COMPLIANCE REPORT OF CONDITIONS MENTIONED IN ENVIRONMENTAL CLEARANCE FOR THE PROJECT

(E. C. Granted on dated 8th February 2021 vide F. No. J-11011/123/2016-IA II(I) Government of India, The Ministry of Environment, Forest and Climate Change, (Impact Assessment Division)

Expansion of Manufacturing of Bulk Drugs and Intermediates from 12.85 TPM to 34.8658 TPM

(Period April 2021 to September 2021)

By



M/s. Vadivarhe Speciality Chemicals Ltd; Gut No. 204, Nashik Mumbai Highway, Taluka - Igatpuri, District - Nashik, Pin Code - 422 403 State - Maharashtra Submitted by



M/s. Vadivarhe Speciality Chemicals Ltd; Gut No. 204, Nashik Mumbai Highway, Taluka - Igatpuri, District - Nashik, Pin Code - 422 403 State - Maharashtra

Brief About the Proposed Project

1. Proposed Project : Expansion of Bulk Drugs and

Intermediates

2. Proposed Capacity : 12.85 TPM to 34.8658 TPM

(Expansion Project)

3. Type of Project : As per EIA Notification 2006

Category "A" 5 (f) Section "Synthetic Organic Chemicals Industry (Bulk Drugs and

Intermediates)

4. Location Details : Gut No. 204, Nashik-Mumbai

Highway, At Post – Wadivarhe, Taluka - Igatpuri, District – Nashik, State – Maharashtra Pin - 422 403

5. Land Area : The proposed expansion project will

be in the existing land area of

12,500 sq. mtr.

6. Project Proponent : Vadivarhe Speciality Chemicals Ltd;

7. Name of the Project Proponent : Shri. Pramod Waman Gajare,

Director of the Company

8. Cost of the Proposed Project : **15 Crore (Existing** 21 crore)

9. Environmental Clearance Granted : MoEF & CC New Delhi, EC Letter

dated 8th February 2021 file No. J-11011/2016-IA (I) Government of India,

Ministry of Environment, Forest and

Climate Change,

Impact Assessment Division

Point-wise EC Compliance Status to various stipulations, terms and conditions laid down by the Ministry of Environment Forest & Climate Change (MoFE & CC) New Delhi

Compliance Period April 2021 to September 2021			
(EC Received on 8th February 2021)			
	Compliance Conditions Specific Conditions		
S1.		attons	
No.	Terms and Conditions	Compliance	
i	The Bank guarantee shall be released after successful implantation of the Remediation Plan and Natural and Community Resources Augmentation Plan, and after recommendation by Regional Office of the Ministry, EAC and approval of the Regulatory Authority. In case of failure to complete the remediation plan within stipulated time line, the fresh bank guarantee shall be submitted.	The point is noted, we are abide of complying and implementing the remediation plan, natural and community resource augmentation plan submitted during the EAC Meeting of the proposed expansion project within the time frame for the release of BG submitted to the State Pollution Control Board. (Copy is attached at Attachment 1)	
ii	As proposed, Rs. 216.82 Lakhs towards Remediation plan and Natural and Community Resource Augmentation plan to be spend within a span of three years as per Annexure, whereas bank guarantee shall be for 5 years.	Agreed, as proposed Rs. 216.82 lakhs will spend towards remediation plan, natural and community resource augmentation plan within a span of three years as per plan submitted and release of BG after 5 years. (Copy is attached at Attachment 2)	
iii	Approval / permission of the CGWA / SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.	 It is to be mentioned here that, the industry is drawing surface water from Mukane Dam for the existing project and will also be for proposed expansion project for which permission for drawl of surface water is already taken from Irrigation Department for existing plant. (Copy is attached at Attachment 3) and for proposed project permission is in process for drawl of additional water for expansion project. No ground water will be drawn for the proposed expansion project. 	
iv	Preventive measures to be taken to control ignition sources in bulk storage	All preventive measures are already taken-up to control	

area and fire protection system to be established above ground storage tanks. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.

