

Compliance Report of Environmental Clearance as on 01.06.2023

MoEF & CC (IA Division) approved F. No. J-11011/318/2016-IA II (I), dated- 15th January 2018 for 'Change in Product Mix' of Pesticides Manufacturing Unit by M/S **Hikal Limited**, at Plot No. A – 18, MIDC – Mahad, Raigad, Maharashtra.

Sr. No.	Conditions	Compliance Status/ Remark
1	This has reference to your online proposal no. IA/ MH/ IND2/70505/2016 Dated 27th October 2017 along with project documents namely, EIA/ EMP report on the above subject matter.	The MoEF & CC examined the proposal for grant of environmental clearance to the Project "Change in Product Mix of Pesticides Manufacturing Unit" Approve F. No. J-11011/318/2016-IA II (I), dated- 15th January 2018
2	The MoEF & CC has examined the proposal for grant of environmental clearance to the project 'Change in Product Mix of Pesticides manufacturing Unit' with the production capacity reduced from the present of 993 TPM to 881.67 TPM by M/S Hikal Limited in a total plot area of 27007 sq.Mtr. at Plot No. A - 18, MIDC Mahad, District Raigad (Maharashtra). In addition, there shall be pesticides production of 84 TPM through formulations, and the by-products increased from the present of 828.78 TPM to 1350.78 TPM.	As per the condition industry had applied for CTE and then CTO to MPCB. Attached EC copy as Annexure 1 Attached CTO copy as Annexure 2
3	The details of the products presently manufactured and after the proposed expansion are as under:- * Total No. of Products = 16 nos. * Existing Production capacity = 993.00 TPM * Proposed Additional/Deletion of Production = (-) 27.33 TPM * Total Production Capacity after Product Mix = 965.67 TPM * Total No. of By Products = 09 nos. * Existing By Production capacity = 828.78 TPM * Proposed Additional/Deletion of By Products = 522 TPM * Total By Product Capacity after Product Mix = 1350.78 TPM	As per the condition industry had applied for CTE and then CTO to MPCB. Attached EC copy as Annexure 1 Attached CTO copy as Annexure 2

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4	<p>Existing land area is 27007 sq. Mtr. and no additional land will be required for the proposed project. Industry has already developed green belt in an area of 6817 sq.Mtr., and additional 2095 sq.Mtr. of green belt will be developed at Nana Nani park to meet the norms in this regard. The total project cost is Rs. 107.92 crore, including existing investment of Rs. 27.92 crores. Total capital cost earmarked for pollution control measures is Rs. 8.7 Cr and the recurring cost (operation and maintenance) will be about Rs. 119.88 lakhs/annum.</p>	<p>Hikal has maintained green area 6817 Sq. Mtr. Additional 2095 Sq. Mtr. as per EC condition is developed outside the factory premises. Factory green belt area photographs are attached as an Annexure-12.</p> <p>The capital investment of the industry – Rs. 139.85 Crs Total capital cost earmarked for pollution control measures is Rs. 8.7 Cr and the recurring cost (operation and maintenance) will be about Rs. 4.0 Crs/ Annum. Attached as Annexure-11</p>
5	<p>There are no National Park, Wild Life Sanctuaries, Biosphere reserves, Tiger/ Elephant Reserves, Wild Life Corridors etc. within 10 km from the project site. Savitri river is flowing at a distance of 1 km in the North.</p>	<p>Noted</p>
6.1	<p>Total water requirement (one time) is estimated to be 581 cum/day (existing 305 cum/day + proposed 276 cum/day), proposed to be met from MIDC water supply. Out of it, 211 cum/day is to be recovered from the RO and the sewage treatment plant for recycling in the industrial operations and thus limiting the regular fresh water requirement to 370 cum/day. Total effluent generation would be increased to 240 cum/day from the present of 130 cum/day, to be taken to the in house ETP for primary treatment and then to the CETP for further treatment.</p>	<ol style="list-style-type: none"> 1. Sewage treatment plant of 50 KLD capacity is installed and is in operation. 2. RO Plant of 100 KLD capacity is installed and is in operation. 3. ETP is in operation as primary, secondary and tertiary treatment and then sent to CETP for further treatment.
6.2	<p>Power requirement will be 3.5 MW and the same will be met from the Maharashtra State Power Distribution Corporation Limited (MSPDCL). Existing unit has one DG set of 125 KVA capacity and additionally 2 DG sets of 500 KVA will be required.</p>	<ol style="list-style-type: none"> 1. Our present connected load is 5 MW & contract demand is 2.9 MVA. 2. We have one DG set of 125 KVA attached.

