



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The AGM
LONA INDUSTRIES LIMITED
Ladiwali, Post-Gulsunde, Tal.-Panvel, Dist.-Raigad,
Maharashtra., Raigad, Maharashtra-410207

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/MH/IND3/232150/2018 dated 02 Oct 2021. The particulars of the environmental clearance granted to the project are as below.

- | | |
|---|---|
| 1. EC Identification No. | EC21A021MH144798 |
| 2. File No. | No. IA-J-11011/84/2018-IA-II(I) |
| 3. Project Type | Expansion |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk |
| 6. Name of Project | Lona Industries Limited, S. Nos. 1, 2, 4, 5, 6, 7 & 10, at Ladiwali, Post: Gulsunde, Tal.: Panvel, Dist.: Raigad, State: Maharashtra. |
| 7. Name of Company/Organization | LONA INDUSTRIES LIMITED |
| 8. Location of Project | Maharashtra |
| 9. TOR Date | 08 Apr 2018 |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 03/12/2021

(e-signed)
Dr. R.B. Lal
Scientist E
IA - (Industrial Projects - 3 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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PARIVESH

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F. No. IA-J-11011/84/2018-IA-II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 110003

Dated: 3rd December, 2021

To,

M/s Lona Industries Limited,
Ladivali, Post Gulsunde,
Taluka Panvel, District Raigad
Maharashtra

[Email: gsmense@lona.com](mailto:gsmense@lona.com)

Project: Expansion of organic pigments manufacturing unit from capacity 4560 TPA to 7640 TPA, located at Sl. Nos. 1,2,4,5,6,7 & 10, at Ladivali, Post Gulsunde, Taluka Panvel, District Raigad Maharashtra by M/s Lona Industries Limited - Environmental Clearance regarding.

Sir,

This has reference to your proposal No. IA/MH/IND3/232150/2018 dated 2nd October, 2021 and submitting the EIA & EMP report and additional information vide letter dated 03.11.2021 on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Expansion of organic pigments manufacturing unit from capacity 4560 TPA to 7640 TPA, located at Sl. Nos. 1,2,4,5,6,7 & 10, at Ladivali, Post Gulsunde, Taluka Panvel, District Raigad Maharashtra by M/s Lona Industries Limited.

3. The details of products and capacity are as under:

S. No.	Name of the Product	Products Quantity (TPA)			Uses
		Existing	Expansion	Total	
	Pigment				
1.	Copper Pthalocyanine crude (CPC)	1680	1680	3360	<ul style="list-style-type: none">• Used in various areas of textile dyeing (Direct dyes for cotton), for spin dyeing• In the paper industry• In printing ink and packaging industry,• In Paints and Plastic.
2.	Copper Pthalocyanine Green	1440	Nil	1440	
3.	Copper Pthalocyanine Alfa Blue	840	Nil	840	
4.	Pigment Emulsion	Nil	1000	1000	
5.	Other Pigments				
	a. Copper Pthalocyanine Beta Blue	162	400	562	
	b. Quinacridone Pink & Red	270	Nil	270	

	c.	Copper Pthalocyanine ZCN	148	Nil	148
	d.	Monosulpho Copper pthalocyanine	20	Nil	20
		Total (TPA)	4560	3080	7640

Table: List of Byproducts

S. No.	By Products	Quantity (MT/A)		
		Existing	Expansion	Total
1.	AlCl ₃ (PAC) Solution (7-10% as Al ₂ O ₃)	36000	---	36000
2.	Hydrochloric acid (30%)	2160	---	2160
3.	Hypochlorite	2160	---	2160
4.	Dilute Sulphuric Acid & MnSO ₄ or	14400	---	14400
	Solid Manganese Carbonate	2520	---	2520
5.	Copper Sulphate / Carbonate as Copper	90	18	108
6.	Cobalt Sulphate / Carbonate as Cobalt	9	--	9
7.	Ammonium Chloride	--	2520	2520
8.	Dicalcium phosphate	--	2160	2160
9.	Gypsum	--	2520	2520

4. The proposed project total plot area is 86210.35 sqm. Total built-up area 29443.16 sqm. Industry has already developed Green Belt in an area of 25863.10 sqm (30% out of total plot area). Moreover, additional Green Belt area of 2586.3 sqm (3 % out of total plot area) will be developed. After expansion of project, the total Green Belt area would be 28449.4 sqm. which accounts for 33 % of total plot area. The estimated expansion project cost is Rs.6.48 Crores. Total capital cost earmarked towards environmental pollution control measures under proposed project is Rs.1.0 Crores and the Recurring cost (operation and maintenance) will be about Rs.0.31 Crores per annum. Total Employment under expansion project would be 30 persons (as direct& indirect). Industry proposes to allocate Rs.45 Lakh towards CER.

