Agenda Notes for discussion in the 159<sup>th</sup> Meeting (4<sup>th</sup> Meeting of the 2023 Series) of the Unit Approval Committee for SEZs through Video Conferencing, to be held on the 31<sup>st</sup> March 2023 at 3.30 P.M. in the chamber of Development Commissioner, Falta Special Economic Zone at 4<sup>th</sup> Floor of 2<sup>nd</sup> MSO Building, Nizam Palace, 234/4, AJC Bose Road, Kolkata-700020.

A	Action taken report for 158 <sup>th</sup> Meeting of the Unit Approval Committee held on 16 <sup>th</sup> March, 2023	Page No.2-3
В	Minutes of 156 <sup>th</sup> Meeting of the Unit Approval Committee held on 16 <sup>th</sup> March, 2023	Page No.4-7

# Name of the SEZ: FALTA SPECIAL ECONOMIC ZONE

Agenda	Request by M/s. Natural Product Manufacturers for setting up of a new			
Item No.	Unit at Falta Special Economic Zone, Falta, South 24 Parganas for	No.8-15		
1	manufacturing and export of Shellac (Dewaxed Bleached Shellac), ISO			
	Ambrettolide and Aleuritic Acid			

Action taken report of 158<sup>th</sup> Meeting of the Unit Approval Committee held on 16<sup>th</sup> March, 2023 at 11.30 A.M. through Hybrid Mode under the Chairmanship of Development Commissioner, Falta Special Economic Zone at 4<sup>th</sup> Floor, 2<sup>nd</sup> MSO Building, Nizam Palace, 234/4, AJC Bose Road, Kolkata-700 020.

### Name of the SEZ: FALTA SPECIAL ECONOMIC ZONE

Agenda Item No. 1	Request for renewal of LOA No. FEPZ/LIC/C-21/2001/573 dated 07.04.2001 by M/s. Cheviot Company Limited, a unit of Falta SEZ for a further period of 05 (five) years w.e.f. 27.03.2023	Action taken
Agenda Item No.2	Request for renewal of LOA No. FSEZ/LIC/A-13/92 dated 29-03-1993 of M/s. Antartica Limited, a unit in FSEZ for a period of 05 (five) years beyond 31.03.2023	Action taken report to be submitted by Secretary, FSEZA regarding pending rental issues.
Agenda Item No.3	Request by M/s. NMC Tools Pvt. Ltd., a unit in Falta SEZ, for approval and inclusion of "Default List of Authorised Services" within their approved services as per DOC's letter No.D.12/19/2013-SEZ dated 02.01.2018	Action taken
Agenda Item No.4	Request by M/s. NMC Tools Pvt. Ltd., a unit in Falta SEZ, for inclusion of additional item "HSS & Carbide Taps" (ITC HS Code – 82074090) in their existing LOP No. FSEZ/LIC/D-26/2007/3182 dated 10.10.2007	Action taken

# Name of the SEZ: CANDOR KOLKATA ONE HI-TECH STRUCTURES PVT. LTD. IT/ITES SEZ

Agenda	Request for M/s. Capgemini Technology Services India	Action taken
Item No.	Limited, a unit in Candor Kolkata One Hi-Tech Structures Pvt.	
5	Ltd. IT/ITES SEZ for inclusion of additional space of 61,719 Sq. Ft.	

# **Monitoring of Annual Performance of SEZ Units**

S1.	Name of the Unit	Name of the	Period of	Remarks
No.		Zone	Monitoring	
1.	M/s. United Cycle	Falta SEZ	2021-22	(+) NFE taken note of. The
	Company (Manufacturing)			committee advised the unit
				to clarify the 21% difference
				between APR data and
				Customs data i/r/ o export
				figures. The Committee has
				also asked the unit for
				immediate payment of 20%

