	• Large Format Billboard
• Width: 1.02 – 3.20 mtr	• Compatible For All Solvent / Eco Solvent Printers	• Exhibition Screen
• Standard roll length: 50/70 mtr	• High Bonding Strength	• Airport And Expressway Light Boxes
• Surface: gloss/ matte	• Stable ink absorption	• Backlit Bus Shelters
• Lamination: cold/ hot	• High Physical Performance In Tear Strength And Tensile Strength	

Source: <https://cleenaind.com/frontlit-flex-banner.aspx>

**c) BLOCKOUT FLEX BANNER:**

PVC blackout flex banner roll material is a type of vinyl material that is used to create large, flexible banners for outdoor advertising and signage. The term "blockout" refers to the material's ability to block out light, making it ideal for double-sided printing.

Blockout Flex Banner		
Specification	Product Features	Application
• Available gsm: 320gsm onwards	• Temperature / Weather (Uv, Rain& Frost) Resistant	• Large Format Billboard
• Width: 1.02 – 3.20 mtr	• Compatible For All Solvent / Eco Solvent	• Trade Show Display
• Standard roll length: 50/70 mtr	• High Bonding Strength	• Outdoor Display
• Surface: gloss/ matte	• Stable Ink Absorption	• Airport & Express Way Light Boxes
• Lamination: cold / hot	• High Colour Expressive Force	Screen Printing
	• High Industrial Strength Yarn, Especially Suitable For Large Billboards	
	• Temperature / Weather (Uv, Rain& Frost) Resistant	

Source: <https://cleenaind.com/frontlit-flex-banner.aspx>



**d) BLACK BACK FLEX BANNER:**

Speciality of the back black is fade proof and increased front light glow brightness.

Black Back Flex Banner		
Specification	Product Features	Application
• Available gsm: 280 gsm onwards	• Temperature/ weather (uv, rain & frost) resistant	• Large Format Billboard
• Width: 1.02 – 3.20 mtr	• Compatible For All Solvent / Eco Solvent	• Trade Show Display
• Standard roll length: 50/70 mtr	• High Bonding Strength	• Outdoor Display
• Surface: gloss/ matte	• Stable Ink Absorption	• Airport & Express Way Light Boxes
• Lamination: hot / cold	• High Colour Expressive Force	Screen Printing

Source: <https://cleenaind.com/frontlit-flex-banner.aspx>

**e) GREY BACK FLEX BANNER:**

Speciality of the grey black is excellent printing with blackout feature by blocking light through it.

Grey Back Flex Banner		
Specification	Product Features	Application
• Available gsm: 280gsm onwards	• Temperature/ Weather (Uv, Rain & Frost) Resistant	• Large Format Billboard
• Width: 1.02-3.20 mtr	• Compatible For All Solvent / Eco Solvent	• Trade Show Display
• Standard roll length: 50/70 mtr	• High Bonding Strength	• Outdoor Display
• Surface: gloss/matte	• Stable Ink Absorption	• Airport & Express Way Light Boxes
• Lamination: cold/ hot	• High Colour Expressive Force	Screen Printing

Source: <https://cleenaind.com/frontlit-flex-banner.aspx>

**3. PRICING STRATEGY:**

As informed to us by the Company, the Company will use the existing customer base of M/s Cleena Industries. Proposed selling price per unit of PVC Flex Banner estimated by the client is INR 1,12,000/MT or INR 112/Kg as shown in the below table:

Selling price per unit
------------------------





Products	Unit prices
Sale of PVC Flex banner	INR 1,12,000/MT

We have not been provided with sample invoices of PVC flex banner being sold by M/s Cleena Industries for verifying expected sale price. As per a study done by IIT Delhi, the average sale price for PVC Flex banner in domestic market is INR 100-125 per Kg. Thus, the estimated sale price is in line with the market price.

#### 4. SELLING, MARKETING AND DISTRIBUTION PLAN:

The above products are already manufactured by the successful Resolution Applicant (M/s Cleena Industries) and have a very good demand in National as well as international market. The products manufactured by the successful Resolution Applicant are primarily sold for domestic use through the country. The Resolution Applicant has a significant presence in the southern states and other states and its esteemed customers include:

Top Customers of M/s Cleena Industries			
S. No.	Name	City	State
1.	Vinod Trading Company	Bhiwandi	Maharashtra
2.	Aditya Flex	Karur	Tamilnadu
3.	MM Impex	Palghar	Maharashtra
4.	Baba Flex	Srikakulam	Andhra Pradesh
5.	Raj Marketing	Chennai	Tamilnadu
6.	Mohit Industry	Mumbai	Maharashtra
7.	Saraf Fabtrade	Jaipur	Rajasthan
8.	Tirupati Enterprises	Patna	Bihar
9.	Balaji Stickers	Vijaynagram	Andhra Pradesh
10.	Chicago Flex	Ludhiana	Punjab

**Source:** Data provided by the Company

The Company aims to leverage the client base of M/s Cleena Industries to sell its products across the country.





## FEEDSTOCK ANALYSIS

## 1. INTRODUCTION:

The major raw materials used to produce the PVC flex banner are polyvinyl chloride (PVC) resin, calcium carbonate, polyester fabric, plasticizers and additives.

## 2. FEEDSTOCK REQUIREMENT:

Major Constituents for producing Flex Banner are given below:

Major Constituents of a Flex Banner		
Materials		Composition (wt.%)
Calcium Carbonate		36
PVC Resin		33
Polyester Fabric		18
Plasticizers		9
Additives		4
Total		100%

Source: Life Cycle Study of Flex Banner and Its Impact on the Environment, IIT Delhi

### 3. AVILABILITY OF FEEDSTOCK:

The Company expects to procure raw materials from the existing suppliers of M/s Cleena Industries as mentioned below:

List of expected raw material suppliers			
S. No.	Item	Grade	Supplier Details
1.	PVC RESIN K-67	SG-5 CHINA LG LS100S JAPAN TK1000 FORMOSA S65D HANWA P1000	Anr International Avr Overseas Jai Pushpa Industries Bgm Polymers Rishabh Triexim
2.	PRIMARY PLASTICIZERS - DOP	Primary Plasticizers	Klj Plasticizers Payal Polyplast Aarti Industries
3.	DINP	PRIMARY PLASTICIZERS	Klj Plasticizers Payal Polyplast



# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

			Aarti Industries
4.	SECONDARY PLASTICIZERS	SGC-1009	Shree Ganesh Chemical
5.	LIQUID STABLIZER	BCR 3610	Baerlocher India Additives
6.	LIQUID STABLIZER	LX-481	Chemvera Speciality
7.	LIQUID STABLIZER	SUN - 8881A	Sar Global
8.	LIQUID STABLIZER	LX-110	Muskan Marketing
9.	SOLID STABILIZER	PP551	Synergy Poly Additives
10.	EXTERNAL LUBRICANT	GEMESOL	Meet Marketing Oswal Cable
11.	INTERNAL LUBRICANT	AC316A	Oswal Cable Connell Bros Invixo Chemical
12.	CARBON BLACK	P - 35 EMULSION AND	Ganpati Color Chem
13.	CALCIUM POWDER - FILLER	UNCOATED	Sona Micron Trinity Calcium Vishnu Vivek Marble Industries Obana Mineral
14.	TITANIUM DIOXIDE	B101 ANATASE SILVERSTAR	Ganpati Kolor Chem Shree Ganesh Chemical Swastik Polymer R K Polymer
15.	TITANIUM DIOXIDE	RUTILE RC - 800PG	Ganpati Kolor Chem Swastik Polymer R K Polymer
16.	OB	PIGMENT	Ganpati Kolor Chem
17.	UV STABLIZER	CYTEC	Gvs Envicon
18.	ULTRAMARINE BLUE	BLUE - PIGMENT	Ganpati Kolor Chem Oswal Cable Meet Marketing
19.	VOILET KBLB	KBLB - PIGMENT	Ganpati Kolor Chem Oswal Cable Meet Marketing
20.	RED	R-565 - PIGMENT	Ganpati Kolor Chem Oswal Cable Meet Marketing
21.	RED COLOUR OXIDE	PIGMENT	Khushal Fertilizer





22.	BLUE TONNER	PIGMENT	Ganpati Oswal Meet Marketing	Kolor	Chem Cable
-----	-------------	---------	------------------------------------	-------	---------------

**Source:** Data provided by the Company

#### 4. PRICING STRATEGY:

As informed to us by the Company, the Company will use the existing supplier base of M/s Cleena Industries. The cost estimated by the client is INR 81,200/Ton or INR 81.2/Kg as is shown in the table below:

Raw material Cost @ 100% capacity			
Raw Material	INR/Ton	Annual Quantity	Amount INR
Annual Consumption of raw material	81,200	16,800	1,36,41,60,000
<b>Total</b>		<b>INR 1,36,41,60,000</b>	

We have not been provided with composition of raw material cost and the sample invoices for raw materials & consumables being purchased by M/s Cleena Industries from its suppliers for verifying the raw material prices. As per our tertiary research, expected raw material cost per Kg of Flex Banner is shown below:

Materials	Composition (wt.%)	Price per Kg	Amount	Reference
Calcium Carbonate	36%	10	3.6	<a href="https://www.vickyplast.com/calcium-carbonates.html">https://www.vickyplast.com/calcium-carbonates.html</a>
PVC Resin	33%	80	26.4	<a href="https://www.exportersindia.com/indian-suppliers/pvc-resin.htm#:~:text=What%20is%20the%20cost%20of%20PVC%20resins%3F&amp;text=The%20price%20of%20PVC%20resins,of%20the%20product.">https://www.exportersindia.com/indian-suppliers/pvc-resin.htm#:~:text=What%20is%20the%20cost%20of%20PVC%20resins%3F&amp;text=The%20price%20of%20PVC%20resins,of%20the%20product.</a>
Polyester Fabric	18%	200	36	<a href="https://www.pranerafabrics.com/plain-polyester-fabric-3040614.html">https://www.pranerafabrics.com/plain-polyester-fabric-3040614.html</a>
Plasticizers	9%	130	11.7	<a href="https://www.vickyplast.com/pvc-plasticizers.html">https://www.vickyplast.com/pvc-plasticizers.html</a>
Additives	4%	95	3.8	<a href="https://www.metawaresindia.com/pvc-chemicals.html">https://www.metawaresindia.com/pvc-chemicals.html</a>
	<b>100%</b>		<b>81.5</b>	

Thus, the estimated raw material price is in line with the market price.









economies, the rise of a burgeoning middle class has led to increased consumer spending, prompting businesses to invest heavily in marketing strategies, further fueling the demand for flex banners.