- ignition sources in bulk storage area for the existing plant and fire protection system is in place. Solvents are stored in a specified place with all safety measures.
- Adequate control measures are provided to detect fire and fight fires.
- The major firefighting arrangement provided includes: 40 numbers of optical smoke detectors along with 8 numbers manual call points and 8 number hooters.
- Firefighting Arrangements: Fire hydrant system consisting of 17 numbers of fire hydrants have been installed and, 69 numbers of fire extinguishers consisting ABC, CO2 and Foam type are installed at various locations of the premises.
- Nitrogen Plant is provided for blanketing while transfer of flammable solvents. Training is provided to concern personnel for the operations.
- Earthing is provided in all the electrical equipment wherever solvent handling is done. For the proposed expansion the same will be extended if required.
- Flame proof electrical fittings are used wherever solvent handling is done for the purpose of expansion. We have also provided earth point identification for all over the plant location. We have also earth monitoring system for solvent storage facility and earth continuity meter at solvent loading and pumping system. Same will also be done for expansion project as and when required.

Proper measures to be taken to prevent internal tank explosion. Chemicals that are water reactive needs to be separated from chemicals that do not react with water.

- The company is taking proper measures and made arrangement to prevent internal tank / drums explosion in the existing project and same will be carried out for the proposed expansion project. The following safety measures have been implemented in the solvent storage area in the existing plant and it will be extended in the same area for proposed expansion also. The facilities and the arrangements and the facilities already made in the industry are as follows:
- 1. Gas detectors are available
- 2. Alarm system are in place
- 3. Fire hydrant system is available
- 4. Fire extinguishers are in place
- 5. Jumpers are in place at flange points
- 6. Earthing and bonding are in place
- Following control measures are implemented in the existing plant and will be continued in the proposed expansion project:
- 1. Fencing and No Smoking for prohibited area, warning signage are displayed in Hindi, English and local language at prominent places (Photographs are attached at Attachment 4).
- 2. Trainings are being conducted regularly to all personnel's involved / engaged in handling solvent activity.
- 3. PPE's are also provided (Photographs are attached at Attachment 5).
- Chemicals that are water reactive required in the proposed expansion project will be separated from other chemicals and stored in a safe and protected containers to avoid any reaction with water.

vi	Proper precautions to be taken to prevent inadvertent mixing of chemicals. Standard operating procedures to be strictly followed during handling of chemicals. Solvents shall be stored in a separate space specified with all safety measures.	Proper precautions are being taken in the existing plant and will be continued in the proposed expansion to prevent inadvertent mixing of chemicals and spillages. SoP's are adopting to prevent any mixing of chemicals and spillages during handling of chemicals and solvents. Separate storages are created for storage of chemicals and solvents with all safety measures and guidelines. (Photographs are attached at Attachment 6)
vii	Risk assessment studies conducting 3 D modelling studies for identification of hazards, consequence analysis due to the accidental release of hazardous chemicals, quantification of risk based on failure probability of equipment, mitigation measures to reduce risk and delineation of disaster management plan shall be undertaken and submitted to the Ministry within 3 months.	Risk assessment studies conducting 3 D modeling studies for identification of hazard consequence analysis due to the accidental release of chemicals and quantification of risk based on failure probabilities of equipments, mitigation measures to reduce risk and delineation of disaster management plan are carried out and report is already submitted to MoEF & CC. (Copy is attached at Attachment 7)
viii	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.	The company is complying and further will comply as per the documents submitted and recommendation in EIA / EMP Report in respect of Environment Management and Risk Mitigation Measures related to the project.
ix	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste / treated water shall be discharged outside the premises. Treated effluent shall be reused in the process / utilities. Treated Industrial effluent shall not be used for gardening / greenbelt development / horticulture.	It is to be mentioned here that zero liquid discharge is being achieved and no waste / treated effluent is discharged out-side the premises. The company is not using treated industrial effluent for green belt development / gardening / horticulture. (The water balance diagram is attached at Attachment 8)
x	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	The activities related to the continuous online (24x7) monitoring system for stack emissions is in process (Quotations regarding are raised for selection of vendors and will be

