



सत्यमेव जयते

File No: IA-J-11011/25/2023-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 11/08/2023



To,

Shri Ajay Gupta
 BHARAT RASAYAN LIMITED
 1510, Vikram Tower, Rajendra Palace, New Delhi - 110008, NEW DELHI-110008
 brlsamatpor@bharatgroup.co.in

Subject: **Setting up a new Unit for Manufacturing of Agrochemicals with a Production Capacity 48290 MTA located at Plot No. D/3/21/2/1 Dahej III, GIDC Industrial Estate, Village Sambheti Vagra, District Bharuch Gujarat by M/s Bharat Rasayan Limited - Grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 - regarding.**

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/GJ/IND3/424990/2023 dated 10.04.2023 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A2002GJ5593641N
(ii) File No.	IA-J-11011/25/2023-IA-II(I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
(vi) Sector	Industrial Projects - 3
(vii) Name of Project	M/s. Bharat Rasayan Limited
(viii) Name of Company/Organization	BHARAT RASAYAN LIMITED
(ix) Location of Project (District, State)	BHARUCH, GUJARAT
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

1. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A, B and C)/ EIA & EMP Reports were submitted to the MoEF&CC for an appraisal by the [Expert Appraisal Committee (EAC)] under the provision of EIA notification 2006 and its subsequent amendments.
2. The above-mentioned proposal has been considered by [Expert Appraisal Committee (Industry-III)] in the 50th and 51st meetings held in April and May, 2023. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above or through the following web link [click here](#).
3. The brief about configuration of products and byproducts as submitted by the Project Proponent in Form-1 (Part A, B and C)/ EIA & EMP Reports / presented during EAC are annexed to this EC as Annexure (1) and MoM is also attached herewith.
4. The EAC, in its meeting held on 19th April 2023 and 16th May 2023, based on information submitted viz: Form 1 (Part A, B and C), EIA/EMP report etc & clarifications provided by the project proponent and after detailed deliberations on all technical aspects and public hearing issues and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to compliance of Specific and Standard EC conditions as given in this letter.
5. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the Expert Appraisal Committee hereby accords Environment Clearance to the instant proposal of M/s. Bharat Rasayan Limited under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of the Specific and Standard EC conditions as given in Annexure (1)
6. The Ministry reserves the right to stipulate additional conditions, if found necessary.
7. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
8. The Project Proponent is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.
9. Validity of EC is upto 10 years from the date of grant of EC for the start of production operations by the project or activity. Validity of EC becomes perpetual subject to the start of production operations by the project or activity on or before the 10 years from the date of grant of EC. In case the project proponent fails to start the production operations within the EC validity date, application for EC validity extension shall be submitted to the regulatory authority as per the provision contained in the Para 9.0 of EIA notification, 2006 and its amendment.
10. General Instructions:
 - (a) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
 - (b) 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.
 - (c) The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
 - (d) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
 - (e) 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.

(f) The Regional Office of this Ministry 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.

(g) 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.

11. This issues with the approval of the Competent Authority

Annexure 1

Specific EC Conditions for (Pesticides industry and pesticide specific intermediates (excluding formulations))

1. Specific Conditions

Sr. No	EC Conditions
1.1	1. The PP shall develop Greenbelt over an area of at least, 24936.79 m² by planting 12000 number of trees within a period of one year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft (about 2 m). Along the periphery: in 2 lines i.e. first line should be of shrub/hedge in close spacing and along the road a row of small trees. Second line along the plant boundary with Tall trees with good canopy at a height of 5 m onwards and total height atleast 20 m shall be planted at a spacing of 2.5 m x 2.5 m. Along internal roads in 2 lines i.e. first line of only flowering herbs/shrub, second line should be of shrub/hedge in close spacing. At open land area: Small to large trees planted at a spacing of 2.5 m x 2.5 m. The budget earmarked for the plantation shall be kept in separate account and should be audited annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year. 2. A separate Environmental Management Cell (having qualified persons 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. PP shall engage Head EHS- Head (R&D) for effluent treatment & process development support- senior safety & fire officer – manager (process safety)- – Manager (Environment). In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year. 3. 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 budget propose under EMP is 30 Crore (Capital cost) and 34.45 Crore per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year. 4. As committed by the PP, Natural gas shall be used as primary fuel, during the unavailability coal shall be used in case of emergency.

Sr. No	EC Conditions
	5. The Total water requirement is 3864 m³/day of which fresh water requirement of 1864 m³/day shall be met from GIDC supply. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year. 6. High COD & High TDS effluent shall be sent to MEE for further treatment. low COD & low TDS effluent shall be sent to own ETP consisting of Primary, Secondary & Tertiary treatment. 120 KLD shall be used for GB development & maintenance purpose. 450 KLD High COD & High TDS plant effluent+ 234 KLD RO reject shall be sent to MEE for further treatment. 2134 KLD Low COD & low TDS effluent shall be sent to own ETP consisting of Primary, Secondary & Tertiary treatment. Treated effluent shall be sent to RO and RO permeate 1580 KLD shall be recycled and used in cooling tower. 310 KLD treated effluent sent to CETP, Dahej and final discharge and disposal into deep sea through u/g common effluent conveyance pipeline. 7. No banned chemicals 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 in this regard. 8. The project proponent shall comply with the environment norms for Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, <i>vide</i> GSR 446 (E), dated 13.6.2011 under the provisions of the Environment (Protection) Rules, 1986. 9. 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. 10. All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. 11. The 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. 12. 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. 13. The 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. 14. Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies. 15. 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. 16. The 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. 17. The PP shall undertake waste minimization measures as below (a) Metering and control of

Sr. No	EC Conditions
	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 cleaning to reduce wastewater generation.

Standard EC Conditions for (Pesticides industry and pesticide specific intermediates (excluding formulations))

1

Sr. No	EC Conditions
1.1	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.
1.2	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.
1.3	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
1.4	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).
1.5	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.
1.6	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.
1.7	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.

Sr. No	EC Conditions
1.8	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.
1.9	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.
1.10	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.
1.11	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.
1.12	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.

Annexure 2

Details of the Project

Sr. No.	Particulars	Details	
a.	Details of the Project	M/s. Bharat Rasayan Limited	
b.	Latitude and Longitude of the project site	21.7510, 72.6777	
c.	Land Requirement (in Ha) of the project or activity	Nature of Land involved	Area in Ha
		Non-Forest Land (A)	7.4162
		Forest Land (B)	0
		Total Land (A+B)	7.4162

Sr. No.	Particulars	Details
d.	Date of Public Consultation	Public consultation for the project was held on
e.	Rehabilitation and Resettlement (R&R) involvement	NO
f.	Project Cost	38000
g.	EMP Cost	3000
h.	Employment Details	80150

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Clodinafop Propargyl	Product	200	Tons per Annum (TPA)	Road, Rail	
Diuron	Product	900	Tons per Annum (TPA)	Road, Rail	
Imidacloprid	Product	300	Tons per Annum (TPA)	Road, Rail	
Metribuzin	Product	1200	Tons per Annum (TPA)	Road, Rail	
Thiomethoxam	Product	500	Tons per Annum (TPA)	Road, Rail	
Triazophos	Product	400	Tons per Annum (TPA)	Road, Rail	
Kresoxim Methyl	Product	50	Tons per Annum (TPA)	Road, Rail	
Sulfentrazone	Product	150	Tons per Annum (TPA)	Road, Rail	
Trifloxystrobin	Product	100	Tons per Annum (TPA)	Road, Rail	
Imbibenconazole	Product	50	Tons per Annum (TPA)	Road, Rail	
Acetamiprid Technical	Product	200	Tons per Annum (TPA)	Road, Rail	
Alpha Cypermethrin Technical	Product	300	Tons per Annum (TPA)	Road, Rail	
Bifenthrin Technical	Product	300	Tons per Annum (TPA)	Road, Rail	
Bispyribac sodium Technical	Product	200	Tons per Annum (TPA)	Road, Rail	
Cymoxanil	Product	150	Tons per Annum (TPA)	Road, Rail	
Fipronil	Product	100	Tons per Annum	Road, Rail	