- **Technological Advancements in Digital Printing:** The advent and continuous evolution of digital printing technologies have revolutionized the flex banner market. Traditional printing methods are being overshadowed by digital alternatives that offer higher precision, better color reproduction, and the ability to print intricate designs. Digital printing not only enhances the aesthetic appeal of flex banners but also facilitates quick turnaround times, enabling businesses to implement time-sensitive marketing campaigns. With the ability to reproduce high-quality graphics, images, and text, digital printing has become a game changer in the flex banner industry. This technological leap has attracted a diverse range of businesses, from small enterprises to large corporations, seeking to elevate the visual impact of their advertising materials.
- **Rise of Sustainable and Eco-Friendly Practices:** Environmental consciousness is reshaping consumer preferences and industry practices, and the flex banner market is no exception. Concerns about the ecological impact of PVC-based materials have led to a growing demand for sustainable and eco-friendly alternatives. Governments and regulatory bodies are increasingly emphasizing the adoption of environmentally responsible practices, prompting manufacturers to explore greener options. As a result, there is a notable shift towards the development of flex banner materials that are recyclable, biodegradable, or made from sustainable sources. This not only aligns with global environmental goals but also caters to the preferences of a consumer base that values eco-friendly products. The integration of sustainability in flex banner manufacturing is not merely a response to regulations but also represents an opportunity for businesses to differentiate themselves in a competitive market.
- **Regulatory Influence and Compliance:** The flex banner market is significantly influenced by regulations and standards related to materials used in advertising and signage. Governments worldwide are increasingly implementing guidelines aimed at reducing the environmental impact of advertising materials. These regulations often focus on restricting or incentivizing the use of certain materials, with a specific emphasis on reducing non-recyclable waste. Manufacturers in the flex banner industry must navigate and adapt to these evolving regulatory landscapes to ensure compliance and sustain market relevance. Additionally, the alignment of businesses with environmentally friendly practices not only enhances their corporate image but



also positions them favorably in markets where consumers are becoming more discerning about the ecological footprint of products and services.

### 3. CHALLENGES:

- Environmental Concerns and Sustainability Challenges:** Perhaps the most pressing challenge confronting the flex banner market is the environmental impact of traditional PVC-based materials. PVC is known for its non-biodegradable nature and the release of harmful substances during production and disposal. As environmental awareness and sustainability concerns gain prominence globally, there is increasing scrutiny on industries that rely on materials with a high ecological footprint. The flex banner market is responding to this challenge by exploring alternative materials, such as bio-based polymers, recyclable plastics, and biodegradable options. However, transitioning to these alternatives poses its own set of challenges, including cost implications, availability of suitable materials, and ensuring the same level of durability and quality as traditional PVC-based flex banners.
- Stringent Regulatory Landscape:** The flex banner market is navigating a complex and evolving regulatory landscape that seeks to address environmental concerns and ensure responsible manufacturing practices. Governments and regulatory bodies are imposing stringent guidelines on the use of certain materials, especially those with adverse environmental impacts. Compliance with these regulations not only necessitates adjustments in manufacturing processes but also involves a financial burden for businesses as they invest in research and development to create compliant and eco-friendly products. The diverse and often conflicting regulatory requirements across different regions further complicate the operational landscape for international players in the flex banner market, requiring them to adapt to varying standards and expectations.
- Market Saturation and Intense Competition:** The flex banner market has witnessed significant growth over the years, leading to market saturation in certain regions and segments. As a result, businesses in the industry face heightened competition, compelling them to differentiate themselves through innovation, quality, and pricing strategies. The commoditization of flex banners, coupled with a multitude of players entering the market, intensifies the competitive landscape. Small and medium-sized enterprises, in particular, find it challenging to carve out a niche in a market where established players dominate. This saturation not only impacts profit





margins but also forces companies to continuously innovate and offer unique value propositions to stand out in a crowded marketplace.

- **Technological Disruptions and Adaptation:** The rapid pace of technological advancements, while beneficial in enhancing the visual appeal and quality of flex banners, presents a challenge for manufacturers. The need to adapt to new printing technologies, materials, and design trends requires substantial investments in research, development, and employee training. Failure to keep pace with technological disruptions can lead to obsolescence and a loss of market relevance. Moreover, the integration of digital technologies in advertising, such as LED screens and interactive displays, poses a competitive threat to traditional flex banners. Adapting to these technological changes while maintaining cost-effectiveness and meeting client expectations is a delicate balance that challenges businesses operating in the flex banner market.
- **Fluctuating Raw Material Costs and Supply Chain Challenges:** The flex banner industry is susceptible to fluctuations in the costs of raw materials, particularly as it pertains to petroleum-based products like PVC. Volatility in oil prices can have a cascading effect on the production costs of flex banners, impacting the profit margins of manufacturers. Additionally, disruptions in the global supply chain, as witnessed in events like the COVID-19 pandemic, can lead to shortages and delays in the procurement of essential materials. Businesses in the flex banner market must navigate these uncertainties by implementing robust supply chain management practices, exploring alternative sourcing options, and developing contingency plans to mitigate the impact of unforeseen events on production schedules and costs.

#### 4. CONCLUSION:

The Global Flex Banner Market is projected to record a CAGR of 5.7% through 2023 to 2029. In conclusion, the global flex banner market faces a spectrum of challenges that demand strategic responses from industry stakeholders. From environmental concerns and regulatory pressures to market saturation and technological disruptions, businesses in the flex banner market must navigate these challenges to ensure sustainable growth and relevance. Embracing innovation, adopting sustainable practices, and staying attuned to market trends are imperative for companies seeking to overcome these challenges and thrive in a rapidly evolving landscape.





<b>PART I</b>	<b>SWOT ANALYSIS</b>
---------------	----------------------

**SWOT ANALYSIS – PVC FLEX BANNER MARKET**

<b>STRENGTHS</b>	<ul style="list-style-type: none"> <li>• <b>Experience in Industry:</b> The promoters are having experience of more than 8 years in the PVC flex banner &amp; WPC/PVC foam board industry which can prove to be a huge strength in the long run.</li> <li>• <b>Low cost and efficient labour force:</b> Skilled and efficient is available in India at a rather low cost as compared to other countries.</li> <li>• <b>Affordable form of advertisement:</b> PVC flex banner is one of most affordable types of advertising.</li> </ul>
<b>WEAKNESSES</b>	<ul style="list-style-type: none"> <li>• <b>Regulatory Approvals</b> - Company will need to really for renewal or fresh licenses since most of them have expired.</li> <li>• <b>CAPEX:</b> The would be set up by a high initial investment, in which ~37% capital would be required for working capital.</li> <li>• <b>Infrastructure Requirements:</b> The project's power load and water consumption are significant, and ensuring uninterrupted power supply and adequate water resources may pose challenges.</li> <li>• <b>Negative net profit margins and declining revenue:</b> M/s Cleena Industries posted negative net profit margins and declining revenue in FY23 which may prove to be a weakness.</li> </ul>
<b>OPPORTUNITIES</b>	<ul style="list-style-type: none"> <li>• <b>Expanding Advertising and Promotional Activities:</b> As businesses across various industries intensify their efforts to capture consumer attention, the demand for visually striking and vibrant advertising solutions, such as flex banners, has witnessed a substantial uptick.</li> <li>• <b>Technological Advancements in Digital Printing:</b> Traditional printing methods are being overshadowed by digital alternatives that offer higher precision, better color reproduction, and the ability to print intricate designs. Digital printing not only enhances the aesthetic appeal of flex banners but also facilitates quick turnaround times, enabling businesses to implement time-sensitive marketing campaigns.</li> <li>• <b>Rise of Sustainable and Eco-Friendly Practices:</b> Concerns about the ecological impact of PVC-based materials have led to a growing demand for sustainable and eco-friendly alternatives. Governments and regulatory bodies are increasingly emphasizing the adoption of</li> </ul>



	environmentally responsible practices, prompting manufacturers to explore greener options.
THREATS	<ul style="list-style-type: none"> <li>• <b>Environmental Concerns and Sustainability Challenges:</b> PVC is known for its non-biodegradable nature and the release of harmful substances during production and disposal. As environmental awareness and sustainability concerns gain prominence globally, there is increasing scrutiny on industries that rely on materials with a high ecological footprint.</li> <li>• <b>Stringent Regulatory Landscape:</b> Governments and regulatory bodies are imposing stringent guidelines on the use of certain materials, especially those with adverse environmental impacts. In India, PVC banners &lt;100 microns are banned. In some states like Kerala, use of PVC banners is banned in entirety. Changes in regulatory environment can significantly impact PVC flex banner industry.</li> <li>• <b>Market Saturation and Intense Competition:</b> The flex banner market has witnessed significant growth over the years, leading to market saturation in certain regions and segments. As a result, businesses in the industry face heightened competition, compelling them to differentiate themselves through innovation, quality, and pricing strategies.</li> <li>• <b>Technological Disruptions and Adaptation:</b> Integration of digital technologies in advertising, such as LED screens and interactive displays, poses a competitive threat to traditional flex banners.</li> <li>• <b>Fluctuating Raw Material Costs and Supply Chain Challenges:</b> The flex banner industry is susceptible to fluctuations in the costs of raw materials, particularly as it pertains to petroleum-based products like PVC. Volatility in oil prices can have a cascading effect on the production costs of flex banners, impacting the profit margins of manufacturers.</li> </ul>