6.3	Existing unit has 2 nos. of boilers having capacities 4 TPH (Briquette fired) & 5 TPH (Furnace oil). One furnace oil fired Thermopack of 2 lakh kcal/h capacity is also existing and sharing the common stack of 40 m with the boilers. No additional boiler is proposed to be installed. Scrubber with 10 m stack height will be provided to control process emission.	Boiler stack is as per given condition Process stack is as per given condition.
7	Details of Solid Waste/ hazardous waste generation and its management are as under :-	Attached consent to operate copy as Annexure-4
7 (i)	Sludge and filters contaminated with oil of 1.80 TPA will be sold to authorized reprocessor/ CHWTSDF for incineration.	We are sending the sludge and filters contaminated with oil to the CHWTSDF (MWML, Talaja) for incineration.
7 (ii)	Chemical sludge from waste water treatment of 67.8 TPA will be sent to CHWTSDF for landfill.	We are sending the Chemical sludge from waste water treatment to CHWTSDF (MWML, Talaja) for disposal.
7 (iii)	Filters and filter material which have organic liquid of 6 TPA will be sent to CHWTSDF for incineration.	We are sending the filters and filter material which having organic liquid to CHWTSDF (MWML, Talaja) for disposal
7 (iv)	Spent catalyst of 36 TPA will be sent to authorize reprocessor/CHWTSDF for incineration.	We are sending the spent catalyst to CHWTSDF (MWML, Talaja) for disposal.
7 (v)	Used/ spent oil of 0.60 TPA will be disposed to authorized reprocessor/ CHWTSDF for incineration	We are sending the used/ spent oil to CHWTSDF (MWML, Talaja) for disposal.
7 (vi)	Spent solvents of 30.00 TPA will be sent to authorized reprocessor/ CHWTSDF for incineration.	We are sending the spent solvents to CHWTSDF (MWML, Talaja) for disposal.
7 (vii)	Distillation residue of 99.00 TPA will be sent to CHWTSDF/ co-processing to cement industries.	We are sending the distillation residue to CHWTSDF (MWML, Talaja) for disposal.
7 (viii)	Process waste sludge/ residues of 300.00 TPA will be sent to CHWTSDF/ co-processing to cement industries.	We are sending the process waste sludge/ residues to CHWTSDF (MWML, Talaja) for disposal.
7 (ix)	Discarded containers/ barrels/ liners of 6000.00 TPA will be decontaminated/ puncture/ cut/ disposal through MPCB approved unit.	We are sending the discarded containers/ barrels/ liners to CHWTSDF (MWML, Talaja) after decontamination.
7 (x)	Discarded containers (plastic/ PP/ Rubber/ Glass) of 30.00 TPA will be sent to CHWTSDF for disposal as per waste disposal criteria.	We are sending the discarded containers (Plastic/ PP/ Rubber/ Glass) to CHWTSDF (MWML, Talaja)
7 (xi)	Evaporator salts of 4465 TPA will be sent to CHWTSDF for landfill.	We are sending the evaporator salts to CHWTSDF (MWML, Talaja) for disposal.
8	The project/ activity is covered under category A of item 5 (b) 'pesticides' of the schedule to the	Noted and complied