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
			(TPA)		
Metalaxyl	Product	300	Tons per Annum (TPA)	Road, Rail	
Permethrin	Product	300	Tons per Annum (TPA)	Road, Rail	
Tricyclazole	Product	300	Tons per Annum (TPA)	Road, Rail	
Tolfenpyrad	Product	100	Tons per Annum (TPA)	Road, Rail	
Spiromesifen	Product	50	Tons per Annum (TPA)	Road, Rail	
2,4-D Ethyl Ester	Product	2000	Tons per Annum (TPA)	Road, Rail	
2,4-D Amine Salt	Product	2000	Tons per Annum (TPA)	Road, rail	
Chlormequat Chloride	Product	200	Tons per Annum (TPA)	Road, Rail	
Paclobutrazole	Product	100	Tons per Annum (TPA)	Road, Rail	
Pendimethalin	Product	1000	Tons per Annum (TPA)	Road, Rail	
Penoxsulam	Product	100	Tons per Annum (TPA)	Road, Rail	
Phenthoate	Product	300	Tons per Annum (TPA)	Road, Rail	
Pretilachlor	Product	500	Tons per Annum (TPA)	Road, Rail	
Pyrazosulfuron Ethyl	Product	50	Tons per Annum (TPA)	Road, Rail	
Pyriothiac Sodium Technical	Product	50	Tons per Annum (TPA)	Road, Rail	
Tebuconazole	Product	600	Tons per Annum (TPA)	Road, Rail	
Temephos	Product	50	Tons per Annum (TPA)	Road, Rail	
Thifluzamide	Product	170	Tons per Annum (TPA)	Road, Rail	
pymetrozine	Product	200	Tons per Annum (TPA)	Road, Rail	
Picoxystrobin	Product	50	Tons per Annum (TPA)	Road, Rail	
Dinotefuran	Product	100	Tons per Annum (TPA)	Road, Rail	
Topramezone	Product	50	Tons per Annum (TPA)	Road, Rail	
Chlorantraniliprole	Product	1000	Tons per Annum (TPA)	Road, Rail	

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Tembotrione	Product	200	Tons per Annum (TPA)	Road, Rail	
Propiconazole	Product	500	Tons per Annum (TPA)	Road, Rail	
Pyraclostrobin	Product	50	Tons per Annum (TPA)	Road, Rail	
Atrazine	Product	600	Tons per Annum (TPA)	Road, Rail	
2,4-D Sodium Salt	Product	500	Tons per Annum (TPA)	Road, Rail	
Acephate	Product	600	Tons per Annum (TPA)	Road, Rail	
Azoxystrobin Technical	Product	200	Tons per Annum (TPA)	Road, Rail	
Isoprothiolane	Product	150	Tons per Annum (TPA)	Road, Rail	
Thiophanate methyl	Product	200	Tons per Annum (TPA)	Road, Rail	
Carboxin	Product	100	Tons per Annum (TPA)	Road, Rail	
Flonicamid	Product	100	Tons per Annum (TPA)	Road, Rail	
Halosulfuron Methyl	Product	50	Tons per Annum (TPA)	Road, Rail	
Carfentrazone ethyl	Product	50	Tons per Annum (TPA)	Road, Rail	
Cartap Hydrochloride	Product	300	Tons per Annum (TPA)	Road, Rail	
Cypermethrin	Product	500	Tons per Annum (TPA)	Road, Rail	
Deltamethrin	Product	600	Tons per Annum (TPA)	Road, Rail	
Ethion	Product	300	Tons per Annum (TPA)	Road, Rail	
Imazethapyr	Product	100	Tons per Annum (TPA)	Road, Rail	
Metsulfuron Methyl	Product	100	Tons per Annum (TPA)	Road, Rail	
Fenoxaprop-p-ethyl	Product	200	Tons per Annum (TPA)	Road, Rail	
Prallethrin	Product	100	Tons per Annum (TPA)	Road, Rail	
Clomazone	Product	50	Tons per Annum (TPA)	Road, Rail	
Flubendiamide	Product	200	Tons per Annum (TPA)	Road, Rail	
Buprofezin Technical	Product	300	Tons per Annum	Road, rail	

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
			(TPA)		
Butachlor Technical	Product	500	Tons per Annum (TPA)	Road, Rail	
Chlorimuron Ethyl	Product	25	Tons per Annum (TPA)	Road, Rail	
Diafenthiuron	Product	300	Tons per Annum (TPA)	Road, Rail	
Difenoconazole	Product	150	Tons per Annum (TPA)	Road, Rail	
Fenpropathrin	Product	150	Tons per Annum (TPA)	Road, Rail	
Fenpyroximate	Product	25	Tons per Annum (TPA)	Road, Rail	
Fenvalerate	Product	200	Tons per Annum (TPA)	Road, Rail	
Glufosinate ammonium	Product	400	Tons per Annum (TPA)	Road, Rail	
Glyphosate	Product	600	Tons per Annum (TPA)	Road, Rail	
Hexaconazole	Product	400	Tons per Annum (TPA)	Road, Rail	
Indoxacarb	Product	100	Tons per Annum (TPA)	Road, Rail	
Lambda Cyhalothrin	Product	1200	Tons per Annum (TPA)	Road, Rail	
Myclobutanil	Product	20	Tons per Annum (TPA)	Road, Rail	
Novaluron	Product	50	Tons per Annum (TPA)	Road, Rail	
Profenofos	Product	500	Tons per Annum (TPA)	Road, Rail	
Propargite	Product	50	Tons per Annum (TPA)	Road, Rail	
Propineb	Product	200	Tons per Annum (TPA)	Road, Rail	
Sulfosulfuron	Product	50	Tons per Annum (TPA)	Road, Rail	
Thiacloprid	Product	50	Tons per Annum (TPA)	Road, Rail	
Pyriproxyfen	Product	100	Tons per Annum (TPA)	Road, Rail	
Clothianidin	Product	100	Tons per Annum (TPA)	Road, Rail	
Cypermethric Acid Chloride (CMAC)	Product	300	Tons per Annum (TPA)	Road, Rail	
Diflubenzuron	Product	50	Tons per Annum (TPA)	Road, Rail	

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Quizalofop ethyl	Product	200	Tons per Annum (TPA)	Road, Rail	
Cyazofamid	Product	100	Tons per Annum (TPA)	Road, Rail	
Oxyfluorfen	Product	100	Tons per Annum (TPA)	Road, Rail	
Zetacypermethrin	Product	600	Tons per Annum (TPA)	Road, Rail	

Copy To

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010 (Gujarat)
2. The Deputy Director General of Forests (C) Ministry of Env., Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A-Wing – 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar - 382010
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)
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 Bharuch, Gujarat.
7. Guard File/Monitoring File/PARIVESH

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-3 SECTOR)**

Dated: 02.05.2023

**MINUTES OF THE 50th EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR)
MEETING HELD ON 19th – 21st APRIL, 2023**

Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 through **Video Conferencing (VC)**

Time: 10:30 AM onwards

(i) Opening Remarks by the Chairman

Prof. (Dr.) A.B. Pandit, Chairman welcomed the Committee members and opened the EAC meeting for further deliberations.