	transmitted to the CPCB and SPCB server. For 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.	finalized soon). After installation of stack emission monitoring system, flue gas discharge and pollutant concentration and data will be transmitted to Central Pollution Control Board and State Pollution Control Board Server as mentioned in the condition For online continuous monitoring of effluent, the company is in process to install web camera with night vision capability and flow meters in the channel / drain carrying effluent within the premises. Action related to implementation of above are also in process, The activity regarding installation of continues monitoring system will be carried out in consultation with the State Pollution Control Board. Relevant documents related to above are enclosed at Attachment 9
xi	The storage of toxic / hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.	Inventory with respect to quantity and storage of toxic and hazardous raw materials are already in practice for the existing project and same will be followed for the proposed expansion project. (Copy is attached at Attachment 10)
xii	Occupational Health Center 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.	Separate Occupational Health Center already existing in the company, the company is regularly making the health check-ups of the workers and employees (Attachment 11) and accordingly deployment of the duties of the workers / employees is made in the company. The company is providing PPE's to the workers and the employees. Same will be followed for the expansion project.
xiii	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.	The company is regularly and periodically arranging induction training to their workers and employees those who are engaged in chemicals / solvents handling for safety and health aspects along with the visual trainings. Pre-employment and periodic employment health checkups and health

		records are maintained recorded by the
		records are maintained regularly by the
		company. (Photographs are attached at Attachment 12)
xiv	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.	As mentioned in compliance of point no. IV, adequate fire control measures are already taken by the company for protecting the possible fire hazards during the manufacturing process in the material handling. Same will be extended and implemented to the proposed expansion project as and when required during the manufacturing of the proposed products. Firefighting system is already available in the company as mentioned earlier at various locations in the premises.
XV	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 specified 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 valve to prevent losses (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.	All these from (a) to (f) are already in practice in the existing plant and will be continued in the proposed expansion plant. (Attachment 13)
xvi	Total fresh water requirement shall not exceed 37.92 cum/day, proposed to be met from Mukane Dam water supply through tankers. Necessary permission in this regards shall be obtained from the concerned regulatory authority, and renewed from time to time.	Noted, The permission for water requirement for the existing plant is already taken from the irrigation department (Copy of the same is attached at Attachment 14) and the permission for additional water requirement for the proposed expansion is in process and awaited (Application for process is attached at Attachment 15). The total fresh water requirement will not exceed 37.92 cum/day for drawl

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	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	from Mukane Dam. Necessary permission in this regard will be obtained from the concerned regulatory authority and renewed from time to time as mentioned in the condition Storm water collection from the roof top and its storage in constructed tanks is in process. The harvested water will be used for various industrial process required after proper treatment. Proper care will be taken not to mix the process effluent with the storm water as the
xvii	harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent / any waste water shall not be allowed to mix with storm water.	storm water collection system will be channelized through pipeline to the storage tank directly. It is to be mentioned here that storm water collection tanks are already constructed. The rain water harvested is being used for flushing and washing to save raw / treated water.
		Noted and agreed, a. Waste minimization is our top
xviii	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 vapor recovery system (f) Use of high pressure hoses for equipment clearing to reduce waste water generation	most priority. It is to be mentioned here that all the raw materials that are used in the manufacturing process are added through pipelines to avoid any spillages and contamination of the working area /soil. Other means of waste generation are minimum. b. There will be by-products generation from the proposed manufacturing of drugs and intermediates however these by-products will not be reused in the other manufacturing processes as it is not required and will be sold to the authorized vendors. c. All the raw materials that are charged in the reactor are through pipeline so there are no / remote chances for spillages anywhere. d. Use of closed feed system in batch
		reactors is already in practice in

		the existing manufacturing and same practice will be adopted for manufacturing of the proposed products. e. Although vapor condensing system for recovery of solvent is already installed in the existing plant, new scrubber will be installed if required in the proposed expansion manufacturing to control vapors, if any. f. The company is already using high pressure hoses for equipment cleaning to reduce waste water generation and same will be practiced for the proposed project. These practices (a) to (f) are already being adopted by the company in the existing plant and will be continued in proposed expansion
xix	The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery. 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.	 unit also. (Attachment 16) Plantation within the plant premises is already developed in 4,600 sq. mtr (36.8%) area of the total plant area (12,500 sq. mtr). Additional plantation around periphery of the plot boundary is carried out (Number of plants 190) as per Central Pollution Control Board guidelines. Proper maintenance of the plantation is taking care by the company with the help of forest officer. (Attachment 17)
xx	As per the Ministry's OM dated 30/09/2020 superseding the OM dated 01/05/2021 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the public hearing and socio-economic issues in the study area, the project proponent shall provide support for educational	 Noted and will comply as per CER action plan proposed and also as per the ministry's OM dated 30/09/2020 to address the public hearing and socioeconomic issues in the study area. The company is already providing support for educational assistant, cleanliness,

assistance, cleanliness and hygiene program to the schools, medical assistance, Plantation, Sanitation and waste management, drinking water facility in the nearby villages. The action plan shall be completed within three years as proposed. All the commitments made during public hearing shall be satisfactorily implemented.

