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**State Level Environment Impact Assessment Authority, Rajasthan**

Main Building, Room No. 5221, Secretariat, Jaipur.

E-mail : seiaaseiaa2018@gmail.com Phone no. 0141-2227838

No. F1 (4)/SEIAA/SEAC-Raj/Sectt/Project /Cat. 5(f) (17991)/2019-20

Dated: **10 FEB 2021**

M/s Harman Bawa Pvt. Ltd  
Add-C/o 65, West Avenue Road,  
Punjabi Bagh, New Delhi

Sub:-E.C for proposed setting up of unit to produce 5,000 MTPA Wire Enamel A (Type I/II/III) (Saturated Polyester Resin), 4000 MTPA Wire Enamel B (Polyester-Imide Resin), 500 MTPA Impregnating Resin (Alkyd Resin), 500 MTPA Insulating Varnish (Unsaturated Polyester Resin), with 572 MTPA methanol and 200 TPA MEG as by- products, Plot No. F- 151-155, Industrial Area, Phase II, Neemarana, District- Alwar, Rajasthan. (Proposal No.- 51500)

This has reference to your application dated 06.03.2020 seeking environmental clearances for the above project under EIA Notification 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification 2006 on the basis of the mandatory documents enclosed with the application viz. the questionnaire, EIA, EMP and additional clarifications furnished in response to the observation of the State Level Expert Appraisal Committee Rajasthan, in its meeting held on 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> December, 2020.

**2 Brief details of the Project:**

1.	Category / Item no. (in Schedule):	5(f) column 4 {Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)}			
2.	Location of Project	Plot no. F-151-155, Industrial Area, Phase II, Neemrana District-Alwar, Rajasthan.			
3.	Project Details Land use Break up	Are as under:			
		S. No.	Particulars	Details	
		1.	Project	Harman Bawa Private Limited- proposed Wire Enamel A, (type I, II, III), Wire Enamel B, Insulating Varnish and Impregnating Resin manufacturing unit	
		2.	Address	Plot no. F-151-155, Industrial Area, Phase II, Neemrana, District-Alwar, Rajasthan	
		3.	Plot area	10,000 sq. m.	
		4.	Products	As under:	
		S. No.	Product name	Base	Capacity
a.	Wire Enamel A (Type I/II/III)	based on Saturated Polyester Resin	5000 MTPA		



b.	Wire Enamel B	based on Polyester-Imide Resin	4000 MTPA
c.	Impregnating Resin	based on Alkyd Resin	500 MTPA
d.	Insulating Varnish	based on Unsaturated Polyester Resin	500 MTPA

5.	By-products	As under:
	Methanol (By-product)	572 MTPA
	MEG (By-product)	200 TPA
6.	Project Cost	823 Lakh
7.	Manpower	54
8.	Power requirement	245 kW; supplied by JVVNL, Alwar
9.	Power backup (DG sets)	250 kVA: 1 No.
	Fuel: HSD	48.4 lt/hr
10.	Thermopacks & fuel	2 nos.: 4 lac kcal/hr each
		Fuel: 44lt/hr each
		HSD
11.	Total Water demand	14 KLD
i.	Fresh water	11.5 KLD
ii.	Treated water	2.5 KLD
12.	ETP Capacity	3 KLD
	Technology	Anaerobic Treatment (UASB) followed by Aerobic Treatment (MBBR)
14.	Cost of EMP (Capital)	Capital cost: Rs. 94.89 Lakh Recurring cost: Rs. 11.30 Lakh

**Land use break up:**

Particulars	Existing (sq.m)	Proposed (sq.m)	Total (sq.m.)
Plant area	2500 (25%)	400 (4%)	2900 (29%)
Paved area	900 (9%)	--	900 (9%)
Green area	3300 (33%)	200 (2%)	3500 (35%)
Open Area	3300 (33%)	-600 (-6%)	2700 (27%)
Total			10,000

4.	Solid waste /haz. waste quantities and management	As under
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**Solid Waste (Hazardous)**

Particulars	Category	Proposed	Management
<b>Hazardous Waste</b>			
Used or spent oil	5.1	10 L/annum	Sold to authorized vendor
Filter paper	36.2	12 T/annum	Send to nearby TSDF, Udaipur.
Empty barrels/containers/liners contaminated with hazardous chemicals	33.1	15040 nos./annum	Sold to authorized vendor

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/wastes			
ETP Sludge	35.3	0.7 KL/day	Send to nearby TSDF, Udaipur.