(ii) Details of Agenda items by the Member Secretary

The Member Secretary apprised the Committee about the details of Agenda items to be discussed during this Expert Appraisal Committee (EAC) meeting.

(iii) Confirmation of Minutes of the 47th, 48th & 49th Meetings of the EAC (Industry-3 Sector).

The EAC noted that the final minutes of the above meetings were issued after incorporating the comments offered by the members and approved by the Chairman. The EAC confirmed the MoM with the following modifications (Agenda No. 47.17, 48.7, 49.7, 49.10, 49.16, 49.18 & 49.23), based on the request of the Project Proponents (PPs).

Agenda No. 47.17

Expansion proposal for various resins, esters and monomers within the existing facility of production capacity from 29393.40 TPM to 39006.40 TPM located at 808/E, 305/6 & 7, Survey No. 523, 434, 800, Phase-III, Notified Industrial Area, GIDC Vapi, Dist. Valsad, Gujarat by M/s Huber Group India Private Limited - Consideration of EC

Proposal No. IA/GJ/IND3/415285/2023; File No. IA-J-11011/46/2023-IA-II(I)]

1. The proposal was recommended by the EAC in its 47th Meeting held on 15th-17th February, 2023 and the MoM were published on 26.2.2023. The ToR had been issued by the SEIAA vide letter no. SIA/GJ/99906/2022 dated 2.6.2022. The project/activity is covered under 5(f) – Synthetic Organic Chemicals Industry under Category ‘B’. However, since **the project site is located in a critically polluted area (CEPI – 79.38), the proposal should have been**

- (v). The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration sources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

Agenda No. 50.4

Setting up a new Unit for Manufacturing of Agrochemicals with a Production Capacity 48290 MTA located at Plot No. D/3/21/2/1 Dahej III, GIDC Industrial Estate, Village Sambheti Vagra, District Bharuch Gujarat by M/s Bharat Rasayan Limited - Consideration of EC

[Proposal No. IA/GJ/IND3/424990/2023; File No. IA-J-11011/25/2023-IA-II(I)]

1. The proposal is for the environmental clearance Setting up a new manufacturing unit for Agrochemicals with a production capacity of 48290 MTA located at Plot No. D/3/21/2/1 Dahej III, GIDC Industrial Estate, Village Sambheti Vagra, District Bharuch Gujarat by M/s Bharat Rasayan Limited.
2. The project/activity is covered under Category 'A' of item 5(b) **Pesticides industry and pesticide specific intermediates (excluding formulations)** of Schedule of EIA Notification, 2006 (as amended).
3. The ToR has been issued by the Ministry, vide letter no. IA- J-11011/25/2023-IA-II (I), dated 3.2.2023. The PP applied for Environment Clearance in the Common Application Form and submitted EIA/EMP Report and other documents. The PP in the Form reported that it is a **Fresh EC case**. The proposal is placed in this 50th EAC meeting on 19th -21st April, 2023, wherein the PP along with accredited Consultant, M/s. Siddhi Green Excellence Pvt. Ltd., Ankleshwar [Accreditation number NABET/EIA/2225/RA 0280 valid till 06th October,2025] made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:
4. The PP reported that the total land area of 73534.76 m². will be used for proposed project and no R& R is involved in the Project. The details of products to be manufactured are as follows:

S.No	Name of Product	CAS No./ HSN code	Proposed Qty. (TPA)	End Use
1.	2,4-D Ethyl Ester	533-23-3	2000	Weedicide
2.	2,4-D Amine Salt	2008-39-1	2000	Herbicide
3.	2,4-D Sodium Salt	2702-72-9	500	Herbicide
4.	Acephate	30560-19-1	600	Insecticide
5.	Acetamiprid Technical	135410-20-7	200	Insecticide
6.	Alpha Cypermethrin Technical	67375-30-8	300	Insecticide
7.	Azoxystrobin Technical	131860-33-8	200	Fungicide
8.	Bifenthrin Technical	82657-04-3	300	Insecticide
9.	Bispyribac sodium Technical	125401-92-5	200	Herbicide

S.No	Name of Product	CAS No./ HSN code	Proposed Qty. (TPA)	End Use
10.	Buprofezin Technical	69327-76-0	300	Insecticide
11.	Butachlor Technical	23184-66-9	500	Herbicide
12.	Cartap Hydrochloride	15263-52-2	300	Insecticide
13.	Chlorimuron Ethyl	90982-32-4	25	Herbicide
14.	Chlormequat Chloride	999-81-5	200	Plant growth regulator
15.	Clodinafop Propargyl	105512-06-9	200	Herbicide
16.	Cymoxanil	57966-95-7	150	Fungicide
17.	Cypermethrin	52315-07-8	500	Insecticide
18.	Deltamethrin	52918-63-5	600	Insecticide
19.	Diafenthiuron	80060-09-9	300	Insecticide
20.	Difenoconazole	119446-68-3	150	Fungicide
21.	Diuron	330-54-1	900	Herbicide
22.	Ethion	563-12-2	300	Insecticide
23.	Fenpropathrin	64257-84-7	150	Insecticide
24.	Fenpyroximate	111812-58-9	25	Insecticide
25.	Fenvalerate	51630-58-1	200	Insecticide
26.	Fipronil	120068-37-3	100	Insecticide
27.	Glufosinate ammonium	77182-82-2	400	Herbicide
28.	Glyphosate	1071-83-6	600	Herbicide
29.	Hexaconazole	79983-71-4	400	Fungicide
30.	Imazethapyr	81335-77-5	100	Herbicide
31.	Imidacloprid	138261-41-3	300	Insecticide
32.	Indoxacarb	173584-44-6	100	Insecticide
33.	Isoprothiolane	50512-35-1	150	Fungicide
34.	Lambda Cyhalothrin	91465-08-6	1200	Insecticide
35.	Metalaxyl	57837-19-1	300	Fungicide
36.	Metribuzin	21087-64-9	1200	Herbicide
37.	Metsulfuron Methyl	74223-64-6	100	Herbicide
38.	Myclobutanil	88671-89-0	20	Fungicide
39.	Novaluron	116714-46-6	50	Insecticide
40.	Paclobutrazole	76738-62-0	100	Plant growth regulator
41.	Pendimethalin	40487-42-1	1000	Herbicide
42.	Penoxsulam	219714-96-2	100	Herbicide
43.	Permethrin	52645-53-1	300	Insecticide
44.	Phenthoate	2597-03-7	300	Insecticide
45.	Pretilachlor	51218-49-6	500	Herbicide
46.	Profenofos	41198-08-7	500	Insecticide
47.	Propargite	2312-35-8	50	Insecticide