**PART J**

**PROJECT COST AND MEANS OF FINANCE**

As per data/information shared by the client, the PVC Flex Banner & WPC/PVC Foam Board Manufacturing Plant is proposed to be taken over by making an investment of INR 4,060.82 lakhs as shown in the below table along with Means of finance:

Total Project Cost		
S. No.	Capital Cost Head	Amount (INR)
1	Land	₹ 7,00,00,000
2	Building	₹ 10,08,00,000
3	Plant & Machinery	₹ 12,50,00,000
4	Refurbishment and installation of old machines + New Equipment	₹ 5,00,00,000
5	Preoperative Expenses	₹ 10,00,000
6	Working Capital Margin (WCM)	₹ 5,31,88,329
7	Interest During Construction (IDC)	₹ 60,93,750
	<b>TOTAL</b>	<b>₹ 40,60,82,079</b>
Means of Finance		
S. No.	Particular	Amount (INR)
1	Promoters' Equity	₹ 6,00,00,000
2	Unsecured Loan	₹ 5,35,82,079
3	Loan from Banks	₹ 29,25,00,000
	<b>TOTAL</b>	<b>₹ 40,60,82,079</b>
	<b>Total Loan</b>	<b>₹ 34,60,82,079</b>

*Source: Data/Information provided by the company.*

**Notes:**

- It is to be noted that the estimation/vetting of the project cost is out of scope of this TEV report, and we have relied upon the data/information provided by the client regarding Total Project cost.
- As per the audited financial statements of the company for the financial year 2021 shared with us, cost of land capitalised in books is ~INR 4.49 Cr. We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date.

As per land sale deeds shared with us, INR 1.43 Cr is the consideration for cost of land, however, company has considered INR 7.00 Cr as market value for computing project cost. As per our technical assessment, fair market value of ~33.76 acres of land is ~INR 10.13 Cr after considering guideline rate of INR 30 lakhs per acre.



3. According to the information shared by the client, the plant is spread over an area of ~80,000 sq. ft. However, as per our technical assessment, built-up area of factory building is ~68,000 sq. ft. only. Approved building layout plan (building permit) has not been shared with us. As per the audited financial statements of the company for the financial year 2021 shared with us, the depreciated cost of factory building is ~INR 4.49 Cr.

We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date. However, company has considered INR 10.08 Cr as market value for computing project cost. As per our technical assessment, fair market value of building having built up area of ~68,000 sq. ft. is ~INR 9.95 Cr.

4. As per the audited financial statements of the company for the financial year 2021 shared with us, the depreciated cost of plant and machinery, electrical equipment, furniture and office equipment, computers, vehicles etc. is ~INR 33.40 Cr. However, company has considered INR 12.50 Cr as market value of existing machinery & equipment for computing project cost.

We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date or other details such as equipment name, manufacturer name, specification/capacity, landed price, age of the plant & machinery, etc. As per our technical assessment, fair market value of machinery and other equipment basis the audited financial statements of financial year 2021 is ~INR 28.61 Cr.

5. The company's management has estimated cost of refurbishment and installation of old machines and new equipment at INR 5.00 Cr. But we have not been provided the details of equipment, plant & machinery along with expected cost and suppliers or any quotations for the same.
6. Therefore, company is proposing ~INR 0.25 Lakhs per metric ton CAPEX for the Plant including GST and pre-operative expenses.
7. The project is proposed to be funded through a term loan of INR 29.25 crores, promoter's equity of INR 6.00 crores and unsecured loan from promoters of INR 5.36 crores.





**PART K**

**PROJECT IMPLEMENTATION SCHEDULE**

Company has planned to achieve the C.O.D by 01<sup>st</sup> November 2024, as per the proposed implementation schedule shown in the table below:

S. No.	Particulars	Activity	Expected completion date	Status
1.	Sanction of Rupee Term Loan	Sanction of Rupee Term Loan and Working Capital Loan	July 2024	Pending
2.	Building & Civil Works	Site Plan preparation	2016	Completed
		Building & Civil Works completion	2016	Completed
3.	Plant & Machinery	Finalization of P&M suppliers for new machinery and refurbishment of old machinery	August 2024	Pending
		Orders to P&M suppliers	August 2024	Pending
		Arrival of P&M	September 2024	Pending
		Installation of P&M	September 2024	Pending
		Utility Installation	October 2024	Pending
4.	Statutory Approvals, registrations & NOCs	From the respective authorities	October 2024	Pending
5.	Finishing & Trial Run	Informed by client	October 2024	Pending
6.	Commercial Operation Date	Informed by client	01 <sup>st</sup> November 2024	Pending

**Notes:**

- Schedule has been made as per feasibility to achieve different milestones.
- Achievement of Milestone will depend on sanction of term loan as per proposed timeline.
- For current status of statutory approvals, kindly refer the "Section L" of this report.
- As per this timeline, the expected C.O.D will be 01<sup>st</sup> November 2024.





**PART L**

**STATUTORY APPROVALS | LICENCES | NOC**

As shown in the below table along with current status, following major approvals are required. However, the list is not exhaustive, and State/District Authorities may be approached for further clearances required (if any):

S. No.	REQUIRED APPROVALS	DATE REFERENCE NO.	STATUS (Approved/ Applied For/ Pending)
1.	Certificate of Incorporation <i>Ministry of Corporate Affairs, Government of India</i>	17 <sup>th</sup> May 2011 CIN: U74990TN2011PTC080650	Approved
2.	Land conversion to Industrial/Non agriculture <i>Directorate of Town and Country Planning (DT &amp; CP)</i>	Not Available	Not Available
3.	Factory Registration and License <i>Directorate of Industrial Safety and Health (DISH)</i>	10 <sup>th</sup> April 2015 TUR 10171/15	Expired (31 <sup>st</sup> December 2019)
4.	Registration of Establishments for Employing Building and Other Construction Workers <i>Directorate of Industrial Safety and Health (DISH)</i>	Not Available	Pending
5.	Building Permit <i>Concerned local development authority</i>	Not Available	Pending
6.	Fire Safety - No Objection Certificate <i>Fire and Rescue Services</i>	Not Available	Pending
7.	Approval for Boiler Erector from <i>Directorate of Boilers</i>	Not Available	Pending
8.	Consent to Establish under Air (Prevention and Control of Pollution) Act, 1981 & Water (Prevention and	Not Available	Pending



	Control of Pollution) Act, 1974 <i>Tamil Nadu Pollution Control Board</i>		
9.	Authorization for Handling Hazardous Wastes <i>Tamil Nadu Pollution Control Board</i>	Not Available	Pending
10.	Power Connection <i>Tamil Nadu Generation and Distribution Corporation (TANGEDCO)</i>	Not Available	Pending
11.	Water Connection <i>Tamil Nadu Water Supply and Drainage Board (TWAD Board)</i>	Not Available	Pending

**Observation Notes:**

1. Company may need to reapply/ renew regulatory licenses and permits since they could have expired.
2. We have not received copy of any license or permit other than factory license which expired on 31<sup>st</sup> December 2019.
3. Above is the only illustration of the major approvals sought or to be sought by the company. It should not be construed as the exhaustive list and in case any approval is missed to be mentioned then it is the sole responsibility of the company to keep the unit compliant with the necessary statutory approvals/ NOCs.