	T		T	T
				of their outstanding rental
				dues, and the balance may
				be paid in monthly
				installments over a
				maximum period of six
				months against Letter of
				Undertaking (LUT).
2.	M/s. Robinson International	Falta SEZ	2020-21 &	(+) NFE taken note of. The
	Pvt. Ltd.		2021-22	Committee noted that there
				is no export in the FY 2021-
				22. Unit has been requested
				to clarify the same.
3.	M/s. Transworld Business	Falta SEZ	2020-21 &	The Committee noted that
	Corporation		2021-22	there is no export from the
	(Manufacturing)			Unit in the last 03 (three)
				years. Unit has been
				requested to clarify the
				same.
4.	M/s. Hi-tech Information &	Falta SEZ	2020-21 &	The Committee noted that
	Marketing Pvt. Ltd.		2021-22	no export done for FY
				2020-2L & 202L-22. Unit
				has been requested to clarify
				the same.

757489/2023/SEZ FALTA 1/45104/2023

Government of India
Falta Special Economic Zone

Ministry of commerce & Industry
Department of Commerce
2nd MSO Building, 4th Floor, Nizam Palace
234/4, AJC Bose Road, Kolkata-700 020

File No. 1(64)/158thUAC/2023

Dated 21/03/2023

Subject: Minutes of 158th meeting (3rdMeeting of the 2023 Series) of the Unit Approval Committee, FaltaSEZ held on 16.03.2023- regarding

Minutes of 158<sup>th</sup>meeting (3<sup>rd</sup>Meeting of the 2023 Series) of the Unit Approval Committee constituted in terms of Section 13 of Sub Section 1 of the Special Economic Zone Act, 2005 held on 16.03.2023 at 11.30 A.M. in the chamber of Development Commissioner, Falta Special Economic Zone, 4<sup>th</sup> floor, 2<sup>rd</sup> MSO Building, Nizam Palace, 234/4, AJC Bose Road, Kolkata-700020 through Hybrid mode regarding Falta SEZ, Manikanchan SEZ, Candor Kolkata One Hi-tech Structures Ltd. IT/ITES SEZ, Wipro Ltd. IT/ ITES SEZ and DLF Ltd. IT/ITES SEZs.

List of participants is enclosed at Annexure-I.

- 2. ShriSatish Kumar, Chairman of the Committee welcomed all the Members present in the meeting and requested ShriAbhishekSanyal, Dy. Development Commissioner, Falta SEZ to place the agenda before the Committee for discussion.
- 3. Item wise discussed and decisions taken were as under:

**Agenda Item No.A&B:**Ratification of the minutes of 156<sup>th</sup>UAC meeting held on 17.02.2023.

Minutes of the  $156^{rd}$  UAC meeting was circulated to all the members of UAC. As no comments were received, the committee ratified the minutes and confirmed the same.

Agenda Item No.1: Request for renewal of LOA No.FEPZ/LIC/C-21/2001/573 dated 07.04.2001 by M/s. Cheviot Company Limited, a unit of Falta SEZ for a further period of 05 (five) years w.e.f. 27.03.2023.

The request for renewal of LOA No.FEPZ/LIC/C-21/2001/573 dated 07.04.2001 by M/s. Cheviot Company Limited, a unit of Falta SEZ was discussed and examined in detail by the Committee. Mr.Pramod Kumar Agrawal, Manager represented on behalf of the unit physically during the course of discussion in the UAC and requested their proposal for consideration. The Committee noted that the monitoring of APR of the unit has been monitored upto 2020-21, has achieved positive NFE and no realization is pending. The Unit has also stated that they are expecting a FOB value of Exports of Rs. 66.547 Crores for the next block of 05(five) years. The Committee directed the unit to add women employees in

1/45104/2023

their strength as proposed women employment is very meager as compared to men employment.

After deliberation, the committee decided to renew the LoA (No. FEPZ/LIC/C-21/2001/573 dated 07.04.2001) of M/s. Cheviot Company Limited for another 05 (five) years w.e.f. 27.03.2023 subject to condition of strict compliance of SEZ Rules, 2006&SEZ Act, 2005.