S.No	Name of Product	CAS No./ HSN code	Proposed Qty. (TPA)	End Use
48.	Propiconazole	60207-90-1	500	Fungicide
49.	Propineb	12071-83-9	200	Fungicide
50.	Pyrazosulfuron Ethyl	93697-74-6	50	Herbicide
51.	Pyrithiobac Sodium Technical	123343-16-8	50	Herbicide
52.	Sulfosulfuron	141776-32-1	50	Herbicide
53.	Tebuconazole	107534-96-3	600	Fungicide
54.	Temephos	3383-96-8	50	Insecticide
55.	Thiophanate methyl	23564-05-8	200	Fungicide
56.	Thifluzamide	130000-40-7	170	Fungicide
57.	Thiomethoxam	153719-23-4	500	Insecticide
58.	Triazophos	24017-47-8	400	Insecticide
59.	Tricyclazole	41814-78-2	300	Fungicide
60.	Tolfenpyrad	129558-76-5	100	Insecticide
61.	pymetrozine	123312-89-0	200	Insecticide
62.	Thiacloprid	111988-49-9	50	Insecticide
63.	Pyriproxyfen	95737-68-1	100	Insecticide
64.	Fenoxaprop-p-ethyl	71283-80-2	200	Herbicide
65.	Diflubenzuron	35367-38-5	50	Insecticide
66.	Carboxin	5234-68-4	100	Fungicide
67.	Picoxystrobin	117428-22-5	50	Fungicide
68.	Spiromesifen	283594-90-1	50	Insecticide
69.	Quizalofop ethyl	100646-51-3	200	Herbicide
70.	Kresoxim Methyl	143390-89-0	50	Fungicide
71.	Sulfentrazone	122836-35-5	150	Herbicide
72.	Carfentrazone ethyl	128639-02-1	50	Herbicide
73.	Dinotefuran	165252-70-0	100	Insecticide
74.	Prallethrin	23031-36-9	100	Insecticide
75.	Flonicamid	158062-67-0	100	Insecticide
76.	Topramezone	210631-68-8	50	Herbicide
77.	Chlorantraniliprole	500008-45-7	1000	Insecticide
78.	Pyraclostrobin	175013-18-0	50	Fungicide
79.	Cyazofamid	120116-88-3	100	Fungicide
80.	Clothianidin	210880-92-5	100	Insecticide
81.	Clomazone	81777-89-1	50	Herbicide
82.	Tembotrione	335104-84-2	200	Herbicide
83.	Trifloxystrobin	141517-21-7	100	Fungicide
84.	Flubendiamide	272451-65-7	200	Insecticide
85.	Oxyfluorfen	42874-03-3	100	Insecticide
86.	Atrazine	1912-24-9	600	Herbicide
87.	Cypermethric Acid Chloride (CMAC)	52314-67-7	300	Intermediate
88.	Halosulfuron Methyl	100784-20-1	50	Herbicide

S.No	Name of Product	CAS No./ HSN code	Proposed Qty. (TPA)	End Use
89.	Imbibenconazole	86598-92-7	50	Fungicide
90.	Zetacypermethrin	1315501-18-8	600	Insecticide
91.	Chloropyrifos Methyl (CPP-M)	5598-13-0	200	Insecticide
92.	Propanil	709-98-8	150	Herbicide
93.	Transfluthrin	118712-89-3	150	Insecticide
94.	Ethiprole	181587-01-9	300	Insecticide
95.	Fluxametamide	928783-29-3	150	Insecticide
96.	Quinoxifen	124495-18-7	100	Fungicide
97.	Amisulbrom	348635-87-0	100	Fungicide
98.	m-phenoxybenzaldehyde	39515-51-0	1800	Intermediate
99.	m-phenoxybenzylalcohol	13826-35-2	400	Intermediate
100.	4-acetyl-2-methylbenzoic acid (AMBA)	55860-35-0	50	Intermediate
101.	2-Hydroxypropyloxymine hydrochloride (HPOA HCL)	950595-72-9	200	Intermediate
102.	Lambdacyhalothric acid	72748-35-7	1200	Intermediate
103.	Pilot product	--	100	--
104.	4-acetyl-2-methylbenzamide (AMBAD)	1095275-06-1	100	Intermediate
105.	3,5'-Dichloro-2,2,2-trifluoroacetophenone (DCAP)	130336-16-2	100	Intermediate
106.	Bromobenzene	108-86-1	500	Intermediate
107.	6-Flouro-2-methyl indole (6-FMI)	40311-13-5	200	Intermediate
108.	m-bromobenzaldehyde	3132-99-8	200	Intermediate
109.	m-phenoxybenzaldehyde Acetal (MPBA)	62373-79-9	500	Intermediate
110.	Lambdacyhalothric acid chloride	76496-71-4	400	Intermediate
111.	1,2,4-Triazinone	33509-43-2	900	Intermediate
112.	Isopropyl bromide	75-26-3	600	Intermediate
113.	1,2,4 triazole	288-88-0	1200	Intermediate
114.	2, 6-Diisopropyl-4-phenoxyphenyl thiourea (DIPPT)	135252-10-7	1000	Intermediate

S.No	Name of Product	CAS No./ HSN code	Proposed Qty. (TPA)	End Use
115.	Oxirane (Tebuconazole)	107534-96-3	1000	Intermediate
116.	Pyrazole (Fipronil)	288-13-1	300	Intermediate
117.	Para chlorophenyl acetic acid (PCPAA)	1878-66-6	250	Intermediate
118.	Phenyl acetic acid.	103-82-2	900	Intermediate
119.	DHPPA [(R)-(+)-2-(4-Hydroxyphenoxy)-Propanoic Acid]	94050-90-5	300	Intermediate
120.	[(Isopropylthio)acetic acid)	22818-59-3	200	Intermediate
121.	2,6-Dibromo-4-(trifluoromethoxy)aniline (TFMDBA)	88149-49-9	200	Intermediate
122.	4-(Trifluoromethoxy) aniline (TFMA)	461-82-5	200	Intermediate
123.	2-Amino-5-chloro-N,3-dimethylbenzamide (CAMA)	890707-28-5	500	Intermediate
124.	Dimethyl Malonate (DMM)	108-59-8	200	Intermediate
125.	Diethyl malonate	105-53-3	200	Intermediate
126.	Diisopropyl malonate	13195-64-7	200	Intermediate
127.	Cyanoacetic acid	372-09-8	600	Intermediate
Total			42890	

- The PP reported that there is no violation case as per the Notification No. S.O. 804(E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act.
- The PP reported that there are no national parks, wildlife sanctuaries, biosphere reserves, tiger/elephant reserves, wildlife corridors etc. within 10 km distance from the project site. Narmada river is flowing at a distance of ~9 km towards South direction. There is no forest land involved in the proposed project. Schedule-I species i.e., Peafowl (*Pavo cristatus*), Bengal Monitor Lizard (*Varanus bengalensis*) and Indian Flap-Shell Turtle – *Lissemys punctata*, were observed in the 10 km radius from the proposed project for which Conservation plan has been prepared.
- The PP reported that **Ambient air quality** monitoring was carried out at 11 locations during December 2021 to February 2022 and the baseline data indicates the ranges of concentrations as PM₁₀ (79-90 µg/m³), PM_{2.5} (30-36 µg/m³), SO₂ (15-20 µg/m³) and NO_x (25-29 µg/m³) (98th

percentile values) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed new project would be 0.530 $\mu\text{g}/\text{m}^3$, 1.923 $\mu\text{g}/\text{m}^3$ and 1.063 $\mu\text{g}/\text{m}^3$ with respect to PM_{10} , SO_2 and NO_x . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). **Noise quality:** The ambient noise level measurements were carried out at 12 locations during December 2021 to February 2022 and the baseline data indicates: Measured Leq (Day) from 46 dB(A) to 58 dB(A) and Leq (Night) from 36 dB(A) to 55 dB(A). **Ground Water Quality:** Ground water monitoring was carried out at 10 locations during December 2021 to February 2022 and the baseline data indicates the ranges of concentrations as: pH from 7.562 to 8.471, Total hardness from 110 to 681 mg/L, TDS from 1656 to 4655 mg/L, Chloride from 193 to 1025 mg/L, Fluoride from 1 to 1.6 mg/L. **Surface Water Quality:** The surface water monitoring was carried out at 10 locations during December 2021 to February 2022 and the baseline data indicates the ranges of concentrations as: For pond water pH ranged between 7.018 - 8.493, TDS: 261 - 1037 mg/l, total hardness: 65-194 mg/l as CaCO_3 , COD: 28 – 100 mg/L, DO: 5.2 - 8.85 mg/L, BOD: 5 – 12 mg/L. **Soil Quality:** The soil quality monitoring was carried out at 11 locations during December 2021 to February 2022 and the baseline data indicates the ranges of concentrations as: pH of 5% leachate @ 25°C: 8.116 – 8.966, Electrical conductivity @ 25°C: 0.346 – 7.46 dS/m, Exchangeable Calcium (Ca): 7.5 – 27 meq/100 gm, Exchangeable Magnesium (Mg): 7 – 20 meq/100 gm, Exchangeable Sodium Percentage (ESP): 5.87 – 45.03 %.