Table No. 4.23: Municipal solid waste

Particulars	Population	Basis	Quantity of waste generated (in kg/day)
Population	54	@0.3 kg/day	16
Landscaping	0.86 acre	@0.2kg/acre/day	0.172
Total			16.172 say 16 kg/day

5.	Project Cost:	Rs. 823 Lakh																														
6.	Water Requirement per day & Source	<div>Details are as follows:- Total water demand: 14 KLD Fresh water demand: 11.5 KLD Recycled water demand: 2.5 KLD Source: RIICO water supply</div> <table><tr><th>S. No.</th><th>Particulars</th><th>Fresh</th><th>Recycled</th><th>Total</th></tr><tr><td>1.</td><td>Domestic</td><td>2.5 KLD</td><td>0</td><td>2.5 KL</td></tr><tr><td>2.</td><td>Industrial</td><td>0 KLD</td><td>0 KLD</td><td>0 KLD</td></tr><tr><td>3.</td><td>Landscaping</td><td>0.5 KLD</td><td>1 KLD</td><td>1.5 KLD</td></tr><tr><td>4.</td><td>Cooling tower (one time demand: 10 KL Daily make up water requirement: 8.5 KL)</td><td>8.5 KLD</td><td>1.5 KLD</td><td>10 KLD</td></tr><tr><td></td><td>Total</td><td>11.5 KLD</td><td>2.5 KLD</td><td>14 KLD</td></tr></table>	S. No.	Particulars	Fresh	Recycled	Total	1.	Domestic	2.5 KLD	0	2.5 KL	2.	Industrial	0 KLD	0 KLD	0 KLD	3.	Landscaping	0.5 KLD	1 KLD	1.5 KLD	4.	Cooling tower (one time demand: 10 KL Daily make up water requirement: 8.5 KL)	8.5 KLD	1.5 KLD	10 KLD		Total	11.5 KLD	2.5 KLD	14 KLD
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7.	Fuel & Energy:-	<div>Power Demand<table><tr><th>Particular</th><th>Demand</th></tr><tr><td>Power</td><td>245 kW</td></tr></table></div> <div>D.G. sets<table><tr><th>D.G .Set</th><th>Details</th></tr><tr><td>Number</td><td>01</td></tr><tr><td>Capacity</td><td>250 kVA</td></tr><tr><td>Fuel</td><td>HSD</td></tr><tr><td>Fuel Consumption</td><td>48.4 lt/hr</td></tr></table></div>	Particular	Demand	Power	245 kW	D.G .Set	Details	Number	01	Capacity	250 kVA	Fuel	HSD	Fuel Consumption	48.4 lt/hr																
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8.	Environment Management Plan with budgetary provision.	Details are as below:-			
		S.No.	Particular	Capital cost (in Rs.)	Annual Recurring Cost (In Rs.)
		1.	Air Pollution	20,00,000	1,00,000
		2.	Water Pollution	5,00,000	200,000
		3.	Green Belt Conservation of local flora & fauna	5,39,000	80,000
		4.	Environment Monitoring & Pollution	-	2,50,000
		5.	Solid Waste management	7,00,000	2,00,000
		6.	Rain Water Harvesting	6,00,000	50,000
		7.	Occupational Health & Safety	30,00,000	2,00,000
		8.	Energy conservation	5,00,000	50,000
		9.	Environment Management Plan (EMP)	16,50,000	
			Total	94,89,000	11,30,000
9.	CSR Activities along with budgetary breakup	The total amount of CER (Corporate Environment Responsibility) is proposed to be Rs. 16.5 Lacs @ 2.0 % of total project cost.			
		EMP Social Activities			Amount Rs. (In Lacs)
		Procurement & Installation of ECG Machine Procurement & Installation of Portable Xray Machine Procurement & Installation of OBGY Equipments Procurement & Installation of Medical Lab Equipments for Testing of Urine, Hematology, Stool Procurement & Installation of autoclave machine Construction of Water Tank Procurement & Installation Eye Testing Machine Procurement of Wheelchairs Maintenance of Lawn area in the CHC			16.50
10.	STP/ETP	Trade effluent: Trade effluent to the tune of 2.1 KLD will be generated. The same will be treated in ETP of capacity 3 KLD; 1.5 KLD treated water will be used for cooling tower makeup. No waste water will be disposed off on ground outside the plant premises. The unit will maintain 'ZLD condition'. Domestic sewage: Approximately, 2 KLD of domestic sewage will be generated from the unit, which will be treated in a modular STP of capacity 2.5 KLD. Treated water to the tune of 1 KLD from the STP will be used for greenbelt.			
11.	Green Belt/Plantation	3500 sq.m. (35%) of the area will be under green belt area			
12.	Budgetary Breakup for Labour	Details are as follows:-			
		S.No	Facilities to be provided for Labourers	Capital Cost (in lacs)	Recurring cost per Annum (in lacs)
		1.	OHC	30	2
		2.	Worker rest room	10	1.5 lac
		3.	Canteen	12	2.5 lac