**PART M**

**COMPANY'S FINANCIAL FEASIBILITY**

**1. PROJECTIONS OF THE FIRM:**

The financial projections of the project are prepared from FY 2024-25 to FY 2032-33 based on the expected COD and loan tenor as per the best practice in industry to assess the financial feasibility of the project are elaborated below:

**A. PROJECTED PROFIT & LOSS ACCOUNT:**

**(INR Lakhs)**

Financial Year	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
<b>Months</b>	<b>5</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
<b>% Production</b>	<b>85%</b>	<b>85%</b>	<b>85%</b>	<b>90%</b>	<b>90%</b>
Sale of PVC Flex banner	5331.2	16153.5	16315.1	17366.8	17622.0
<b>Gross Annual Revenue</b>	<b>5331.2</b>	<b>16153.5</b>	<b>16315.1</b>	<b>17366.8</b>	<b>17622.0</b>
1. Raw Material Consumed	4831.4	11646.3	11704.6	12455.4	12517.3
2. Changes in Inventory of Finished Goods	-1134.1	-62.5	-8.1	-81.5	-10.2
3. Power	229.5	556.3	561.9	600.9	606.9
4. Fuel	38.3	92.7	93.6	100.1	101.1
5. Consumables, Stores & Spares	327.3	793.3	801.2	856.8	865.4
6. Repair & Maintenance	75.0	198.0	217.8	239.6	263.5
7. Other Manufacturing Expenses	5.0	13.2	14.5	16.0	17.6
<b>Total Variable Expenses</b>	<b>4372.3</b>	<b>13237.3</b>	<b>13385.5</b>	<b>14187.3</b>	<b>14361.6</b>
1. Salary & Wages	250.0	660.0	726.0	798.6	878.5
2. General, Selling & Administrative Expenses	213.2	646.1	652.6	694.7	704.9
<b>Total Fixed Expenses</b>	<b>463.2</b>	<b>1306.1</b>	<b>1378.6</b>	<b>1493.3</b>	<b>1583.3</b>
<b>Total Production Cost</b>	<b>4835.6</b>	<b>14543.5</b>	<b>14764.1</b>	<b>15680.5</b>	<b>15945.0</b>
EBIDTA	495.6	1610.1	1551.0	1686.2	1677.0
Interest on Term Loan	121.9	272.5	231.5	188.5	143.5
Interest on Unsecured Loan	0.0	0.0	0.0	0.0	0.0
Interest on Working Capital Limit	125.0	300.0	300.0	300.0	300.0
Depreciation	185.7	346.1	299.0	258.6	223.8
Preliminary Expenses	0.8	2.0	2.0	2.0	



# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

PBT	62.3	689.5	718.4	937.1	1007.8
Less: Taxation	15.7	173.5	180.8	235.9	253.6
<b>PAT</b>	<b>46.6</b>	<b>516.0</b>	<b>537.6</b>	<b>701.3</b>	<b>754.1</b>

(Continued)

Financial Year	FY 2030	FY 2031	FY 2032	FY 2033
<b>Months</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>
<b>% Production</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>
Sale of PVC Flex banner	17798.2	17976.2	18156.0	18337.5
<b>Gross Annual Revenue</b>	<b>17798.2</b>	<b>17976.2</b>	<b>18156.0</b>	<b>18337.5</b>
1. Raw Material Consumed	12579.9	12642.8	12706.0	12769.5
2. Changes in Inventory of Finished Goods	-10.8	-10.2	-11.0	-9.2
3. Power	612.9	619.1	625.3	631.5
4. Fuel	102.2	103.2	104.2	105.3
5. Consumables, Stores & Spares	874.0	882.8	891.6	900.5
6. Repair & Maintenance	289.9	318.9	350.8	385.8
7. Other Manufacturing Expenses	19.3	21.3	23.4	25.7
<b>Total Variable Expenses</b>	<b>14467.5</b>	<b>14577.7</b>	<b>14690.3</b>	<b>14809.1</b>
1. Salary & Wages	966.3	1043.6	1127.1	1183.5
2. General, Selling & Administrative Expenses	711.9	719.0	726.2	733.5
<b>Total Fixed Expenses</b>	<b>1678.2</b>	<b>1762.7</b>	<b>1853.3</b>	<b>1917.0</b>
<b>Total Production Cost</b>	<b>16145.7</b>	<b>16340.4</b>	<b>16543.6</b>	<b>16726.1</b>
EBIDTA	1652.5	1635.8	1612.4	1611.4
Interest on Term Loan	96.5	48.5	6.2	0.0
Interest on Unsecured Loan	0.0	0.0	0.0	0.0
Interest on Working Capital Limit	300.0	300.0	300.0	300.0
Depreciation	193.8	167.9	145.6	126.4
Preliminary Expenses	1.2	0.0	0.0	0.0
PBT	1061.1	1119.4	1160.6	1185.1
Less: Taxation	267.1	281.7	292.1	298.3
<b>PAT</b>	<b>794.0</b>	<b>837.7</b>	<b>868.5</b>	<b>886.8</b>





## B. PROJECTED BALANCE SHEET:

Below table shows the Projected Balance Sheet of the PVC Flex and Foam Board Plant from the period FY 2024-25 to FY 2032-33. FY 2025 would be the implementation period of the project:

(INR Lakhs)

Financial Year	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
<b>Months</b>	<b>5 M</b>	<b>12 M</b>	<b>12 M</b>	<b>12 M</b>	<b>12 M</b>
Equity	600.0	600.0	600.0	600.0	600.0
Reserve & Surplus	46.6	562.6	1100.2	1801.5	2555.6
Secured Loan	2525.0	2105.0	1665.0	1205.0	725.0
Unsecured loan	535.8	535.8	535.8	535.8	535.8
Trade Payables	1187.2	1223.3	1237.2	1327.0	1336.2
Term liabilities payable within one year	400.0	420.0	440.0	460.0	480.0
Working Capital Loan	3000.0	3000.0	3000.0	3000.0	3000.0
<b>Total Equity &amp; Liabilities</b>	<b>8294.7</b>	<b>8446.7</b>	<b>8578.2</b>	<b>8929.3</b>	<b>9232.7</b>
Land	700.0	700.0	700.0	700.0	700.0
Building	1030.3	1030.3	1030.3	1030.3	1030.3
Plant & Machinery and Other Equipment	1788.7	1788.7	1788.7	1788.7	1788.7
<b>Total Gross Block</b>	<b>3518.9</b>	<b>3518.9</b>	<b>3518.9</b>	<b>3518.9</b>	<b>3518.9</b>
Depreciation	185.7	531.7	830.8	1089.3	1313.1
<b>Net Block</b>	<b>3333.3</b>	<b>2987.2</b>	<b>2688.2</b>	<b>2429.6</b>	<b>2205.8</b>
Trade Receivables	2132.5	2692.3	2719.2	2894.5	2937.0
Inventory – Raw Material	1401.1	1408.1	1415.2	1505.9	1513.4
Inventory – Finished Goods	1134.1	1196.6	1204.7	1286.2	1296.4
Inventory - Consumables	65.5	66.1	66.8	71.4	72.1
Cash & Bank	219.1	89.2	479.1	738.6	1206.7
<b>Current Assets</b>	<b>4952.2</b>	<b>5452.3</b>	<b>5884.8</b>	<b>6496.6</b>	<b>7025.7</b>
Preliminary Expenses W/off	9.2	7.2	5.2	3.2	1.2
<b>Total Assets</b>	<b>8294.7</b>	<b>8446.7</b>	<b>8578.2</b>	<b>8929.3</b>	<b>9232.7</b>

(Continued)

Financial Year	FY 2030	FY 2031	FY 2032	FY 2033
<b>Months</b>	<b>12 M</b>	<b>12 M</b>	<b>12 M</b>	<b>12 M</b>
Equity	600.0	600.0	600.0	600.0
Reserve & Surplus	3349.7	4187.3	5055.8	5942.6



# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

Secured Loan	245.0	0.0	0.0	0.0
Unsecured loan	535.8	535.8	535.8	535.8
Trade Payables	1353.1	1369.3	1386.4	1401.5
Term liabilities payable within one year	480.0	245.0	0.0	0.0
Working Capital Loan	3000.0	3000.0	3000.0	3000.0
<b>Total Equity &amp; Liabilities</b>	<b>9563.5</b>	<b>9937.5</b>	<b>10578.0</b>	<b>11479.9</b>
Land	700.0	700.0	700.0	700.0
Building	1030.3	1030.3	1030.3	1030.3
Plant & Machinery and Other Equipment	1788.7	1788.7	1788.7	1788.7
<b>Total Gross Block</b>	<b>3518.9</b>	<b>3518.9</b>	<b>3518.9</b>	<b>3518.9</b>
Depreciation	1506.9	1674.8	1820.4	1946.8
<b>Net Block</b>	<b>2012.1</b>	<b>1844.2</b>	<b>1698.5</b>	<b>1572.2</b>
Trade Receivables	2966.4	2996.0	3026.0	3056.3
Inventory – Raw Material	1521.0	1528.6	1536.2	1543.9
Inventory – Finished Goods	1307.2	1317.4	1328.4	1337.6
Inventory - Consumables	72.8	73.6	74.3	75.0
Cash & Bank	1684.1	2177.7	2914.6	3894.9
<b>Current Assets</b>	<b>7551.5</b>	<b>8093.3</b>	<b>8879.5</b>	<b>9907.8</b>
Preliminary Expenses W/off	0.0	0.0	0.0	0.0
<b>Total Assets</b>	<b>9563.5</b>	<b>9937.5</b>	<b>10578.0</b>	<b>11479.9</b>

### C. PROJECTED CASH FLOW STATEMENT:

(INR Lakhs)

Financial Year	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
<b>Particulars</b>	<b>5 M</b>	<b>12 M</b>	<b>12 M</b>	<b>12 M</b>	<b>12 M</b>
Net Profit	46.6	516.0	537.6	701.3	754.1
Increase in Equity / Share Capital	600.0	0.0	0.0	0.0	0.0
Increase in TL	2925.0	0.0	0.0	0.0	0.0
Increase in Unsecured Loan	535.8	0.0	0.0	0.0	0.0
Increase in Working Capital Loan	3000.0	0.0	0.0	0.0	0.0
Depreciation	185.7	346.1	299.0	258.6	223.8
Preliminary Expenses w/off	0.8	2.0	2.0	2.0	2.0
Trade payables	1187.2	36.0	13.9	89.9	9.2
<b>TOTAL</b>	<b>8481.2</b>	<b>900.1</b>	<b>852.6</b>	<b>1051.7</b>	<b>989.1</b>
Capital Expenses	3518.9	0.0	0.0	0.0	0.0



# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED

Decrease in Term Loan	0.0	400.0	420.0	440.0	460.0
Decrease in Unsecured Loan	0.0	0.0	0.0	0.0	0.0
Trade Receivable	2132.5	559.8	26.9	175.3	42.5
Inventory – Raw Material	1401.1	7.0	7.0	90.7	7.5
Inventory – Finished Goods	1134.1	62.5	8.1	81.5	10.2
Inventory - Consumables	65.5	0.7	0.7	4.6	0.7
Preliminary Expense	10.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>8262.1</b>	<b>1029.9</b>	<b>462.7</b>	<b>792.2</b>	<b>521.0</b>
Opening Balance	0.0	219.1	89.2	479.1	738.6
Net Surplus/ Deficit	219.1	-129.9	389.9	259.5	468.1
<b>Cumulative Balance</b>	<b>219.1</b>	<b>89.2</b>	<b>479.1</b>	<b>738.6</b>	<b>1206.7</b>

(Continued)

Financial Year	FY 2030	FY 2031	FY 2032	FY 2033
Particulars	12 M	12 M	12 M	12 M
Net Profit	794.0	837.7	868.5	886.8
Increase in Equity / Share Capital	0.0	0.0	0.0	0.0
Increase in TL	0.0	0.0	0.0	0.0
Increase in Unsecured Loan	0.0	0.0	0.0	0.0
Increase in Working Capital Loan	0.0	0.0	0.0	0.0
Depreciation	193.8	167.9	145.6	126.4
Preliminary Expenses w/off	1.2	0.0	0.0	0.0
Trade payables	16.8	16.2	17.1	15.1
<b>TOTAL</b>	<b>1005.8</b>	<b>1021.8</b>	<b>1031.2</b>	<b>1028.3</b>
Capital Expenses	0.0	0.0	0.0	0.0
Decrease in Term Loan	480.0	480.0	245.0	0.0
Decrease in Unsecured Loan	0.0	0.0	0.0	0.0
Trade Receivable	29.4	29.7	30.0	30.3
Inventory – Raw Material	7.6	7.6	7.6	7.7
Inventory – Finished Goods	10.8	10.2	11.0	9.2
Inventory - Consumables	0.7	0.7	0.7	0.7
Preliminary Expense	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>528.4</b>	<b>528.2</b>	<b>294.3</b>	<b>47.9</b>
Opening Balance	1206.7	1684.1	2177.7	2914.6
Net Surplus/ Deficit	477.4	493.6	736.8	980.4
<b>Cumulative Balance</b>	<b>1684.1</b>	<b>2177.7</b>	<b>2914.6</b>	<b>3895.0</b>



**D. KEY FINANCIAL RATIO:**

YEAR	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
<b>EBITDA Margin %</b>	9.3%	10.0%	9.5%	9.7%	9.5%	9.3%	9.1%	8.9%	8.8%
<b>EBIT Margin %</b>	5.8%	7.8%	7.7%	8.2%	8.2%	8.2%	8.2%	8.1%	8.1%
<b>PAT Margin %</b>	0.9%	3.2%	3.3%	4.0%	4.3%	4.5%	4.7%	4.8%	4.8%
<b>Revenue Growth %</b>	-	26.3%	1.0%	6.4%	1.5%	1.0%	1.0%	1.0%	1.0%

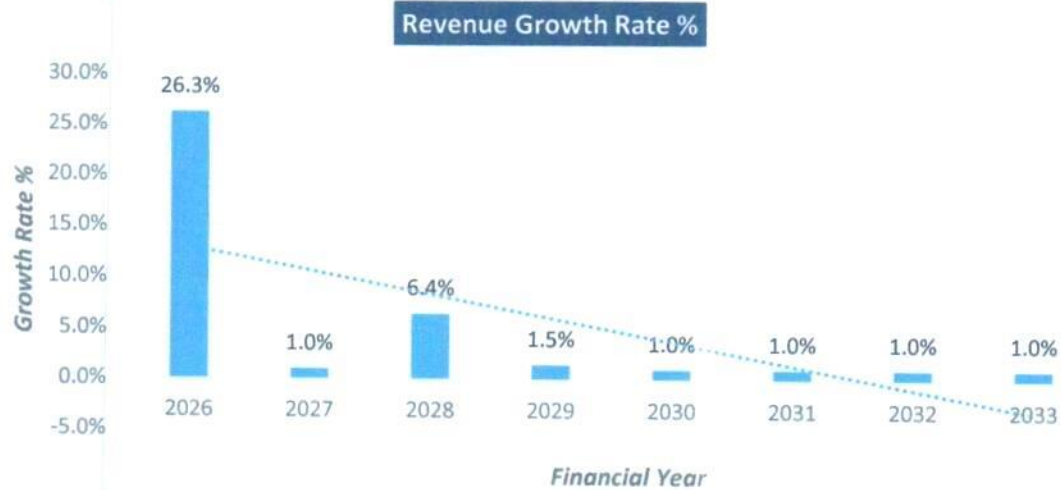
**E. GRAPHICAL REPRESENTATION OF KEY RATIOS:**





# TECHNO-ECONOMIC VIABILITY REPORT

## M/S APOLLO POLYVINYL PRIVATE LIMITED



### F. ESTIMATED KEY FINANCIAL METRICS:

#### DEBT SERVICE COVERAGE RATIO (DSCR)

Particular	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
PAT (Profit After Tax)	46.6	516.0	537.6	701.3	754.1	794.0	837.7	868.5	886.8
Depreciation	185.7	346.1	299.0	258.6	223.8	193.8	167.9	145.6	126.4
Preliminary Expenses	0.8	2.0	2.0	2.0	2.0	1.2	0.0	0.0	0.0
Interest on term loan	121.9	272.5	231.5	188.5	143.5	96.5	48.5	6.2	0.0
Interest on working capital loan	125.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
<b>Subtotal</b>	<b>480.0</b>	<b>1436.5</b>	<b>1370.2</b>	<b>1450.4</b>	<b>1423.4</b>	<b>1385.5</b>	<b>1354.1</b>	<b>1320.3</b>	<b>1313.2</b>
Interest on term loan	121.9	272.5	231.5	188.5	143.5	96.5	48.5	6.2	0.0







**H. NPV,IRR AND PAYBACK PERIOD OF THE PROJECT:**

(INR Lakhs)

Free Cash Flow for the project									
Particulars	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Period (Months)	5.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
EBIT	309.1	1262.0	1249.9	1425.6	1451.3	1457.6	1467.9	1466.8	1485.1
Less: Taxes	15.7	173.5	180.8	235.9	253.6	267.1	281.7	292.1	298.3
Add: Depreciation & Amortisation	185.7	346.1	299.0	258.6	223.8	193.8	167.9	145.6	126.4
<b>NOPAT</b>	<b>479.1</b>	<b>1434.5</b>	<b>1368.2</b>	<b>1448.4</b>	<b>1421.4</b>	<b>1384.3</b>	<b>1354.1</b>	<b>1320.3</b>	<b>1313.2</b>
+/- WCC	3545.9	593.9	28.8	262.3	51.8	31.6	32.0	32.3	32.8
Capex	3518.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Free Cash Flow to Firm (FCFF)</b>	<b>-</b> <b>6585.7</b>	<b>840.6</b>	<b>1339.4</b>	<b>1186.0</b>	<b>1369.6</b>	<b>1352.7</b>	<b>1322.1</b>	<b>1288.0</b>	<b>1280.4</b>
Discount Period	0.4	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4
Discount Factor	0.94	0.82	0.71	0.62	0.54	0.47	0.41	0.35	0.31
PV Of FCFF	- 6213.1	689.6	955.5	735.7	738.8	634.5	539.2	456.8	394.9
TV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8325.3
PV Of TV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2567.6
<b>PV(FCFF+TV)</b>	<b>-</b> <b>6213.1</b>	<b>689.6</b>	<b>955.5</b>	<b>735.7</b>	<b>738.8</b>	<b>634.5</b>	<b>539.2</b>	<b>456.8</b>	<b>2962.5</b>

Key Input for NPV & IRR		
S. No.	Key Input	Description
1.	Market Risk Premium	7.81% (Damodaran ERP India Jan 2024)
2.	Company Specific Risk Premium	2%
3.	Discount Rate	15.00%
4.	Perpetual Growth Rate	1.0%
NPV		INR 1,813.76 Lakhs
IRR		20.73%

Payback Period of the Project		
Financial Year	Cash Accrual	Accumulated Cash Accrual
2025	233.10	233.10
2026	864.04	1097.14





## TECHNO-ECONOMIC VIABILITY REPORT M/S APOLLO POLYVINYL PRIVATE LIMITED

2027	838.66	1935.80
2028	961.86	2897.66
2029	979.90	3877.56
2030	988.97	4866.52
2031	1005.59	5872.12
2032	1014.09	6886.21
2033	1013.17	7899.39
<b>Total</b>	<b>7899.39</b>	
<b>TPC</b>	<b>INR 4060.82 Lakhs</b>	
<b>Payback Period</b>	<b>4.60 Years</b>	

Thus, the project will be having a payback period of **4.60 years** and NPV & IRR of the project as on COD will **INR 1,813.76 Lakhs & 20.73%** respectively, which indicates worthiness of the project.