8. The PP reported that the total water requirement will be 3864 m^3/day of which fresh water requirement of 1864 m^3/day will be met from GIDC supply. Industrial Effluent of 700 KLD (450 KLD high COD effluent & 250 KLD RO reject) shall be treated in stripper. 699 KLD effluent from stripper shall be subjected to MEE followed by ATFD. 625 KLD MEE condensate shall be sent to ETP and treated with 1469 KLD low COD effluent. 2254 KLD treated effluent shall be treated in ETP (P+S+T). 310 KLD effluent from ETP shall be sent to CETP, Dahej for further treatment & disposal into deep sea through u/g common effluent conveyance pipeline balance shall be subjected to MBR & RO. 1684 KLD RO permeate shall be recycled and to be used in cooling tower makeup and APCM purpose. Domestic effluent of 120 m^3/day will be treated through Sewage Treatment Plant (STP) & treated water shall be mixed with industrial effluent.
9. Power requirement will be 4000 KW and will be met from M/s. Dakshin Gujarat Vij Company Ltd. (DGVCL). 2 Nos. DG set of 750 KVA capacity each & 2 Nos. DG sets of 1500 KVA of each will be used as standby during power failure for proposed project. Stack (11 m & 15 m Height) will be provided as per CPCB norms to the proposed DG Sets.
10. Multi fuel boilers (1 No. 25 MT/h & 1 No. 18 MT/h standby) and Thermic Fluid Heaters (3 Nos. 4 Lakh kcal/h each - 2 operational + 1 standby) will be installed. Electrostatic precipitator (ESP) shall be provided to Boilers and Multi Cyclone Separator & Bag filter shall be provided to Thermic Fluid Heaters with online CEMS on its stack (30 m height) for continuous monitoring. Natural gas OR LDO/FO (low sulphur) & Coal (low sulphur) shall be used as Fuel for Multi fuel boilers & Thermic Fluid Heaters, HSD shall be used as Fuel for DG Set.
11. **Details of Process Emissions Generation and its Management:** The process emissions from the manufacturing processes shall be HCl , SO_2 , Cl_2 , NO_x , NH_3 , HBr , H_2S , PM , VOC , DMA

from manufacturing processes. Two stage Water Scrubbers & caustic scrubber with coolers shall be provided to respective reaction vessels to control the emissions. Proposed Process gas stacks, emission and control measures:

Stack No.	Stack Attached to	Stack Height (m)	Air Pollution Control Measures (APCM)	Parameter	Permissible limits
1	Process Vent – 1	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl SO ₂ Cl ₂	20 mg/Nm ³ 40 mg/Nm ³ 5 mg/Nm ³
2	Process Vent – 2	15	Primary Scrubber with Hypo Secondary Scrubber with caustic circulation	NO _x	25 mg/Nm ³
3	Process Vent – 3	15	Primary Scrubber Secondary Scrubber	NH ₃	175 mg/Nm ³
4	Process Vent – 4	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HBr H ₂ S	5 mg/Nm ³ 5 mg/Nm ³
5	Process Vent – 5	15	Primary Scrubber Secondary Scrubber Blower with caustic	NaCN	--
6	Process Vent – 6	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl SO ₂ Cl ₂	20 mg/Nm ³ 40 mg/Nm ³ 5 mg/Nm ³
7	Process Vent – 7	15	Primary Scrubber with Hypo Secondary Scrubber with caustic circulation	NO _x	25 mg/Nm ³
8	Process Vent – 8	15	Primary Scrubber Secondary Scrubber	NH ₃	175 mg/Nm ³
9	Process Vent – 9	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HBr H ₂ S	5 mg/Nm ³ 5 mg/Nm ³
10	Process Vent – 10	15	Primary Scrubber Secondary Scrubber Blower with caustic	NaCN	--
11	Process Vent – 11	15	Primary Scrubber Secondary Scrubber	NH ₃	175 mg/Nm ³

Stack No.	Stack Attached to	Stack Height (m)	Air Pollution Control Measures (APCM)	Parameter	Permissible limits
12	Process Vent – 12	15	Scrubber	DMA	--
13	Process Vent – 13	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl SO ₂ Cl ₂	20 mg/Nm ³ 40 mg/Nm ³ 5 mg/Nm ³
14	Process Vent – 14	15	Blower with Bag filter	PM	150 mg/Nm ³
15	Process Vent – 15	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HCl SO ₂ Cl ₂	20 mg/Nm ³ 40 mg/Nm ³ 5 mg/Nm ³
16	Process Vent – 16	15	Primary Scrubber with Hypo Secondary Scrubber with caustic circulation	NO _x	25 mg/Nm ³
17	Process Vent – 17	15	Primary Scrubber Secondary Scrubber	NH ₃	175 mg/Nm ³
18	Process Vent – 18	15	Primary Scrubber Secondary Scrubber Ventury Scrubber with caustic	HBr H ₂ S	5 mg/Nm ³ 5 mg/Nm ³
19	Process Vent – 19	15	Primary Scrubber Secondary Scrubber Blower with caustic	NaCN	--
20	General Stack – 1	15	Primary Scrubber with Caustic Circulation	VOC	--
21	General Stack – 2	15	Primary Scrubber with Caustic Circulation	VOC	--
22	General Stack – 3	15	Primary Scrubber with Caustic Circulation	VOC	--
23	General Stack – 4	15	Primary Scrubber with Caustic Circulation	VOC	--
24	General Stack – 5	15	Primary Scrubber with Blower	VOC	--
25	General Stack – 6	15	Primary Scrubber with Blower	VOC	--
26	General Stack – 7	15	Primary Scrubber with Caustic Circulation	HCl Cl ₂	20 mg/Nm ³ 5 mg/Nm ³

12. Details of Solid Waste/ Hazardous Waste Generation and its Management:

Solid waste/Hazardous Waste:

S. No.	Name of Hazardous Waste	Source of Generation	Sch.	Category (as per HW rules 2016)	Proposed quantity (MTA)	Facility	Mode of Disposal & Remarks
1.	Used Oil	From Machinery	I	5.1	30	Collection, Storage, Reuse & Transportation	Disposal by selling it to registered re-processors/ reuse as lubricant within premises.
2.	Discarded Containers, barrels, liners contaminated with hazardous waste/ chemicals	From Raw material / Product packing	I	33.1	1825	Collection, Storage, Decontamination, Transportation	Disposal to Approved vendor or reuse within the premises.
3.	ETP Sludge and MEE Sludge	From ETP and MEE	I	35.3	15949.73	Collection, Storage, Transportation	Disposal at TSDF Site
4.	Stripper Solvent	From MEE	--	--	500	Collection, Storage, Transportation	Disposal by co-processing / Incineration at ICHWMF Site
5.	Process Waste / Waste Residue containing Pesticides	From process	I	29.1	5351.22	Collection, Storage, Transportation	Disposal by co-processing / Incineration at ICHWMF Site
6.	Date expired and off-specification on residues	From process	I	29.3	60	Collection, Storage, Transportation	Disposal by co-processing / Incineration at ICHWMF Site