	Environmental Impact Assessment Notification, 2006 and requires appraisal at Central Level by the Sectoral Expert Appraisal Committee (EAC) in the Ministry.	
9	The ToR for the project was granted on 31st January 2017, and amended on 22nd June, 2017 providing exemption from public hearing as per the provisions contained in para 7 III stage (3) (i) (b) of the EIA Notification, 2006	Noted and complied
10	The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 31st meeting held during 23-24 November, 2017. Project proponent and their accredited consultant M/S Goldfinch Engineering Systems Private Limited have presented EIA/ EMP report as per the ToR. EAC found the EIA/EMP report to be satisfactory and in consonance with the presented ToR. The committee has recommended the proposal for grant of environmental clearance.	Noted and complied Attached EC copy as Annexure -1
11	Based on the proposal submitted by the project proponent and recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to project for " Change in Product Mix of Pesticides Manufacturing Unit" with the production capacity reduced from the present 993 TPM to 881.67 TPM by M/S Hikal Limited in a total area of 27007 sqm at plot no. A - 18, MIDC Mahad, District Raigad (Maharashtra), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to the compliance of the terms of the conditions as under :	Noted and complied as given below
11. a	Total production of pesticides shall include manufacturing of at least 10% of Bio Pesticides	As per the condition industry has comply in CTO Attached CTO copy as Annexure-2
11. b	Consent to Establish/ Operate for the project shall be obtained from the state pollution control board as required under Air (Prevention and control of pollution) Act, 1981 and Water (prevention and control of pollution) Act, 1974	Complied. Attached consent to establish copy as Annexure-3 and consent to operate copy as Annexure-2
11. c	Total effluent after treatment shall not exceed 64 cum/day to be discharged to the CETP drain. The effluent discharge shall conform to be 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.	Complying as per condition. Total discharge of treated effluent to CETP is less than 64 cum/day and attached consent to operate copy as Annexure-2
11. d	Necessary authorization required under the Hazardous and Other Wastes (Management and trans-boundary movement) Rules, 2016, Solid	Complied. Industry has obtained suitable CTE and then from MPCB under the

	waste management rules, 2016 shall be obtained and the provisions contained in the rules shall be strictly adhered to.	hazardous and other wastes (management and trans-boundary movement) Rules, 2016 Attached consent to Establish copy as Annexure-3 and consent to operate copy as Annexure-2
11. e	National emission standard for organic chemicals manufacturing industry issued by the ministry vide GSR 608(E) dated 21st July 2010 and amended from time to time shall be followed.	Noted and following
11. f	To control source and fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and / or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/ SPCB guidelines.	Complied. 1. Installed multicyclone dust collector with adequate stack height for the boiler. 2. Well-designed scrubber with adequate stack height for other process to control gaseous emissions.
11. g	Solvent Management, if any, shall be carried out as follows :	Noted
	i) Reactor shall be connected to chilled brine condenser system.	Complied. All reactor vents are connected to chilled brine/ cooling condensers as per requirement.
	ii) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.	Complied. All reactor and solvent handling pumps are having mechanical seals to leakage prevention.
	iii) The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.	Complied. All condensers are well designed to achieve optimum recovery.
	iv) Solvents shall be stored in a separate space specified with all safety measures.	Complied. All solvents are stored in a defined area as per considering compatibility of chemicals.
	v) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done	Complied. Proper electrical earthing provided to all electrical equipment's wherever solvent handling is done.
	vi) Entire plant shall be flameproof. The solvent storage tanks shall be provided with breather valve to prevent losses.	Complied. Solvent storage tanks installed with flame proof fittings and equipment's wherever applicable as per hazardous area classification. Breather valve installed on all solvent storage tanks.

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	vii) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation	Complied. All solvent storage tank connected with chilled brine vent condensers
11. v	Total freshwater requirement shall not exceed 370 cum/ day proposed to be met from MIDC supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	Following the condition
11. i	Process effluent/ any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Complied. No effluent/ wastewater source connected with storm water drain. There is separate provision for storm water, and it is passed through guard pond.
11. j	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.	Complied. All hazardous chemicals are stored in a good condition, breather valve arrangement made for solvent tanks and all chemicals handled in close loop through pumps.
11. k	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.	Complied. We are having a membership of MWML, Taloja (CHWTSDf site) and we sending our hazardous waste at same location for secure landfilling and incineration.
11. l	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.	Complied. We are strictly following the guidelines of MSIHC Rules, 1989 and MVA, 1989
11. m	The company shall undertake waste minimization measures as below :-	Noted
	i) Metering and control of quantities of active ingredients to minimize waste.	Complied. Production plant having metering for controlling quantities of ingredients to waste minimization.
	ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	Complied. Optimum reuse of byproducts are worked out in R & T lab and then use in the process to the maximum extent.