### I. OTHER FINANCIAL RATIOS:

Financial Year	2026	2026	2027	2028	2029	2030	2031	2032	2033
<b>Return On Revenue (%)</b>	1%	3%	3%	4%	4%	4%	5%	5%	5%
<b>Return On Capital (%)</b>	10%	39%	37%	40%	37%	35%	31%	26%	23%
<b>Return On Investment</b>	8%	86%	90%	117%	126%	132%	140%	145%	148%
<b>Return On Net Worth</b>	4%	30%	24%	24%	20%	18%	16%	14%	13%
<b>Fixed Assets Coverage</b>	1.3	1.4	1.6	2.0	3.0	8.2	NA	NA	NA
<b>Interest Coverage Ratio</b>	2.0	2.8	2.9	3.5	3.8	4.2	4.7	5.3	5.4
<b>Current Ratio</b>	1.1	1.2	1.3	1.4	1.5	1.6	1.8	2.0	2.3
<b>Quick Ratio</b>	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.4	1.6
<b>TOL / TNW</b>	6.0	4.0	2.8	2.0	1.5	1.1	0.9	0.7	0.6
<b>Debt - Equity Ratio</b>	2.5	1.5	0.9	0.6	0.3	0.2	0.0	0.0	0.0

### J. BREAK-EVEN ANALYSIS:

(INR lakhs)									
Financial Year	2026	2026	2027	2028	2029	2030	2031	2032	2033
Revenue	5331.2	16153.5	16315.1	17366.8	17622.0	17798.2	17976.2	18156.0	18337.5
Variable Expenses	4372.3	13237.3	13385.5	14187.3	14361.6	14467.5	14577.7	14690.3	14809.1
Contribution	958.9	2916.2	2929.6	3179.5	3260.4	3330.8	3398.5	3465.7	3528.4



Fixed Expenses	895.8	2224.7	2209.1	2240.4	2250.6	2268.5	2279.1	2305.1	2343.3
Profit / PBT	63.1	691.5	720.4	939.1	1009.8	1062.3	1119.4	1160.6	1185.1
<b>PV RATIO</b>	<b>18.0%</b>	<b>18.1%</b>	<b>18.0%</b>	<b>18.3%</b>	<b>18.5%</b>	<b>18.7%</b>	<b>18.9%</b>	<b>19.1%</b>	<b>19.2%</b>
BEP Revenue	4980.3	12323.0	12302.9	12237.1	12164.3	12122.0	12055.1	12076.0	12178.6
<b>BEP%</b>	<b>93.4%</b>	<b>76.3%</b>	<b>75.4%</b>	<b>70.5%</b>	<b>69.0%</b>	<b>68.1%</b>	<b>67.1%</b>	<b>66.5%</b>	<b>66.4%</b>

#### K. TERM LOAN INPUTS:

Term Loan Repayment Inputs – Term Loan	
Total loan amount	INR 2925 lakhs
Rate of Interest	10.00%
1st Disbursement	Aug-24
IDC Start & End Month	Aug-24 to Oct-24
IDC Period (construction period)	3 Months
Commencement /Operation Start	Nov-25
Moratorium Start & End Month (only interest to pay)	Aug-24 to Mar-25
Moratorium Period after COD	5 Months
Repayment Start	Apr-25
Repayment End	Sep-32
Repayment Period	78 Months

Financial Year (FY)	2025	2026	2027	2028	2029	2030	2031	2032
Op. Bal	0.0	2925.0	2525.0	2105.0	1665.0	1205.0	725.0	245.0
Disbursement	2925.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rep.	0.0	400.0	420.0	440.0	460.0	480.0	480.0	245.0
Closing balance	2925.0	2525.0	2105.0	1665.0	1205.0	725.0	245.0	0.0
Interest	195.0	272.5	231.5	188.5	143.5	96.5	48.5	6.2
IDC	73.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TL Interest	121.9	272.5	231.5	188.5	143.5	96.5	48.5	6.2

#### L. DEPRECIATION SCHEDULE (WRITTEN DOWN VALUE METHOD):

		(INR lakhs)							
Financial Year (FY)	2026	2026	2027	2028	2029	2030	2031	2032	2033
Building/Civil Works	1,030.3	978.8	880.9	792.8	713.5	642.2	577.9	520.2	468.1
Depreciation - Building/Civil Works	51.5	97.9	88.1	79.3	71.4	64.2	57.8	52.0	46.8



Plant & Machinery and other equipment	1,788.7	1,654.5	1,406.3	1,195.4	1,016.1	863.7	734.1	624.0	530.4
Depreciation - P&M and other equipment	134.1	248.2	211.0	179.3	152.4	129.6	110.1	93.6	79.6
<b>Total WDV Depreciation</b>	<b>185.7</b>	<b>346.1</b>	<b>299.0</b>	<b>258.6</b>	<b>223.8</b>	<b>193.8</b>	<b>167.9</b>	<b>145.6</b>	<b>126.4</b>

## M. WORKING CAPITAL REQUIREMENT:

(INR lakhs)

Financial Year (FY)	2025	2026	2027	2028	2029	2030	2031	2032	2033
Net Working Capital	3545.9	4139.8	4168.6	4431.0	4482.7	4514.3	4546.3	4578.5	4611.3
Working Capital Margin (15%)	531.9	621.0	625.3	664.6	672.4	677.1	681.9	686.8	691.7
Working Capital Loan	3000.0	3000.0	3000.0	3000.0	3000.0	3000.0	3000.0	3000.0	3000.0

## 2. KEY ASSUMPTIONS & BASIS:

S. No.	Item	Assumptions and Basis																
1.	General	<p>a. The plant is assumed to operate 24*7 for 300 days in a year.</p> <p>b. The projections of the Company are done for the period from FY 2025 to FY 2033, ~9 years, to cover the term loan period as per the industry best practices. It is assumed that the unit will be achieving on 01<sup>st</sup> November 2024.</p> <p>c. We have considered both Revenue &amp; cost-based model (top to bottom approach) while making the future financial projections.</p>																
2.	Revenue Build up	<p>a. Total income for the financial years during the forecasted period will be generating from sale of PVC Flex banner.</p> <table><tr><th colspan="4">Revenue @100% capacity</th></tr><tr><th>Products</th><th>Unit Price</th><th>Annual Quantity</th><th>Amount (INR)</th></tr><tr><td>Sale of PVC Flex banner</td><td>1,12,000</td><td>INR/MT</td><td>1,88,16,00,000</td></tr><tr><td colspan="3">Total Revenue (INR)</td><td>1,88,16,00,000</td></tr></table>	Revenue @100% capacity				Products	Unit Price	Annual Quantity	Amount (INR)	Sale of PVC Flex banner	1,12,000	INR/MT	1,88,16,00,000	Total Revenue (INR)			1,88,16,00,000
Revenue @100% capacity																		
Products	Unit Price	Annual Quantity	Amount (INR)															
Sale of PVC Flex banner	1,12,000	INR/MT	1,88,16,00,000															
Total Revenue (INR)			1,88,16,00,000															



		<p>b. Thus, the company is expected to generate INR 5,331.2 Lakhs (@ 85% Capacity Utilization) in the initial year. Further it is expected to increase up to INR 18,337.5 Lakhs till FY 2032-33.</p>						
3.	<p>Pricing (Average Price Per Unit)</p>	<p>a. Proposed selling price per unit of PVC Flex Banner is shown in the below table:</p> <table><tr><th colspan="2">Selling price per unit</th></tr><tr><th>Products</th><th>Unit prices</th></tr><tr><td>Sale of PVC Flex banner</td><td>INR 1,12,000/MT</td></tr></table> <p>b. We have not been provided with sample invoices of PVC flex banner being sold by M/s Cleena Industries for verifying expected selling price. As per a study done by IIT Delhi, the average sale price for PVC Flex banner in domestic market is INR 100-125 per Kg.</p> <p>c. An escalation factor of 1% has been considered in the prices of the products during the forecasted periods considering the micro and macro-economic factors.</p>	Selling price per unit		Products	Unit prices	Sale of PVC Flex banner	INR 1,12,000/MT
Selling price per unit								
Products	Unit prices							
Sale of PVC Flex banner	INR 1,12,000/MT							
4.	<p>Capacity Utilization</p>	<p>a. For the PVC flex unit, initially we have assumed an 85% capacity utilization in the initial year. Capacity utilisation has been projected to increase to 90% in 4<sup>th</sup> year and constant thereafter as the unit will take some time to achieve the economies of scale and is expected to operate at a higher capacity in the later years.</p> <p>b. We have considered the capacity utilization on conservative basis to keep a mark-up for future market &amp; economic risks in the Project.</p>						
5.	<p>Capital Expenditure</p>	<p>a. As per the audited financial statements of the company for the financial year 2021 shared with us, cost of land capitalised in books is ~INR 4.49 Cr. We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date.</p> <p>As per sale land deeds shared with us, INR 1.43 Cr is the consideration for cost of land, however, company has considered INR 7.00 Cr as market</p>						



		<p>value for computing project cost. As per our technical assessment, fair market value of ~33.76 acres of land is ~INR 10.13 Cr after considering guideline rate of INR 30 lakhs per acre.</p> <p>b. As per the audited financial statements of the company for the financial year 2021 shared with us, the depreciated cost of factory building is ~INR 4.49 Cr.</p> <p>We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date. However, company has considered INR 10.08 Cr as market value for computing project cost. As per our technical assessment, fair market value of building having built up area of ~68,000 sq. ft. is ~INR 9.95 Cr.</p> <p>c. As per the audited financial statements of the company for the financial year 2021 shared with us, the depreciated cost of plant and machinery, electrical equipment, furniture and office equipment, computers, vehicles etc. is ~INR 33.40 Cr.</p> <p>However, company has considered INR 12.50 Cr as market value of existing machinery &amp; equipment for computing project cost. We have not been provided with fixed assets register or the latest audited/provisional balance sheet for verifying the cost as of date or other details such as equipment name, manufacturer name, specification/capacity, landed price, age of the plant &amp; machinery, etc.</p> <p>As per our technical assessment, fair market value of machinery and other equipment basis the audited financial statements of financial year 2021 is ~INR 28.61 Cr.</p> <p>d. Refurbishment and installation of old machines and New Equipment has been estimated by the Company at INR 5 Cr. However, we have not been provided with quotations for the same.</p> <p>e. Estimated cost of Pre-Operative Expenses has been estimated by the Company at INR 0.10 crores.</p>
--	--	--



6.