		4.	RO Water for drinking water (water cooler),	1	10 lac
		5.	Safety Shoes & Dress	15 lac	-
		6.	During the construction Phase	Local labour will be employed, no housing facility will be provided.	

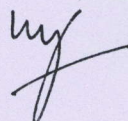
3. The SEAC Rajasthan after due considerations of the relevant documents submitted by the project proponent and additional clarifications/documents furnished to it have recommended for Environmental Clearance with certain stipulations. The SEIAA Rajasthan after considering the proposal and recommendations of the SEAC, Rajasthan in its 4.49<sup>th</sup> Meeting held on 22.01.2021 hereby accord Environmental Clearance to the project as per the provisions of Environmental Impact Assessment Notification 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

#### **I. Statutory compliance:**

- The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

#### **II. Air quality monitoring and preservation**

- The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
- To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable).





The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.

vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

#### III. Water quality monitoring and preservation

i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)

ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).

iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.

iv. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.

v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.

vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

#### IV. Noise monitoring and prevention

i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

#### V. Energy Conservation measures

i. The energy sources for lighting purposes shall preferably be LED based.

#### VI. Waste management

i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

iii. The company shall undertake waste minimization measures as below:-

a. Metering and control of quantities of active ingredients to minimize waste.

b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.

c. Use of automated filling to minimize spillage.

d. Use of Close Feed system into batch reactors.

e. Venting equipment through vapour recovery system.





f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

#### VII. Green Belt

The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

#### VIII. Safety, Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

#### IX. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

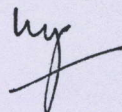
vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vii. The project proponent shall inform the RSPCB / Regional Office of the MoEF & CC, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.


ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA / Ministry of Environment, Forests and Climate Change (MoEF&CC).



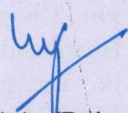


- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The SEIAA / MoEF & CC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The SEIAA / Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of the Ministry/ RSPCB/ SEIAA shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

  
(P.K. Upadhyay)  
Member Secretary,  
SEIAA, Rajasthan.

No. F1 (4)/SEIAA/SEAC Raj/Sectt/Project /Cat. 5(f) (17991)/ 2019-20 Dated:  
Copy to following for information and necessary action:

1. Secretary, Ministry of Environment, Forest & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi-110003.
2. Principal Secretary, Environment Department, Rajasthan, Jaipur.
3. Sh. R.K. Meena, IAS (Retd.), B-75, Shankar Vihar, 50 Feet Gaitore Road, Sawai Gaitore, Jaipur
4. Dr. Anil Kumar Goel IFS (Retd.), Forest Colony, Sector 4, Jawahar Nagar, Jaipur.
5. Member Secretary, Rajasthan State Pollution Control Board, Jaipur for information & necessary action and to display this sanction on the website of the Rajasthan Pollution Control Board, Jaipur.
6. Member Secretary, SEAC Rajasthan.
7. The CCF, Regional Office, Ministry of Environment & Forests, RO(CZ), Kendriya Bhawan, 5<sup>th</sup> Floor, Sector 'H', Aliganj, Lucknow-226 020.
8. Environment Management Plan- Division, Monitoring Cell, Environment, Forest & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi-110003.
- ✓ 9. Sh. Jagbir Singh Manral, ACP, Department of Environment, Government of Rajasthan, Jaipur with the direction to upload the copy of this Environment Clearance on the website.

  
M.S. SEIAA, (Rajasthan)