S. No.	Name of Hazardous Waste	Source of Generation	Sch.	Category (as per HW rules 2016)	Proposed quantity (MTA)	Facility	Mode of Disposal & Remarks
7.	Distillation residues from contaminated organic solvents	From process	I	36.1	82.18	Collection, Storage, Transportation	Disposal by co-processing / Incineration at ICHWMF Site
8.	Used Catalyst (Spent Catalyst)	From process	I	29.5	19.34	Collection, Storage	Recycle / reuse within premises
9.	Ammonia Sol (20%-25%)	From process	II	A10	129.18	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises
10.	Potassium Chloride Solution	From process	II	B-10	1490.59	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU
11.	Potassium Chloride Solids	From process	II		49.61		
12.	Aq. Alum (Aqueous Aluminum Chloride Solution)	From process	II		8119.40	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU
13.	Sodium Bromide Solution	From process	II		2796.15	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.

S. No.	Name of Hazardous Waste	Source of Generation	Sch.	Category (as per HW rules 2016)	Proposed quantity (MTA)	Facility	Mode of Disposal & Remarks
14.	Potassium Bromide Solution	From process	II		1552.23	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU
15.	Potassium bromide (Solid)	From process	II		275.30	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.
16.	Hydrobromic Acid	From process	II		1614.10	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises
17.	Ammonium chloride (Solid)	From process	II		650.28	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises
18.	Cupric chloride	From process	II		3.60	Collection, Storage	Recycle / reuse within premises
19.	Spent acid, Dilute sulfuric Acid	From process	II	B-15	3218.08	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.

S. No.	Name of Hazardous Waste	Source of Generation	Sch.	Category (as per HW rules 2016)	Proposed quantity (MTA)	Facility	Mode of Disposal & Remarks
	Hydrochloric Acid (25-30%)	From process	II		8184.23	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.
20.	Ammonium Sulphate solution	From process	II		2633.82	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises
21.	Sodium Sulfite Solution (20%-25%)	From process	II		11875.71	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.
22.	Sodium Sulfite Solids	From process	II		889.17		
23.	Sodium bi sulfide (Sodium Hydrogen Sulfide) Solution	From process	II		416.11	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.
24.	Mix solvents	From process	II	B-28	206.40	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.

S. No.	Name of Hazardous Waste	Source of Generation	Sch.	Category (as per HW rules 2016)	Proposed quantity (MTA)	Facility	Mode of Disposal & Remarks
25.	Di-methyl amine (DMA) Solution 30-40%	From process	II		86.72	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU.
26.	Acetic Acid	From process	II		198.37	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises
27.	Sodium hypochlorite (NaOCl 10%)	From process	--	--	38.83	Collection, Storage	Recycle / reuse within premises
28.	Ferrous chloride	From process	--	--	152.76	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises
29.	Ammonium Hydroxide	From process	--	--	967.20	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises

S. No.	Name of Hazardous Waste	Source of Generation	Sch.	Category (as per HW rules 2016)	Proposed quantity (MTA)	Facility	Mode of Disposal & Remarks
30.	Ammonium Bisulfate	From process	--	--	928.54	Collection, Storage, Transportation	Disposal by selling to Actual end users having permission under Rule -9 and after making MoU OR Recycle / reuse within premises

Non- Hazardous Waste:

Sr. no.	Type/ Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Proposed Quantity (MT/A)	Management of Non Hazardous Waste
1.	Coal Ash	From boiler	5840	Collection, Storage in covered area with RCC flooring & Sell to brick manufacturers and/or cement industry

13. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 30 Crore (capital) and the Recurring Cost (operation and maintenance) will be about ₹ 34.45 Crore per annum. Industry proposes to allocate Rs. 5.7 Crore towards Corporate Social Responsibility.
14. Industry will develop greenbelt over an area of ~33.9 % i.e. 24936.79 m² out of total area of the project.
15. The PP reported that the Public hearing is exempted as per the Para 7.III. Stage (3) (i) (b) of the EIA Notification, 2006 as the project site is located within Dahej-III GIDC Industrial Estate. Dahej-III GIDC Industrial Estate is covered within PCPIR Region (Petroleum, Chemical & Petrochemical Investment Region) & PCPIR has obtained Environmental Clearance and CRZ Clearance vide File No. 21-49/2010-IA-III dated 14th September, 2017.
16. The PP proposed to set up an Environment Management Cell (EMC) by engaging Head EHS-Head (R&D) for effluent treatment & process development support- senior safety & fire officer – manager (process safety)- – Manager (Environment)- safety & fire officer- shift safety & fire officer for the functioning of EMC.
17. The PP reported that the following w.r.t carbon sequestration:

GHG emissions from-	CO ₂ eq. Emissions in tons per MT of product	Remarks
Fuel combustion in utilities	2.00	Fuel – Coal
HSD combustion in D.G set	0.22	(considering 30 days of operation in a year)
Electricity consumption from Grid	0.67	To be supplied by DGVCL
Transportation of goods and passengers to and fro project site	0.06	Includes transport by bus, cars, vans from Ankleshwar, bharuch to dahej and transportation of raw materials and finished goods within 500 km.
TOTAL before reduction	2.95	
Reduction in GHG emissions from-		Remarks
Roof top solar power plant	0.06	About 354.1KW (calculated from https://solarrooftop.gov.in/rooftop_calculator).
CO ₂ sequestered by Greenbelt	0.002	105 tons CO ₂ to be sequestered per year
Net Carbon footprint	2.90	

The greenbelt trees shall sequester ~ 2090 tons of CO₂ during lifespan of 20 years (~105 tons of CO₂ per year). This amount of sequestration potential is appreciable and shall significantly reduce the carbon footprint of the unit.

18. The PP submitted the Disaster Management Plan and On-site and Off-site Emergency Plans in the EIA report.
19. The estimated project cost is Rs. 380 Crore. Total Employment will be 250 Nos. persons as direct & 150 Nos. persons indirect after proposed new project shall become operational.
20. **Deliberations by the EAC:**

The EAC constituted under the provisions of the EIA Notification, 2006 comprising expert members/domain experts in various fields, examined the proposal submitted by the PP in desired format along with the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the PP.

The EAC noted that the PP 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 reports. 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 PP.

The EAC noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The EAC deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The EAC advised that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC inter-alia, deliberated on the fuel, Greenbelt, water balance, schematic diagram of ETP and advised the PP to submit the following:

- Undertaking of gradually reduction in utilization of coal.
- Undertaking for revised Greenbelt plan including revised period of implementation, tree count and according budget.
- Submit Revised water balance diagram including treated sewage water to be used in greenbelt purpose.
- Submit Revised Schematic diagram of ETP indicating inlet of ATFD and recycle of sludge in Aeration tank.

The PP submitted the above information/documents and the EAC found these to be satisfactory.

The EAC deliberated on the Onsite and Offsite Emergency plans and various mitigation measures to be proposed during implementation also of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The expert members of the EAC found the proposal in order and recommended for grant of environmental clearance.

The EAC is of the view that its recommendation and grant of environmental clearance by the regulatory authority 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 PP 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.