Agenda Item No.2: Request for renewal of LOA No. FSEZ/LIC/A-13/92 dated 29-03-1993 of M/s. Antartica Limited, a unit in FSEZ for a period of 05 (five) years beyond 31.03.2023

The request for renewal of LOA No. FSEZ/LIC/A-13/92 dated 29-03-1993by M/s. Antartica Limited, a unit of Falta SEZ, was discussed and examined in detail by the Committee, Mr.Rohit Kothari, Director appeared before the committee on behalf of the unit physically during the course of discussion in the UAC and requested their proposal for consideration. The Committee asked the concerned unit to clarify their non-performance/no export during last 02(two) years. The unit clarified that they had no bulk orders from overseas due to covid-19 pandemic. However, they now wish to start manufactureactivity shortly. The Unit also stated that they are expecting a FOB value of Exports of Rs. 650.00 (Rs. in lakhs) for the next block. The unit also noted that there is pending issue of nonpayment of rental dues. The Committee directed Secretary, FSEZA to sort out the issue at the earliest.

After deliberation, the committee decided to renew the LoA no. FSEZ/LIC/A-13/92 dated 29-03-1993 of M/s. Antartica Limited for only 02(two) years w.e.f. 01.04.2023 subject to condition of strict compliance of SEZ Rules, 2006 & SEZ Act, 2005.

Agenda Item No.3: Request by M/s. NMC Tools Pvt. Ltd., a unit in Falta SEZ, for approval and inclusion of "Default List of Authorized Services" within their approved services as per DOC's letter No.D.12/19/2013-SEZ dated 02.01.2018

The request of M/s. NMC Tools Pvt. Ltd., a unit in Falta SEZ for approval and inclusion of their 28 (Twenty Eight) service requirements in "Default List of Authorized Services" was discussed at length. After due deliberation, the committee decided to approve and include the said service requirements as applied by the unit in "Default List of Authorized Services" for authorized operations in Falta SEZ in terms of Instruction No. 79 dated 19.11.2013 by DOC and subject to complying the formalities of the SEZ Rules & Act 2005.

Agenda Item No.4: Request by M/s. NMC Tools Pvt. Ltd., a unit in Falta SEZ, for inclusion of additional item "HSS & Carbide Taps" (ITC HS Code – 82074090) in their existing LOP No.FSEZ/LIC/D-26/2007/3182 dated 10.10.2007

The request of M/s. NMC Tools Pvdt. Ltd., a unit in Falta SEZ, for inclusion of new items in the existing LOA No. FSEZ/LIC/D-26/2007/3182 dated 10.10.2007 was discussed and examined in detail. Mr. Manas Maity represented on behalf of the unit physically during the course of discussion in the UAC and requested their proposal for consideration. The 757489/2023/SEZ FALTA 1/45104/2023

Committee asked to the unit for immediate submission of APR for FY 2020-21 and 2021-22 for monitoring the same. After due deliberation the Committee approved the proposal for inclusion of additional items under ITC HSN Code 82074090, "HSS and Carbide Taps" in the existing LOA No. FSEZ/LIC/D-26/2007/3182 dated 10.10.2007 subject to compliance of SEZ Act, 2005 and SEZ Rules 2006.

Agenda Item No.5: Request for M/s. Capgemini Technology Services India Limited, a unit in Candor Kolkata One Hi-Tech Structures Pvt. Ltd. IT/ITES SEZ for inclusion of additional space of 61,719 Sq. Ft. – regarding

The request of M/s. Cappemini Technology Services India Limited, a unit in Candor Kolkata One Hi-Tech Structures Pvt. Ltd. IT/ITES SEZ, for inclusion of additional space of 61,719 Sq. Ft. was discussed and thoroughly examined by the Committee. Shri Ramkrishna Menon appeared before the committee and explained their request for consideration of their proposal. The unit intimated to UAC that this inclusion of additional space is to meet their business activities for prospective clients as well as to increase employment strength. The committee noted the copy of the space offer letter dated 08.03.2023 issued by the developer (M/s Candor) to the unit for allocation of 61719 Sq.Ft space.

After due deliberation, the Committee decided to approve the inclusion of additional space measuring 61,719 sq.ft. (30,993 sq.ft Tower A2-3rd Floor and 30,726 Sq.ft. A2-4th floor) in their existing LOA NO. FSEZ/LIC/C-3/2016/3673 dated 5<sup>th</sup>December 2018 as requested by the concerned unit in terms of rule 18.(2) (ii) of SEZ Rules 2006.