5. PP reported that the Karnala Bird Sanctuary is located about 1.65 Km from project site. ESZ for the Karnala Bird Sanctuary is notified vide notification No. S.O. 230 (E) dated 22.01.2016. PP confirmed that the Unit is located outside of the ESZ i.e. 1.56 Km. The River Patalganga is at a distance of 0.2 Km on East from the project site.

6. The Ambient air quality monitoring was carried out at 8 locations during March -May 2019 and submitted baseline data indicates that ranges of concentrations of PM₁₀ (45.10–71.30 µg/m³), PM_{2.5} (12.20 – 24.80 µg/m³), SO₂ (10.20 – 28.70 µg/m³) and NO_x (17.13 – 28.80 µg/m³) respectively. The concentrations are within the National Ambient Air Quality Standards (NAAQS). No new boiler will be installed under expansion hence AAQ modeling study was not carried out.



7. It is noted that total water requirement after expansion project will be 2309.63 CMD. Out of which, 1928.43 CMD fresh water will be taken from Patalganga River, 253.2CMD will be recycle water in process, 98 CMD will be MEE Condensate and 30 CMD will be STP treated effluent to be recycled thereby reducing fresh water demand. Effluent of 1468 M³/Day will be generated and same will be segregated as strong and weak streams and treated through 2 separate ETP schemes. The treated effluent (MEE Condensate) of 98 CMD from Strong Stream(Stream-I) will be recycled and Treated effluent from weak stream (Stream-II) after achieving prescribed standards will be discharged through underground pipeline in Saline zone of Patalganga river near Kharpada Creek. The Domestic effluent of 40 CMD is treated in existing STP and treated effluent of 30 CMD will be reused for Greenbelt Plantation.

8. Power requirement after expansion of project will be 2090 kVA including existing 1900 kVA and will be taken from MSEDCL. Existing unit has 4 D.G. sets of capacities namely 500 kVA, 250 kVA, 180 kVA and 62.5 kVA installed as standby during power failure. Stack of heights of 4.5 m, 3.2 m, 2.7 m and 1.6 m (ARL) respectively are provided as per CPCB norms. Existing unit has 3 Boilers of capacities 6 TPH, 10 TPH and 14 TPH.MDC to 10 TPH boiler and MDC followed by Bag Filter to 14 TPH Boiler with a stack of height of 30 m and 33 m are installed for controlling the particulate emissions within the statutory limit of 115 mg/Nm³ for the existing boilers. Five Thermic Fluid Heaters (TFHs) each of capacity 4 Lac Kcal/Hr and three VTBs with capacities of 10 Lac Kcal, 15 Lac Kcal and 20 Lac Kcal are provided on site. Further, four Spin Flush Dryers (SFD) of capacities 2 Lac Kcal, 4 Lac Kcal (2 Nos.) and 6 Lac Kcal are also installed on site.

9. Details of solid waste/hazardous waste disposal and process emissions generation and its management are as per the plan provided in the EIA & EMP report and the same was deliberated in the EAC meeting. The Detailed Minutes of Meeting may be referred and the same is available on Parivesh Portal (www.parivesh.nic.in).

10. As per the provision of "EIA Notification No. S. O. 1533 (E)" dated 14.09.2006 as amendments thereto the expansion project comes under Category – A of item 5(f) 'Synthetic organic chemicals industry and requires appraisal at Central Level by Expert Appraisal Committee (EAC). However, project is established on Non MIDC Land and further General Condition is also applicable– the Karnala Bird Sanctuary lies within 5 Km from Project Site.

11. The Standard ToRs has been issued by Ministry vide letter No. No. J-11011/84/2018-IA-II (I) dated 8th April, 2018 for Expansion of Organic Pigments Manufacturing Unit. Public hearing for expansion project has been conducted by the State Pollution Control Board on 20.02.2020 which was presided over by Additional District Magistrate. The main issues raised during the public hearing are related to the employment, health and safety of worker, hazardous waste generation and its impact on environment.

12. The Unit was established in the year 1968 and well before the "EIA Notification No. S.O. 60 (E) dated 27.01.1994 and "EIA Notification No. S.O. 1533 (E) dated 14.09.2006. Therefore, the existing unit of LIL did not attract the condition for procurement of Environmental Clearance (EC) and hence only MPCB consent was procured and operating the Unit with valid CTO as per the Air and Water Act. The certified compliance status of CTO was issued by the SPCB and the same was deliberated by the EAC and found in order.

13. The proposal was considered by the **Expert Appraisal Committee (Industry-3 Sector) in its meeting held on 25-26 October, 2021 and 11-12 November, 2021** in the Ministry through video conferencing, wherein the project proponent and their accredited consultant M/s.Equinox Environments (I) Pvt. Ltd. presented the EIA & EMP report. The



minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <http://parivesh.nic.in/>.