Expenses

f. The estimation/vetting of Total Project Cost or its component is out of scope of this TEV report, and we have relied upon the data/information provided by the client in this regard.

a. The cost of the raw material @ 100% capacity has been shown in the below table:

Raw material Cost @ 100% capacity

Raw Material	INR/Ton	Annual Quantity	Amount INR
Annual Consumption of raw material	81,200	16,800	1,36,41,60,000
Total	INR 1,36,41,60,000		

b. We have not been provided with the composition of raw materials and the sample invoices of raw materials being purchased by M/s Cleena industries for verifying expected raw material prices.

c. As per our tertiary research and data available in the public domain, we found the unit rate are in the permissible range. Escalation of 1% is considered during forecasted period.

Materials	Composition (wt.%)	Price per Kg	Amount	Reference
Calcium Carbonate	36%	10	3.6	<a href="https://www.vickyplast.com/calcium-carbonates.html">https://www.vickyplast.com/calcium-carbonates.html</a>
PVC Resin	33%	80	26.4	<a href="https://www.exportersindia.com/indian-suppliers/pvc-resin.htm#:~:text=What%20is%20the%20cost%20of%20PVC%20resins%3F&amp;text=The%20price%20of%20PVC%20resins,of%20the%20product.">https://www.exportersindia.com/indian-suppliers/pvc-resin.htm#:~:text=What%20is%20the%20cost%20of%20PVC%20resins%3F&amp;text=The%20price%20of%20PVC%20resins,of%20the%20product.</a>
Polyester Fabric	18%	200	36	<a href="https://www.pranerafabrics.com/plain-polyester-fabric-3040614.html">https://www.pranerafabrics.com/plain-polyester-fabric-3040614.html</a>
Plasticizers	9%	130	11.7	<a href="https://www.vickyplast.com/pvc-plasticizers.html">https://www.vickyplast.com/pvc-plasticizers.html</a>
Additives	4%	95	3.8	<a href="https://www.metawaresindia.com/pvc-chemicals.html">https://www.metawaresindia.com/pvc-chemicals.html</a>
	100%		81.5	

d. As per information provided by the client, estimated annual consumption of the power will be 86,40,000 Kwh at 100% capacity and the applicable per unit charges will INR 7.5 per Kwh. Thus, the annual electricity expenses would be INR 6,48,00,000. An escalation rate of 1% is assumed on it.

e. Fuel for boiler has been estimated at INR 3000/MT. Annual quantity of wood required would be 3,600 MT. Therefore, annual expense would be INR 1.08 Cr. An escalation rate of 1% is assumed on it.

f. Consumables, Stores & Spares have been estimated at INR 5.5/Kg of PVC



		<p>flex banner. An escalation rate of 1% is assumed on it. Repair &amp; maintenance has been estimated at INR 1.8 Cr for the base year.</p> <p>g. A 10% escalation rate has been considered during the forecasted period on the salary &amp; wages of the proposed manpower, repair &amp; other manufacturing expenses.</p> <p>h. General, Selling &amp; Administrative Expenses has been estimated at 4% of revenue.</p> <p>i. Company is expected to have a similar EBITDA as compared to industry trends and peer's scales.</p> <p>j. We have not been provided with latest income tax return or schedule of brought forward losses for income tax purposes. Hence, we have not considered set off of previous year tax losses and unabsorbed depreciation for our assessment.</p>
7.	Partial Loan	<p>a. The project is proposed to be funded through a term loan of INR 29.25 crore, promoter's equity of INR 6.00 crore and unsecured loan of INR 5.36 crore.</p> <p>b. The tenure of term loan will be 86 months years from August 2024 to September 2032. First disbursement shall be in August 2024 and 8 months will be considered as moratorium period. As per discussion with bank, Interest rate has been considered as 10.00%. Repayment period shall be 78 months.</p> <p>c. Working capital loan of INR 30 crore is proposed after keeping a margin of 15%.</p>

**Key Findings:**

1. Average DSCR, EBIDTA margin, EBIT margin is 1.62, 9.34%, and 7.81% respectively during the estimated period.
2. The company is having a positive NPV and IRR as on COD, of INR 1813.76 lakhs and 20.73% respectively at the base cases while it may vary with changes in the assumptions & micro and macro-economic trends considered as on date.



**TECHNO-ECONOMIC VIABILITY REPORT**  
**M/S APOLLO POLYVINYL PRIVATE LIMITED**

3. The project is having a payback period of 4.60 years.
4. Based on the above key financial ratios of the Project during the forecasted period shows that the project appears financially viable if the promoters of the project are able to maintain assumed capacity utilization, revenue and can contain cost as assumed above in the calculation.





**PART N**

**CONCLUSION**

Based on the technological, economic and market analysis done above, various assumptions of sectoral trends taken, product pricing to be adopted by the company, the Project appears to be Techno-commercially viable subject to the risks, threats, weaknesses, limitations of the product as detailed previously.

As per financial projections for the estimated period, **Average DSCR, EBITDA Margin and EBIT Margin** of the project are **1.62, 9.34%, and 7.81%** respectively, where higher DSCR is the indicator of the project capability to pay out its outstanding debt and EBITDA margin shows the capability of the project to generate the operating profits over the forecasted period. Also, the project is having the payback period of **4.60 Years** in the line with sectoral trends.

The PVC Flex Banner & WPC/PVC Manufacturing Plant is having a positive **NPV and IRR** as **INR 1813.76 lakhs and 20.73%%** respectively at a 90% capacity utilization as the industry is expectedly growing at a CAGR of 5.7% during the forecasted period. While it is not avoidable that the future projections may change in the upcoming years due to various factors impacting the operation, managerial, financial efficiency and economies of scale of the project.

While it would be depending on the management's capability in future that how efficiently company adopts marketing and advertisement strategy, supply chain and carry out inventory & resource management to achieve higher profitability. After considering the foreseen demand of the PVC flex banners domestically and globally, various initiatives taken by the government, financial analysis of the project based on the assumptions taken over the projected period, it appears reasonable to comment that the project is "**Technically and Economically**" Viable subject to current assumptions considered and occurring the same in the upcoming years same as the forecasted period which is dependent on the sincerity and efforts of the management and various micro and macroeconomic & industry situation.


We have tried our level best to analyse the Project techno-economic feasibility of the Project based on the Industry research, Project information and various futuristic assumption taken within the limitations and challenges came in front of us. However, achieving the financial milestones depends on the ability, sincerity and efforts of the company, promoters and its key management to maintain the projected raw material cost level Y-o-Y basis keeping the fact in mind that the project is found sensitive with respect to the downside fluctuation in revenue and capacity utilisation.





## TECHNO-ECONOMIC VIABILITY REPORT M/S APOLLO POLYVINYL PRIVATE LIMITED

<b>Declaration</b>	<p>i. The undersigned does not have any direct/indirect interest in the above property/project/Company.</p> <p>ii. The information furnished herein is true and correct to the best of our knowledge, logical and scientific assumptions.</p> <p>iii. This TEV Report is carried out by our Financial Analyst team on the request from PNB, MCC Branch, Haridwar.</p> <p>iv. Meeting of Financial projections will be subject to the market &amp; economy stability factors, judicious business operations and proper &amp; timely implementation of the project and putting proper plan for achieving high productivity, efficiency and achieving cost saving benefits to increase profitability.</p> <p>v. We have submitted TEV report to the PNB, MCC Branch, Haridwar.</p>
<b>Number of Pages in the Report</b>	78
<b>Enclosed Documents</b>	Disclaimer & Remarks 74-77
<b>Place</b>	Noida
<b>Date</b>	25 <sup>th</sup> July 2024

FOR ON BEHALF OF M/S. R.K. ASSOCIATES VALUER & TECHNO ENGINEERING CONSULTANTS PVT. LTD.		
SURVEYED BY	PREPARED BY	REVIEWED BY
Mr. Abhinav Chaturvedi	Mr. Aneesh Mallick	Mr. Gaurav Kumar
		



**PART O**

**DISCLAIMER | REMARKS**

1. No employee or member of R.K Associates has any direct/ indirect interest in the Project.
2. This report is prepared based on the copies of the documents/ information which the Bank/ Company has provided to us out of the standard checklist of documents sought from them and further based on our assumptions and limiting conditions. The client/owner and its management/representatives warranted to us that the information they supplied was complete, accurate and true and correct to the best of their knowledge. All such information provided to us has been relied upon in good faith and we have assumed that it is true and correct in all respect. I/We shall not be liable for any loss, damages, cost or expenses arising from fraudulent acts, misrepresentations, or wilful default on part of the owner, company, its directors, employee, representative or agents. Verification or cross checking of the documents provided to us from the originals or from any Govt. departments/ Record of Registrar has not been done at our end since this is beyond the scope of our work. If at any time in future, it is found or came to our knowledge that misrepresentation of facts or incomplete or distorted information has been provided to us then this report shall automatically become null & void.
3. Legal aspects for e.g. investigation of title, ownership rights, lien, charge, mortgage, lease, sanctioned maps, verification of documents, etc. have not been done at our end and same has to be taken care by legal expert/ Advocate. It is assumed that the concerned Lender/ Financial Institution has satisfied them with the authenticity of the documents, information given to us and for which the legal verification has been already taken and cleared by the competent Advocate before requesting for this report. I/ We assume no responsibility for the legal matters including, but not limited to, legal or title concerns.
4. This report is a general analysis of the project based on the scope mentioned in the report. This is not an Audit report, Design document, DPR or Techno feasibility study. All the information gathered is based on the facts seen on the site during survey, verbal discussion & documentary evidence provided by the client and is believed that information given by the company is true best of their knowledge.
5. This Techno Economic-Viability study is prepared based on certain futuristic assumption which are intra dependent on economic, market and sectorial growth condition in future and socio-economic, socio-political condition at macro and micro level.