#### **Monitoring of Annual Performance of SEZ Units**

The following Units have been monitored by the Committee-

Sl.	Name of the Unit	Name of the	Period of	Remarks
No.		Zone	Monitoring	
1.	M/s United Company (Manufacturing)	Falta SEZ	2021-22	(+) NFE taken note of. The committee advised the unit to clarify the 21% difference between APR data and Customs data i/r/ o export figures. The Committee has also asked the unit for immediate payment of 20% of their outstanding rental dues, and the balance may be paid in monthly installments over a maximum period of six months against Letter of Undertaking (LUT).

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2.	M/s. Robinson International Pvt Ltd	Falta SEZ	2020-21 & 2021-22	(+) NFE taken note of. The Committee noted that there is no export in the FY 2021-22. Unit has been requested to clarify the same.
3.	M/s. Transworld Business Corporation(Manufac turing)	Falta SEZ	2020-21 & 2021-22	The Committee noted that there is no export from the Unit in the last 03 (three) years. Unit has been requested to clarify the same.
4.	M/s. Hi-tech Information & Marketing Pvt. Ltd	Falta SEZ	2020-21 & 2021-22	The Committee noted that no export done for FY 2020-21 & 2021-22. Unit has been requested to clarify the same.

This issues with the approval of Development Commissioner.



e-Sd/-(Abhishek Sanyal) Deputy Development Commissioner & Head of Office

File No. 1(64)/158thUAC/2023

Dated 21/03/2023

Copy forwarded to for information and necessary action to:-

1,	The Joint Commissioner, Office of the Principal Chief Commissioner, Central Goods Service Tax and Central Excise, Kolkata Zone, Central CGST Bhavan (2 <sup>nd</sup> Floor),	
	180 Shantipally, R.B. Connector, Kolkata-700 107.	*
2.	Smt. Dona Ghosh,	
	Jt. DGFT	
	Office of the Additional Director General of Foreign Trade,	
	Government of India, 4, Esplanade East	
	Kolkata- 700069	
3.	ShriS.Bhattacharya,	
	Advisor Project	
	WBIDC, 23, Camac Street,	
	5th Floor, Kolkata-700 017	
4.	ShriBappaditya Banerjee,	
	Assistant Commissioner of Customs,	

# FALTA SPECIAL ECONOMIC ZONE

# 159th UAC meeting to be held on 31st March, 2023

### Agenda No.1

Sub:- Application by M/s. Natural Product Manufacturers for setting up of a new Unit at Falta Special Economic Zone, Falta, South 24 Parganas for manufacturing and export of Shellac (Dewaxed Bleached Shellac), ISO Ambrettolide and Aleuritic Acid - regarding

M/s. Natural Product Manufacturers vide its letter No.Nil dated 28.02.2023 and 20.03.2023 has submitted an application for setting up a new SEZ unit in Form F. As per Rule 17 of SEZ Rules, 2006 for setting up of a new unit, the following documents have to be submitted such as Application Fees, IEC, Allotment of space, Foreign Exchange Balance Sheet, Share Holding Pattern, Name of Director/ Partners/ Proprietors, Certificate from ROC, Investment, Employment, Details of Capital Goods, Raw Materials, ITC HS Code of items to be imported and exported etc. On examination of documents, it is found that the firm has submitted the required documents. Accordingly, a check list has been prepared and furnished below:

1.	Name of the applicant unit and	M/s. Natural Product Manufacturers			
	Regd./Head Office address.	Corporate Office: DGK-602, DLF Galleria, New Town,			
		Kolkata West Bengal - 700156			
		· ·			
		Present Manufacturing Unit: 315A, Badu Road,			
		Madhyamgram, Kolkata-700155, West Bengal			
		Website – www.npmresearch.com			
		Email – operations@npmresearch.com,			
		npm.office1@gmail.com			
		Contact: 91+9830165125			
		NAME OF THE BANK – Bank of Baroda, Salt Lake City,			
		Kolkata			
	IEC No.	AASFN0083E			
	PAN No.	AASFN0083E			
	GST No.	19AASFN0083E1Z3			
	MSME No.	UDYAM – WB – 14 - 005170			
2.	About Company/Firm/ Directors/	Partnership Firm			
	Promoters				
		Name of the Partners alongwith Share Holding Pattern			
		1. Mr. Sumit Kumar Ghosh, Partner – 70%			
		2. Mrs. Shampa Ghosh – 10%			
		3. Ms. Spandita Ghosh – 10%			
		4. Mr. Saptarshi Ghosh – 10%			

3.	Whether the applicant has been issued any industrial licence or LOI/LOA under EOU/SEZ/STP/EHTP Scheme. If so, give full particulars, namely reference No., date of issue, items of manufacture and progress of implementation of each project (Refer Para XII(i) of Form F of SEZ Rules, 2005	NO					
4.	Whether proof of address/residence of promoter(s) has been furnished/ Nature of the documents to be indicated	YES (Aadhar Card, PAN Card)  1. Sumit Kumar Ghosh – PAN No.ADNPG5716D, Aadhar No.422217113423  2. Saptarshi Ghosh - PAN No.CFJPG4116D, Aadhar No.358266325894					
5.	Whether copies of IT Returns of Proprietor/All Partners/Directors for last 3 years or audited balance sheet for last 3 years in case of companies have been furnished	IT Return for all the Partners for the last 3 (three) year been submitted.  Audited Balance Sheet of M/s. Natural Product Manufactor for the FY ending on 31.03.2021 and 31.03.2022 have submitted.			ufacturers		
6.	List of Imported Raw Materials along	ITC HS Co			em Description		
	with ITC (HS) Code	13019099 13019099		SEEDL. STICKI			
7.	Classification of the items proposed	ITC HS	Item	BIICK	Metric	Produ	ıction
'	for manufacturing/services as per	Code	Descri	ption	With	Capac	
	ITC(HS) Classification	13019099	Shella		M. Tons	600.00	
	Production capacity		(Dewa Bleach				
		33019033	ISO	ettolide	M. Tons	120.00	)
		33029020		tic Acid	M. Tons	300.00	)
8.	Whether the proposal envisages permission for sub-contracting part production in DTA	No					,
9.	In case of Partnership firm, the partnership Deed is registered or not	Registered fr	om Nota	ry			
10.	Marketing tie-up/arrangement	Yes					
	envisaged?	Party Name –  1. International Flavors & Fragrances Hangzhou Co. Ltd.					
		<ul><li>– China</li><li>2. Givauda</li></ul>	n De Ma	vico Ma	xico		
					- United Kins	gdom	
		4. Decco Po			•		
11.	Requirement of power	250 (KVA)					
12.	Requirement of built-up area	2508 Sqr. Mt					
13.	Requirement of land	Factory and C Warehousing		12000 Sqı 1000 Sqı			
14.	Whether provisional offer of allotment for space from the Developer enclosed	-		1			
15.	Investment in plant and machinery	Indigenous - Imported Cl					