- and hygiene programs to the schools, medical assistance, plantation, sanitation, waste management, drinking water facility in nearby villages and it will be continued further.
- The action plan given will be completed within 3 years. We ensure the satisfactory implementation of the commitments made during the public hearing. (Photographs are attached at Attachment 18)

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.

The company is having quality control lab equipped with all necessary facilities and instrumentation required for the industry. Within the Quality Control Laboratory, additional facilities developed related to the infrastructure the equipment required and analytical laboratory for environmental sample analysis and monitoring. The company is having its Environment Management Cell and safety equipped with all the facilities and (Attachment 19). manpower. The management of the industry adheres in conforming and maintaining standards set by the State Pollution Control Board in totality. The organogram of EMC which is functional at M/s. Vadivarhe Speciality Chemicals Ltd; along with responsibilities are shown in **Attachment 20.**

Compliance of other General Conditions

No further expansion or modification in the plant, other than mentioned in the EIA and Notification, 2006 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,

Agreed and point is noted.

The EC granted by MoEF & CC New Delhi dated 8th February 2021 for the expansion of the product manufacturing from 12.85 TPM to 34.8658 TPM. The proposed expansion is to be carried out in the existing land area. Please see the attached EC Letter from MoEF & CC New Delhi at (Attachment 21). We have obtained CTE and CTO for the proposed expansion from MPCB (Attachment 22).

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	as applicable, to assess the adequacy of conditions imposed and to add addition environmental protection measures required, if any	
ii	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	 The total power requirement will be 450 KVA. The main source of power is MSEDCL. Solar Electricity Generation Plant is installed at the factory premises for the energy generation between 886 units to 1063units per day and utilized for the production activity. Same will be practiced for the proposed expansion project (Attachment 23). For lighting purpose as mentioned in the condition LED based or advanced having preference in energy conservation and environment betterment is in practice presently (Attachment 24).
iii	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 source 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).	 We are regularly monitoring noise levels in and around the plant area and found to be within the prescribed limit of Central Pollution Control Board for day and night time. However for noise control measure viz. acoustic hoods, silencers and enclosures etc. are provided at all the sources of noise generation in the existing plant and will be continued / extended further for the proposed expansion as per the requirements. Moreover, additional plantation raised in and around the periphery of the plant will help to attenuate the noise level We have made mandatory use of PPE's for all the workers working in the noise generating area and equipments. We have made the peripheral plantation to reduce /

		attenuate the noise effect to the surrounding area. In addition to this additional plantation is also carried out along the periphery and within the plant area. (Photographs are attached at Attachment 25)
iv	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	The point is noted and will comply, all the relevant measures are being taken-up and in process for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken and implemented by involving local villages and administration. The company is in process of undertaking eco-developmental measures including community welfare measures in the project area for improving the environment.
V	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.	Agreed and will comply.
vi	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZillaParishad / Municipal Corporation, Urban local Body and the local NGO, if any from whom suggestions / representations, if any were received while processing the proposal.	Already Complied (Attachment 26)

vii	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environment Clearance conditions including results of monitored data (both in hard copies as well as by e-email) to the respective 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.	Noted and will comply. After Environmental Clearance issued by the MoEF & CC New Delhi on dated 8th February 2021, first six monthly EC Compliance Report is submitted on 27/05/2021 to the Regional Office MoEF & CC and MoEF & CC New Delhi and respective Zonal Offices of CPCB and SPCB (Copy is attached at Attachment 27).
viii	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 environment clearance condition and shall also be sent to the respective Regional Offices of MoEF & CC by e-mail.	• Noted and complying, we are regularly submitting Environment Statement for each financial year ending 31st March in Form-V to State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and also on the website of the company along with the status of compliance of Environment Clearance conditions through email to the Regional Office of the MoEF & CC and will continue the same.
ix	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	Complied (Attachment 28)

	of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	
x	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 date of start of the project.	Noted, and will comply. However it is to be mentioned here that mostly existing facilities and infrastructure will be utilized for the proposed expansion project as per the requirement of the demand of the market.
xi	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.	The point is noted.