6. Meeting of assumption and financial ratio will entirely depend on the sincerity and efforts of the company, promoters and its key managerial performance.
7. All observations mentioned in the report is only based on the visual observation and the documents/ data/ information provided by the client. No mechanical/ technical tests, measurements or any design review have been performed or carried out from our side during Project assessment.
8. This report has been diligently prepared by our techno-financial team to the best of their ability. However, it's important to note that the recommendations provided in this Total Economic Viability (TEV) assessment do not imply an endorsement, validation, or certification of the accuracy or completeness of the disclosed information by the involved stakeholders. Furthermore, we do not claim or endorse that the opinions presented herein are the sole best course of action for decision-makers to follow. There may exist additional approaches and inputs that have not been covered within this report or fall outside the scope of this report.
9. Bank/FII should **ONLY** take this report as an Advisory document from the Financial/ Chartered Engineering firm and its specifically advised to the creditor to cross verifies the original documents for the facts mentioned in the report which can be availed from the borrowing company directly.
10. In case of any default in loans or the credit facility extended to the borrowing company, R.K Associates shall not be held responsible for whatsoever reason may be and any request for seeking any explanation from the employee/s of R.K Associates will not be entertained at any instance or situation.
11. The documents, information, data provided to us during the course of this assessment by the client are reviewed only up to the extent required in relation to the scope of the work. No document has been reviewed beyond the scope of the work.
12. This report only contains general assessment & opinion as per the scope of work evaluated as per the information given in the copy of documents, information, data provided to us and/ and confirmed by the owner/ owner representative to us at site which has been relied upon in good faith. It doesn't contain any other recommendations of any sort including but not limited to express of any opinion on the suitability or otherwise of entering into any transaction with the borrower.





13. We have relied on data from third party, external sources & information available on public domain also to conclude this report. These sources are believed to be reliable and therefore, we assume no liability for the truth or accuracy of any data, opinions or estimates furnished by others that have been used in this analysis. Where we have relied on data, opinions or estimates from external sources, reasonable care has been taken to ensure that such data has been correctly extracted from those sources and /or reproduced in its proper form and context, however still we can't vouch its authenticity, correctness or accuracy.
14. This Report is prepared by our competent technical team which includes Engineers and financial experts & analysts.
15. This is just an opinion report and doesn't hold any binding on anyone. It is requested from the concerned Financial Institution which is using this report for taking financial decision on the project that they should consider all the different associated relevant & related factors also before taking any business decision based on the content of this report.
16. All Pages of the report including annexure are signed and stamped from our office. In case any paper in the report is without stamp & signature then this should not be considered a valid paper issued from this office.
17. Though adequate care has been taken while preparing this report as per its scope, but still we can't rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within **15 (Fifteen) days** in writing from the date of issuance of the report, to rectify these timely, then it shall be considered that the report is complete in all respect and has been accepted by the client up to their satisfaction & use and further to which R.K Associates shall not be held responsible in any manner.
18. Defect Liability Period is **15 DAYS**. We request the concerned authorized reader of this report to check the contents, data and calculations in the report within this period and intimate us in writing if any corrections are required or in case of any other concern with the contents or opinion mentioned in the report. Corrections only related to typographical, calculation, spelling mistakes, incorrect data/ figures/ statement will be entertained within the defect liability period. Any new changes for any additional information in already approved report will be regarded as additional work for which additional fees may be charged. No request for any illegitimate change in regard to any facts & figures will be entertained.



19. R.K Associates encourages its customers to give feedback or inform concerns over its services through proper channel at [valuers@rkassociates.org](mailto:valuers@rkassociates.org) in writing within **15 days** of report delivery. After this period no concern/ complaint/ proceedings in connection with the Techno- Economic Viability Study Services will be entertained due to possible change in situation and condition of the subject Project.
20. Our Data retention policy is of **ONE YEAR**. After this period, we remove all the concerned records related to the assignment from our repository. No clarification or query can be answered after this period due to unavailability of the data.
21. This Techno Economic Viability Study report is governed by our (1) Internal Policies, Processes & Standard Operating Procedures, (2) Information/ Data/ Inputs given to us by the client and (3) Information/ Data/ Facts given to us by our field/ office technical team. Management of R.K Associates never gives acceptance to any unethical or unprofessional practice which may affect fair, correct & impartial assessment and which is against any prevailing law. In case of any indication of any negligence, default, incorrect, misleading, misrepresentation or distortion of facts in the report then it is the responsibility of the user of this report to immediately or at least within the defect liability period bring all such act into notice of R.K Associates management so that corrective measures can be taken instantly.
22. R.K Associates never releases any report doing alterations or modifications from pen. In case any information/ figure of this report is found altered with pen then this report will automatically become **null & void**.
23. If this report is prepared for the matter under litigation in any Indian court, no official or employee of R.K Associates will be under any obligation to give in person appearance in the court as a testimony. For any explanation or clarification, only written reply can be submitted on payment of charges by the plaintiff or respondent which will be 10% of the original fees charged where minimum charges will be Rs. 15,000/.





**EXTRACTS OF IMPORTANT STATUTORY APPROVALS PROVIDED BY THE CLIENT**

**INITIAL LICENCE ISSUED/ RENEWAL.**

**தொழிற்சாலைச் சட்டம்**  
**படிவம் எண். 4.**

விதி 4(6) இன் கீழ்க் குறிப்பிடப்பட்டுள்ளவா  
ஒரு தொழிற்சாலையை நடத்துவதற்கானப் பதிவு  
உரிமமும்

உரிம எண் : 3285.

பதிவு எண் : TUR 10171/15. கட்டணம் ரூ.40,000

1948-ம் ஆண்டு தொழிற்சாலைகள் சட்டத்தின்  
வழிவகைகளின்படியும், அதன் கீழ் செய்யப்படு  
விதிகளின் படியும், கீழே விவரித்துள்ள  
வளாகத்துக்குள் ஒரு தொழிற்சாலையாக 100  
மினிகப்படாத தொழிலாளர்களுடன் நடப்ப  
ஆண்டில் எந்த ஒரு நாளிலும் 25000 குதிரை,  
திறனுக்கு மிகைப்படாத இயந்திர சக்தியுடன  
உரிமம் வழங்கப்படுகின்றது/ புதுப்பிக்கப்படுகிறது

விதி 109இன் கீழ் இந்த உரிமம் உரிய நாளுக்கு  
முன் நீக்கப்பட்டாலெழிய 2015 ஆ  
ஆண்டு டிசம்பர் திங்கள் 31ஆம் நாள் வரை இது  
உரிமம் செயற்பாட்டில் இருக்கும்.

ஒ.நா. 933260, டி. 10.04.2015.  
2

தொழிற்சாலையின் பெயர் **APOLLO POLYVINYL**  
**S. F. 10, 12, 6 To 8, 24 To 29, 9/A, 9/B, 17, 20, 39 To 40,**  
**உரிமம் வழங்கப்பட்ட வளாகத்தின் விவரிப்பு**  
**D. No-28, Siruvada village,**

மும் நாளும்.....  
எண் ணுமிடப்பட்ட வரைபடத்தில்  
காண்பிக்கப்பட்டு உள்ள உரிமம் வழங்கப்பட்ட  
வளாகம்.....மாவட்டத்தில்.....  
அமைந்துள்ளது மற்றும் அதில் Siruvada District.  
அடங்கியுள்ளது.

நாள் : 26-06-2015  
John Director  
Industrial Safety and Health-I  
Chennai-600 032.

**LIST OF DIRECTORS**

1. M. SUNIL KAPOOR (Chairman)
2. M. VARUN KAPOOR.

**தொழிற்சாலைச் சட்டம் புதுப்பித்தல்**

புதுப்பித்த நாள்	புதுப்பிப்பதற்குக் கட்டணம்.	உரிமம் முடிவுறும் நாள்.	தொழிற்சாலைகள் துணைத் தலைமை ஆய்வாளரது ஒப்பம்.
1. 06.2015.	L. No 40,000 - L. No 40,000 - L. No 40,000 - L. No 40,000 -	31.12.2016 } 31.12.2017 } Agents 31.12.2018 } 31.12.2019 }	John Director Industrial Safety and Health-I Chennai-600 032.
2.			
3.			
4.			
4		5	