21. The EAC, after detailed deliberations, **recommended the project for the grant of environmental clearance, subject to the compliance of the terms and conditions as under, and general terms and conditions in Annexure-I:**

- (i) The PP shall develop Greenbelt over an area of at least, 24936.79 m² by planting 12000 number of trees within a period of one year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft (about 2 m). Along the periphery: in 2 lines i.e. first line should be of shrub/hedge in close spacing and along the road a row of small trees. Second line along the plant boundary with Tall trees with good canopy at a height of 5 m onwards and total height atleast 20 m shall be planted at a spacing of 2.5 m x 2.5 m. Along internal roads in 2 lines i.e. first line of only flowering herbs/shrub, second line should be of shrub/hedge in close spacing. At open land area: Small to large trees planted at a spacing of 2.5 m x 2.5 m. The budget earmarked for the plantation shall be kept in separate account and should be audited annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (ii) A separate Environmental Management Cell (having qualified persons 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. PP shall engage Head EHS- Head (R&D) for effluent treatment & process development support- senior safety & fire officer – manager (process safety)- – Manager (Environment). In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iii) 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 budget propose under EMP is ₹ 30 Crore (Capital cost) and ₹ 34.45 Crore per annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.

- (iv) As committed by the PP, Natural gas shall be used as primary fuel, during the unavailability coal shall be used in case of emergency.
- (v) The Total water requirement is 3864 m³/day of which fresh water requirement of 1864 m³/day shall be met from GIDC supply. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (vi) High COD & High TDS effluent shall be sent to MEE for further treatment. low COD & low TDS effluent shall be sent to own ETP consisting of Primary, Secondary & Tertiary treatment. 120 KLD shall be used for GB development & maintenance purpose. 450 KLD High COD & High TDS plant effluent+ 234 KLD RO reject shall be sent to MEE for further treatment. 2134 KLD Low COD & low TDS effluent shall be sent to own ETP consisting of Primary, Secondary & Tertiary treatment. Treated effluent shall be sent to RO and RO permeate 1580 KLD shall be recycled and used in cooling tower. 310 KLD treated effluent sent to CETP, Dahej and final discharge and disposal into deep sea through u/g common effluent conveyance pipeline.
- (vii) No banned chemicals 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 in this regard.
- (viii) The project proponent shall comply with the environment norms for Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, *vide* GSR 446 (E), dated 13.6.2011 under the provisions of the Environment (Protection) Rules, 1986.
- (ix) 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.
- (x) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.
- (xi) The 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.

- (xii) 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.
- (xiii) The 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.
- (xiv) Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.
- (xv) 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.
- (xvi) The 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.
- (xvii) The PP 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 cleaning to reduce wastewater generation.

Agenda No. 50.5

Proposed Nano-Fertilizer (Nano Urea/Nano DAP) Manufacturing Plant” With Production Capacity of 36500 KL located at L-3, L-2 (a), L-2 (b) & L-2 (c), Industrial Area Jasidih, Deoghar, Jharkhand by Indian Farmers Fertiliser Cooperative Limited (IFFCO) - Consideration of ToR

[Proposal No. IA/JH/IND3/422082/2023; File No. IA-J-11011/116/2023-IA-II(I)]

1. The proposal is for the ToR for preparation of EIA/EMP for Proposed Nano-Fertilizer (Nano Urea/Nano DAP) Manufacturing Plant” With Production Capacity of 36500 KL located at L-3, L-2 (a), L-2 (b) & L-2 (c), Industrial Area Jasidih, Deoghar, Jharkhand by Indian Farmers Fertiliser Cooperative Limited (IFFCO).

Annexure-III

List of the Expert Appraisal Committee (Industry-3) members participated during Video Conferencing (VC) meeting

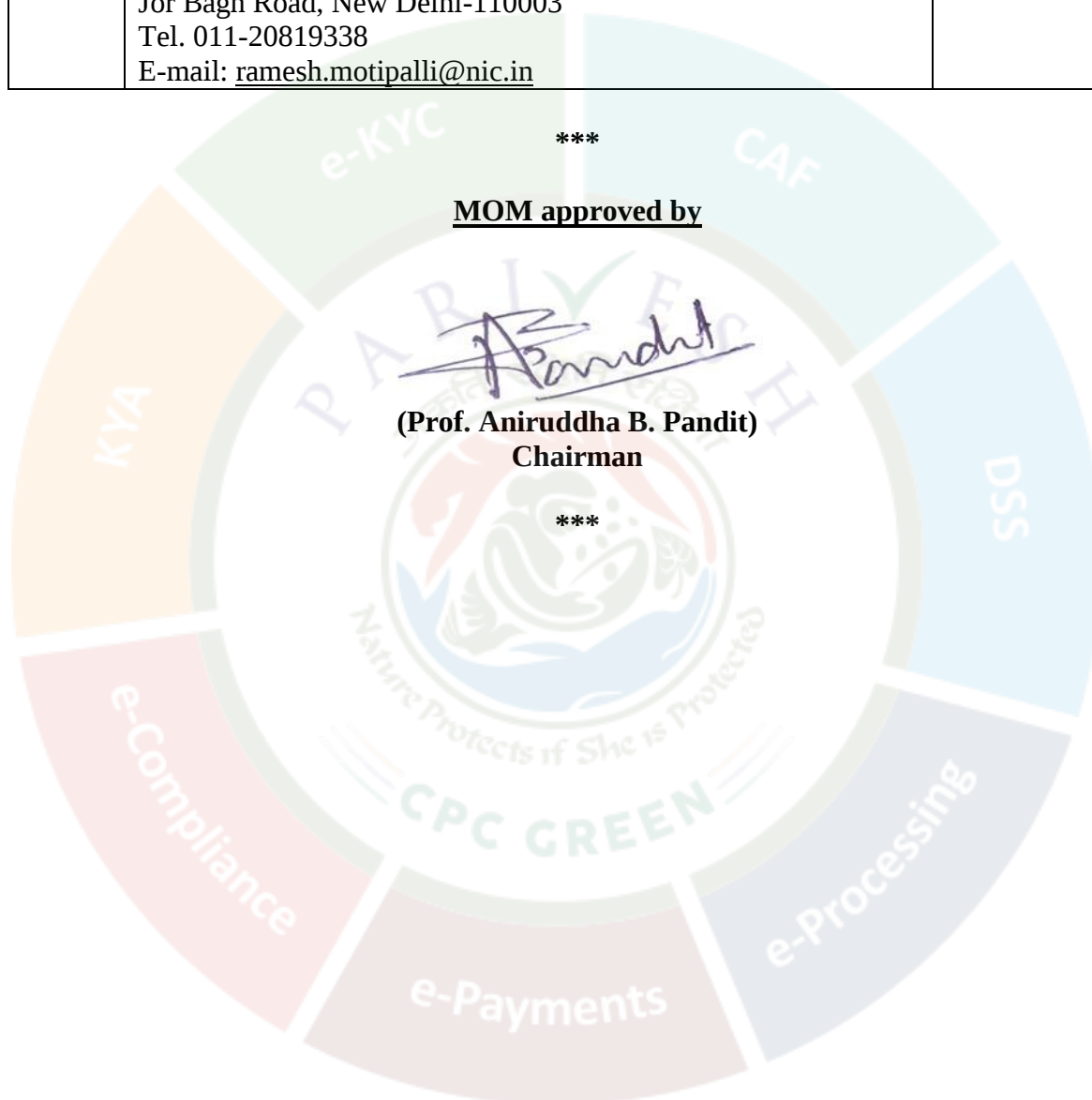
S. No.	Name of Member	Designation
1.	Prof. (Dr.) A.B. Pandit Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India Email: ab.pandit@ictmumbai.edu.in	Chairman
2.	Dr. Ashok Kumar Saxena, IFS Bungalow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member
3.	Prof. (Dr.) S. N. Upadhyay Research Professor (Hon.), Department of Chemical Engineering & Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi E-mail: snupadhyay.che@iitbhu.ac.in	Member
5.	Shri Santosh Gondhalkar 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
6.	Dr. Suresh Panwar House No.4, Gayateri Green Society, NH 58 Bypass, Kankerkhara, Meerut, Uttar Pradesh Email- spcpri@gmail.com	Member
7.	Shri Tukaram M Karne "SHREYAS ORNATE" F-1, 95-Tulasibagwale Colony, Sahakarnagar-2, PUNE: 411 009, Maharashtra E-mail: tmkarne@gmail.com	Member
8.	Shri Sanjay Bisht Scientist 'E', Room No. 517, Office of the Director General of Meteorology, Indian Meteorological Department, Musam Bhawan, Lodhi Road, New Delhi -110003 E-mail: sanjay.bist@imd.gov.in	Member
9.	Shri Dinabandhu Gouda Additional Director, DH IPC-I, Room No. 309A, Third Floor, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032 E-mail: dinabandhu.cpcb@nic.in	Member