		The unit has submitted that it will not import any Capital Goods.
16.	Financial arrangement envisaged source of finance including financial status of promoters(s)	Self/Bank
17.	Import and Indigenous requirement of materials and other inputs	Capital Goods– Indigenous 200.00 Lakhs (INR)  Raw materials, components, consumables, packing material, fuel etc. for 5 years  1. Indigenous – 19.11 Crores (INR)
		2. Imports – 37.58 Crores (INR)
18.	Requirement of Water	17000 KL
19.	Effluent Treatment	They will recycle waste by a effluent treatment plant
20.	FOB value of exports during the first 5 years	1 <sup>st</sup> year - 100.00 lakhs 2 <sup>nd</sup> year - 150.00 lakhs 3 <sup>rd</sup> year - 200.00 lakhs 4 <sup>th</sup> year - 250.00 lakhs 5 <sup>th</sup> year - 300.00 lakhs Total - <b>1000.00 lakhs</b>
21.	Foreign Exchange Outgo for the first 5 years	1 <sup>st</sup> year - 20.00 lakhs 2 <sup>nd</sup> year - 30.00 lakhs 3 <sup>rd</sup> year - 40.00 lakhs 4 <sup>th</sup> year - 50.00 lakhs 5 <sup>th</sup> year - 60.00 lakhs Total - <b>200.00 lakhs</b>
22.	Net Foreign Exchange earnings for the first five year (1) - (2)	1 <sup>st</sup> year - 80.00 lakhs 2 <sup>nd</sup> year - 120.00 lakhs 3 <sup>rd</sup> year - 160.00 lakhs 4 <sup>th</sup> year - 200.00 lakhs 5 <sup>th</sup> year - 240.00 lakhs Total - <b>800.00 lakhs</b>
23.	Whether the items proposed to be manufactured envisage pollution?	An in-principle approval of West Bengal Pollution Control Board Memo No.451-ka_co_r/17/0293 dated 28.04.2022 has been enclosed.
24.	Whether proposal is for manufacturing, trading or services	Manufacturing
25.	Whether Foreign Technology agreement envisaged	NIL
26.	Whether then applicant or any of the Partner/Director who are also Partners/Directors or another company or firm its associate concerns are being proceeded against or have been debarred from getting any license/letter of Intent/Letter of Permission under Foreign Trade (Development and regulation) Act, 1992 or Foreign Exchange Management Act, 1999 or Customs Act, 1962 or Central Excise Act, 1944 (Refer Para XII(ii) or FORM 'F' of SEZ Rules, 2006	NA
27.	Share holding pattern	Name of the Partners alongwith Share Holding Pattern

		1. Mr. Sumit Kumar Ghosh, Partner – 70%
		·
		2. Mrs. Shampa Ghosh – 10%
		3. Ms. Spandita Ghosh – 10%
		4. Mr. Saptarshi Ghosh – 10%
28.	Whether application has been	Yes
	received online	
29.	Board Resolution for power of	Available
	signing all documents	
30.	Employment	Women-10 & Men-30

The Unit has submitted all the required documents for setting up of a new manufacturing unit in SEZ as per Rule 17 of SEZ Rules 2006 in Form F to the Development Commissioner. As per Rule 18 of SEZ Rules, 2006, the Approval Committee may approve or approve with modification or reject a proposal placed before it under sub-rule (2) of Rule 17 of SEZ Rules, 2006.

Thus, the proposal is submitted before UAC for discussion/ decision. The process flow chart of the manufacturing process of the unit is also submitted before the UAC for kind perusal.



Head Office: 315A, Badu Road, Madhyamgram, Kolkata Website: www.npmresearch.com

PROJECT REPORT

Scanned on 14 AUG 2020

NATURAL PRODUCT MANUFACTURERS

#### **Aleuritic Acid Flow Sheet & Process Description**

PROCESS OF MANUFACTURING Water from ETP Lac/Seedlac/Kirilac Caustic Lime Make up Water STORAGE TO LEAVE 7 C.S.T.R CAKE(FILTER (Bore well) DIGESTOR DAYS FOR HYDROLYSIS FILTER PRESS RESIDUE) Water from ETP E.T.P Repeat three times CSTR HOT WATER Hypo-chloride 5% HCL FILTER Purification Hydraulic ACIDIFIACATION COOL FILTER PRESS Cake Acid Wash Water - Soda to neutralize HEAT CHAMBER CSTR Treated Water from ETP→ Finished Product ETP FILTER **Packaging** Organic Manure D Natural Product Manufacturers 2020

NATURAL PRODUCT MANUFACTURERS

Sumul 36. Shoot

This document contains confidential information only to be disclosed with written consent from Natural Product Manufacturers.