	iii) Use of automated filling to minimize spillage.	Complied. Auto filling system is in use wherever feasible to avoid spillage.
	iv) Use of close feed system in to batch reactors.	Complied. Close loop feed system for batch reactors is provided wherever feasible.
	v) Venting equipment through vapor recovery system.	Complied. All vents of equipment's are connected with condensers
	vi) Use of high pressure hoses for equipment clearing to reduce waste water generation.	Complied. This practice is in working practice
11. n	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.	Complied as per requirement
11. o	At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues and item wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Complied. (Total till date 109 lacs) We surveyed and collected issues from 10 km periphery of project area and implemented and continued. See attached Annexure-9
11. p	The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.	Complied. Acoustic enclosure provided to DG with adequate stack height
11. q	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Complied. We are having full-fledge advanced firefighting system as per standard norms
11. r	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied. Periodical & annual medical checkup of all workers is done through certifying surgeon and record maintained in Form No. 07, attached as Annexure-5 & Annexure 5.1
11. s	Continuous online (24*7) monitoring system for stack emissions and the effluent, shall be installed for measurement of flow/ discharge and the pollutants concentration, and the emissions and effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.	Complied. We installed continuous online monitoring system for stack emissions and effluent and data transmitted to CPCB & MPCB server. Online monitoring reports attached as Annexure-6

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11. t	Storage of raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Raw materials storage should not exceed 3 days at any point of time.	Complied. All raw material stored in warehouse, storage room and covered closed shed. Raw material storage is at optimum level which is less than 3 days.
11. u	The energy sources for the lighting purposes shall preferably be LED based. A minimum of 10 - 20 % of the total power requirement for the industrial operations shall be met from nonconventional energy resources/ solar supply.	Complied. Implemented installation of LED for lighting purpose
11.1	The Grant of Environmental Clearance is further subject to compliance of other generic conditions as under :-	Noted
i	The project authorities must strictly adhere to the stipulations made by the state pollution control board (SPCB), State Government and/ or any other statutory authority.	Noted and comply
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environmental and Forests. 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 to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and will follow
iii	The locations of ambient air quality monitoring stations shall be decided in consultation with the state pollution control board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Noted and comply.
iv	The National Ambient Air Quality Emission Standards issued by the Ministry vide GSR No. 826 (E) dated 16th November, 2009 shall be complied with.	Noted and comply.

v	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 Environment (protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time)	Noted and Complied. We are implemented measures for controlling noise and also monitored the noise levels from different places across the factory.
vi	The company shall harvest rainwater from the tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	Complied. We are harvesting rainwater to maximum extent and reuse for utility purpose.
vii	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.	Complied. We are having a training calendar and we provided training to all employees as per schedule. We also carried out pre-employment and periodical medical examination of all employees.
viii	The company shall comply with all 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, risk mitigation measures and public hearing shall be implemented.	Complied as per requirement
ix	The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.	Complied. We are implementing CSR activity considering need of local villagers and stake holders. Refer Annexure-9
x	A separate environmental management cell equipped with full-fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.	Complied. We are having a qualified environment cell and also well-equipped laboratory for carry out the environmental management and monitoring functions.
xi	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the ministry of environment and forests 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.	Noted and complied.

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xii	A copy of the clearance letter shall be sent by the project proponent to concerned panchayat, zila parishad / Municipal corporation, urban local body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Noted & complied as per requirement
xiii	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e- mail) to the respective regional office of MoEF, 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.	Complied. We submitted six monthly EC compliance report to concern authorities in June-2022 Attached as Annexure-10 Latest monitoring reports attached as Annexure 7
xiv	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 regional offices of MoEF & CC by e-mail	Complied. We submitting Environment Statement in Form V for each financial year ending 31st March. Copy of same is attached as Annexure 8
xv	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 at http://moef.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.	Complied as per requirement
12	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not found to be satisfactory.	Noted
13	The ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted

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14	The above conditions will be enforced, inter-alia under the provisions of the water (Prevention and control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, The Environment (Protection) Act, 1986, The Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and The Public Liability Insurance Act, 1991, read with subsequent amendments therein.	Noted

For Hikal Limited, Mahad



Authorized Signatory