The EAC, constituted under the provision of the EIA Notification, 2006 comprising Experts Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA & EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

The EAC noted that the Karnala Bird Sanctuary is located about 1.65 Km from project site. ESZ for the Karnala Bird Sanctuary is notified vide notification No. S.O. 230 (E) dated 22.01.2016. PP confirmed that the Unit is located outside of the ESZ i.e. 1.56 Km. The Committee deliberated the issue on KML/Map and found in order. The EAC is of the view that since ESZ has been notified and the instant Unit is outside of the ESZ, the proposal may be considered.

The EAC noted that the Unit was established in the year 1968 and well before the "EIA Notification No. S.O. 60 (E) dated 27.01.1994 and "EIA Notification No. S.O. 1533 (E) dated 14.09.2006. Therefore, the existing unit did not attract the requirement of Environmental Clearance and PP is operating the Unit with CTO as per the Air and Water Act. The certified compliance status of CTO was issued by the SPCB and the same was deliberated by the EAC and found in order.

The Committee noted that the EIA/EMP reports are in compliance of the ToR issued for the project, considering the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the action plan and budget allocation for green belt development and suggested to complete plantation in one year. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee also suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices. The Committee deliberated the solvent recovery and its mitigation plan and found satisfactory. The committee also deliberated water balance and found satisfactory. The Committee also suggested to find possibility to increase the use the recycled water. The committee also deliberated the Action Plan on issues raised in the public hearing and found the reply of PP to be satisfactory.

After detailed deliberations, the Committee noted that non-availability of briquette may cause the problem in day to day operation of the unit. The Committee, after detailed deliberation accepted the request of PP and amended the condition, as, "The Committee suggested use of coal having low sulphur and ash content. Further, 15% Biomass Briquettes replacing coal to be used as fuel".

14. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary



permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

15. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3), Ministry of Environment, Forest and Climate change hereby accords **Environmental clearance to the project for expansion of organic pigments manufacturing unit from capacity 4560 TPA to 7640 TPA, located at Sl. Nos. 1,2,4,5,6,7 & 10, at Ladivali, Post Gulsunde, Taluka Panvel, District Raigad Maharashtra by M/s Lona Industries Limited** under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

A. Specific Conditions:

- (i). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97% with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- (iii). The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iv). **As committed PP shall use coal having low Sulphur and ash content. Further, 15% Biomass Briquettes replacing coal to be used as fuel.**
- (v). No banned Chemicals/Products shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government issued in this regard.
- (vi). An Occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (vii). Treated effluent shall be reused in the process/utilities. Treated Industrial effluent shall not be used for gardening/greenbelt development/horticulture purpose.
- (viii). The unit shall make the arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Mock drill shall be conducted regularly.
- (ix). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
- (x). Total fresh water requirement, sourced from Patalganga River, shall not exceed 1928.43 CMD. Prior permission in this regard shall be obtained from the concerned regulatory authority.



- (xi). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (if applicable).
- (xiii). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space provided with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valves to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xiv). Process organic residue and spent carbon, if any, shall be sent to Cement or other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. There shall be commitment from the brick manufacturer to take the fly ash from the plant. The Unit is to be started after getting the commitment from the brick manufacturer / cement plant.
- (xv). 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.
- (xvi). The green belt of at least 5-10 m width shall be developed in at least 33% of the total project area, mainly along the plant periphery/ additional land. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing map. Trees have to be planted with spacing of 2m x 2m and the number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration.
- (xvii). The activities and the action plan proposed by the project proponent to address the socio-economic and public hearing issues in the study area, shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit. All the commitments made during public hearing shall be satisfactorily implemented.
- (xviii). A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the



Environmental Management and Monitoring functions.

B. General Conditions: The grant of environmental clearance is further subject to compliance of other general conditions as under:-

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.
- (iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iv) 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. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (v) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (vi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (vii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (viii) The project proponent shall also upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (ix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as



prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.

- (x) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (xi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

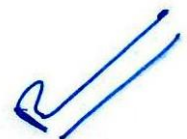
16. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

17. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

18. Any appeal against this environmental clearance 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.

19. 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.

20. This issues with approval of the competent authority.

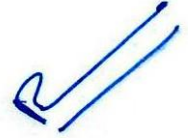


(Dr. R. B. Lal)
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Copy to: -

1. The Deputy DGF (C), MoEF&CC, Integrated Regional Office(WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Line, Nagpur - 1
2. The Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 32
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th Floor, Opp. Cine Planet, Sion Circle, Mumbai – 22
5. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
6. The District Collector, District Raigad, Maharashtra
7. Guard File/Monitoring File/Website/Record File/Parivesh Portal



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