**Head Office:** 315A, Badu Road, Madhyamgram, Kolkata **Website:** www.npmresearch.com

#### PROJECT REPORT

#### **NATURAL PRODUCT MANUFACTURERS**

#### Process of Manufacturing Aleuritic Acid (Shellac Derivative)

#### The process

- The feed is mixed with Lime and caustic flakes (98%) in the feed dissolved tank for dissolving the feed.
   Recycled water ex- ETP is used. Makeup of hot water from the bore well is used as and when necessary.
   The temperature of the hot water is maintained at 65-70° C.
- The dissolved feed (slurry) is then stored for 7(seven) days in a separate tank for cooling and hydrolysis.
- The dissolved feed is then transferred to a tank where common salt and recycled water (normal temperature) is added and stirred continuously for 'salting out sodium salt'. In the rainy season harvested rainwater (hot) is also used. The solution is then filtered in a filter press. The alkaline filtrate (1st rejected water) pumped to ETP. The solid residue is then transferred back to the old tank for repeating the process 2 to 3 times.
- 4. The contents of the tank are finally filtered and the solid residue is taken into another tank. The filtrate (1st Reject Water) is transferred to ETP.
- 5. The solid residue is then diluted with hot water (65-70°C) with continuous stirring. The slurry is then filtered and the filtrate is then pumped to the bleach tank and the residue is transferred to a residue treating tank where recycled water (normal temperature) is added to remove the alkalinity of the solid residue. The content is then filtered. The residue is dried and disposed of as organic manure. The filtrate (alkaline wash water) is pumped to ETP as 2<sup>nd</sup> rejected water.
- 6. In the Bleach tank Sodium Hypochlorite (5%) is added for bleaching. The content is then pumped to an Acidification Tank, where HCL (33%) is added to neutralize the content.
- 7. The content is then filtered. The residue, finished product is dried/pulverized and packed as a finished product. The filtrate, acidic water is treated with soda ash (95%) and pumped to ETP as 3<sup>rd</sup> rejected water.
- Alkaline and Acidic reject water thus obtained is treated in ETP for reuse/recycle.

NATURAL PRODUCT MANUFACTURERS

Partner



Head Office: 315A, Badu Road, Madhyamgram, Kolkata

Website: www.npmresearch.com

PROJECT REPORT

NATURAL PRODUCT MANUFACTURERS

### **Dewaxed Bleached Shellac Flow Sheet & Process Description:**

#### Process flow sheet of synthesis of Dewaxed Bleached Shellac (Shellac Derivative Category - 2)



NATURAL PRODUCT MANUFACTURERS

Partner



Head Office: 315A, Badu Road, Madhyamgram, Kolkata

Website: www.npmresearch.com

PROJECT REPORT

NATURAL PRODUCT MANUFACTURERS

#### Process of Manufacturing Dewaxed Bleached Shellac Powder & Flake

#### Process:

#### Alkaline Dissolution of Seedlac:

For the purpose of extracting the shellac from Seedlac we are adding Sodium Carbonate to Seedlac in the ratio of 12 parts to 100 parts. The water being added to the mixture is produced by a Reverse Osmosis Filter; free from heavy metals or dissolved solids. The pH of the solution at the start of the dissolving should be preferably in the range of 10 to 11. The mixture is further emulsified using a high-speed emulsifying arrangement. The shellac solution is filtered using a filter press of 0.5-micron cloth to remove the impurities and insect remains from the purified shellac solution.

#### Decolourisation of Shellac (Bleaching):

The purified shellac solution is of a dark brown colour; to achieve the colour index necessary for the accepted standard of bleached shellac it must be decolorized using a suitable bleaching method. Sodium Hypochlorite is used and accepted as a standardized bleaching agent for decolourisation of bleached shellac. The bleached shellac is treated with freshly prepared Sodium Hypochlorite with a free chlorine percentage of 5% to 6% (v/v).

#### Precipitation of Shellac from Bleached Shellac Solution:

After adequate amount of decolourisation, the pale-yellow liquor can be precipitated to a solid form by precipitating the shellac (bleached) solution using an acidic medium. The addition of 5% Sulphuric Acid is used to precipitate the Bleached Shellac from its solution.

#### Drying:

We are using a hydraulic press to drain out most of the water from the precipitated bleached shellac from the previous step.

We are drying the remaining moisture using a rotary dryer arrangement in the presence of dehumidified air.

Sunul Sw. Glosh

Partner

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