10.	Dr. M. Ramesh Scientist 'E' Ministry of Environment, Forest and Climate Change Indira Paryavaran Bhawan, Room No. V-203, Vayu Wing, Jor Bagh Road, New Delhi-110003 Tel. 011-20819338 E-mail: ramesh.motipalli@nic.in	Member Secretary
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MOM approved by



(Prof. Aniruddha B. Pandit)
Chairman



**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-3 SECTOR)**

Dated: 29.05.2023

**MINUTES OF THE 51st EXPERT APPRAISAL COMMITTEE (INDUSTRY-3 SECTOR)
MEETING HELD ON 16th –17th MAY, 2023**

Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 through **Video Conferencing (VC)**

Time: 10:30 AM onwards

(i) Opening Remarks by the Chairman

Prof. (Dr.) A.B. Pandit, Chairman welcomed the Committee members and opened the EAC meeting for further deliberations.

(ii) Details of Agenda items by the Member Secretary

The Member Secretary apprised the Committee about the details of Agenda items to be discussed during this Expert Appraisal Committee (EAC) meeting.

(iii) Confirmation of Minutes of the 50th EAC Meeting of the EAC (Industry-3 Sector).

The EAC noted that the final minutes of the above meeting were issued after incorporating the comments offered by the members and approved by the Chairman. The EAC confirmed the MoM with the following modifications (50.4, 50.12) based on the request of the Project Proponents (PPs).

Agenda No. 50.4

Setting up a new Unit for Manufacturing of Agrochemicals with a Production Capacity 48290 MTA located at Plot No. D/3/21/2/1 Dahej III, GIDC Industrial Estate, Village Sambheti Vagra, District Bharuch, Gujarat by M/s Bharat Rasayan Limited - Consideration of EC

[Proposal No. IA/GJ/IND3/424990/2023; File No. IA-J-11011/25/2023-IA-II(I)]

1. The proposal was recommended by the EAC in its 50th Meeting held on 19th - 21st April, 2023 and the MoM were published on 2.5.2023. Subsequently, the PP vide e-mail dated 4.5.2023 requested the following modification in the MoM:

Reference of MOM	As per MOM	Modification Required	Remarks
Pg no. 32 of MoM	Production Capacity is mentioned as 48290 MTA	Production Capacity to be corrected as 42890 MTA	Typographical error and factual in nature
Pg no. 37 of MoM, Point no. 8	Industrial Effluent of 700 KLD (450 KLD high COD effluent & 250 KLD RO reject) shall be treated in stripper. 699 KLD effluent from stripper shall be subjected to MEE followed by ATFD. 625 KLD MEE condensate shall be sent to ETP and treated with 1469 KLD low COD effluent. 2254 KLD treated effluent shall be treated in ETP (P+S+T). 310 KLD effluent from ETP shall be sent to CETP, Dahej for further treatment & disposal into deep sea through u/g common effluent conveyance pipeline balance shall be subjected to MBR & RO. 1684 KLD RO permeate shall be recycled and to be used in cooling tower makeup and APCM purpose. Domestic effluent of 120 m ³ /day will be treated through Sewage Treatment Plant (STP) & treated water shall be mixed with industrial effluent. 2.	Industrial Effluent of 684 KLD (450 KLD high COD effluent & 234 KLD RO reject) shall be treated in stripper. 699 KLD effluent from stripper shall be subjected to MEE followed by ATFD. 625 KLD MEE condensate shall be sent to ETP and treated with 1469 KLD low COD effluent. 2134 KLD effluent shall be treated in ETP (P+S+T). 310 KLD effluent from ETP shall be sent to CETP, Dahej for further treatment & disposal into deep sea through u/g common effluent conveyance pipeline balance shall be subjected to MBR & RO. 1580 KLD RO permeate shall be recycled and to be used in cooling tower makeup purpose. Domestic effluent of 120 m ³ /day will be treated through Sewage Treatment Plant (STP) & treated water shall be used for greenbelt development & maintenance purpose	The EAC noted that based on its recommendation, thePP has revised the water balance, which has been incorporated in the specific condition vi on pg 49). The same may be incorporated in point no. 8 in the EC letter.

2. The EAC deliberated on the above and recommended the same.

Annexure-III

List of the Expert Appraisal Committee (Industry-3) members participated during Video Conferencing (VC) meeting

S. No.	Name of Member	Designation
1.	Prof. (Dr.) A.B. Pandit Vice Chancellor, Institute of Chemical Technology, Mumbai, Sir JC Bose Fellow, Government of India Email: ab.pandit@ictmumbai.edu.in	Chairman
2.	Dr. Ashok Kumar Saxena, IFS Bungalow No. 38, Sector-8A, Gandhinagar, Gujarat – 382008 E-mail: ashoksaxena1159@gmail.com	Member
3.	Prof. (Dr.) S. N. Upadhyay Research Professor (Hon.), Department of Chemical Engineering & Technology, Indian Institute of Technology (Banaras Hindu University), Varanasi E-mail: snupadhyay.che@iitbhu.ac.in	Member
4.	Shri Santosh Gondhalkar 'Shree' Apartment, Flat 401, Plot No. 22, Tukaram Society, Santnagar, Pune- 411009 E-mail: santoshgo@gmail.com	Member
5.	Dr. Suresh Panwar House No.4, Gayateri Green Society, NH 58 Bypass, Kankerkhara, Meerut, Uttar Pradesh Email-spcppri@gmail.com	Member
6.	Shri Tukaram M Karne "SHREYAS ORNATE" F-1, 95-Tulasibagwale Colony, Sahakarnagar-2, PUNE: 411 009, Maharashtra E-mail: tmkarne@gmail.com	Member
7.	Shri Dinabandhu Gouda Additional Director, DH IPC-I, Room No. 309A, Third Floor, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032 E-mail: dinabandhu.cpcb@nic.in	Member

8.	Dr. M. Ramesh Scientist 'E' Ministry of Environment, Forest and Climate Change Indira Paryavaran Bhawan, Room No. V-203, Vayu Wing, Jor Bagh Road, New Delhi-110003 Tel. 011-20819338 E-mail: ramesh.motipalli@nic.in	Member Secretary
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MOM approved by



(Prof. Aniruddha B. Pandit)
Chairman

