

PCL: EHS: EC :2024/ II/

Dated: 20.12.2024

Government of India

Ministry of Environment, Forest and Climate Chang

(IA-II Section)

Indira Parya varan Bhawan Jorbagh Road, New Delhi - 3

Ref. No.: F.No. IA-J-11011/332/2018- IA II(1) -dtd. 07.01.2020

SUB: STATUTORY COMPLIANCE BASED ON ENVIRONMENTAL CLEARANCE FOR THE EXPANSION OF OUR CHLOR ALKALI PLANT & ESTABLISHMENT OF OTHER PLANTS BY M/S PRIMO CHEMICALS LTD (Formerly known as PUNJAB ALKALIES & CHEMICALS LIMITED).

This refers to the conditions as indicated in the Environmental Clearance granted by Govt. of India (MoEF) Vide No. IA-J-11011/332/2018- IA II(I) dated. 07.01.2020 to our, we are, hereby, submitting the six-monthly compliance report for the period 01.04.2024 to 30.09.2024 for further necessary action, please.

The six-monthly compliance report has been uploaded on the Parvesh Portal of MoEF&CC and on the website of our unit.

It is further mentioned here that till date we have implemented the partial production capacity of caustic soda i.e. 500 TPD out of 800 TPD for which EC was obtained from MoEF&CC i.e we are manufacturing only 500 TPD of caustic soda and other allied products out of allowed capacity of 800 TPD.

The expansion on account of production capacity of our Caustic Soda has been expanded to 500 TPD against 800 TPD as allowed as per our EC referred above. After obtaining CTOs for other products i.e 35 MW Power plant, 100 TPD SBP & 50 TPD Aluminium Chloride Plant have been commissioned.

This is for your kind information, please.

Thanking you,

Yours faithfully,

FOR

(Munish Aggarwal)

S V P (O)

For PRIMO CHEMICALS LIMITED

(Formerly known as PUNJAB ALKALIES & CHEMICALS LIMITED)

CC:

Government of India

Ministry of Environment, Forest and Climate Chang

Integrated Regional Office, Bays No. 24-25, Dakshin Marg, Sector 31-A,

CHANDIGARH, PORTO CHEMICALS LIMITED

(FORMERLY KNOWN AS PUNJAB ALKALIES & CHEMICALS LIMITED)

WORKS: NANGAL-UNA ROAD, NAYA NANGAL-140126 DISTT. ROPAR, PUNJAB, INDIA

PHONE: 0188-275358,275386 EMAIL: INFO@PRIMOCHEMICALS.IN CIN: L24119CH1975PLC003607, WEBSITE: WWW.PRIMOCHEMICALS.IN

COMPLIANCE REPORT OF EC CONDITIONS FOR THE PERIOD 01.04.2023 TO 30.09.2023 PRODUCTION OF 500TPD OF CAUTIC SODA AND ALLIED PRODUCTS

EC compliance report

For Expansion of:

- 1. Chlor Alkali Plant from 99000 TPA to 264000 TPA.
- 2. Establishment of Flaker Plant.
- 3. Establishment of Stable Bleaching Powder Plant.
- 4. Establishment of Hydrogen peroxide Plant.
- 5. Establishment of Captive Power Plant.
- 6. Establishment of AlCl3 Plant as per EC Amendment

Sr. No.	EC Conditions /Recommendation	Compliance Status
A.	Specific Conditions:	
i	Solvent management shall be carried out as follows:	
a)	Reactor shall be connected to chilled brine condenser system.	Since we are not using any kind of Solvent, as such, there is no need to install chilled brine condenser system.
b)	Reactor and solvent handling pump shall have mechanical seals to prevent leakages.	There is no reactor in which reaction is carried out and there is no use of any solvent for manufacturing of products for which EC has been obtained.
c)	The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.	No such condenser for recovery of any material has been installed in our unit.
d)	Solvents shall be stored in a separate space specified with all safety measures.	There is no use of any kind of solvent. How ever, only FO is used as fuel in the existing boilers, which is properly stored as per PESO guidelines for direct consumption in our existing Boilers.
e)	Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.	Proper earthing is provided as per PESO guidelines for storage of FO.
f)	Entire plant shall be flaming proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	Entire plant wherever LDO/FO storage, H2-building and Cell House are flame proof. The storage tank of LDO/FO is provided with breather valve.
g)	All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.	There is no storage of solvents as there is no use of solvents for the products for which EC has been obtained.
II	Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be	We have installed an ETP consisting of collection tank, neutralization tank, equalization tank, flash mixer, clarifier, MGF, ACF, DMF, RO feed tank, RO Plant, evaporator and 2 no. sludge drying beds.

treated in ETP/RO to meet the prescribed standards.

RO permeate, evaporator condensate and steam condensate is collected in a tank for further using in the cooling tower as make up water.

	Statutory compliance	
	(i) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Reference to the EC Number: IA-January 11011/332/2018- IA II(I) — dated. 07.01.2020 and subsequently after obtaining CTE from Punjak Pollution Control Board (CTE Number CTE/Exp/RPN/2021/16314815) we have completed following projects:
		1. Caustic Soda Expansion from 300 TPD to 500 TPD, Commissioning of 100 TPD Stable Bleaching Powder Plant, Commissioning of 35 MW Captive Power Plant, 200 TPD Flaker Plant and 50 TPI Aluminum Chloride Plant and CTO obtained from PPCB/PBIP having details:
		i.) CTO (water)/varied/PBIP/RPR/2023/ 2309721444 dt. 29.11.2023 valid till 31.03.2025 CTO(Air))/varied/ PBIP/RPR/2023/ 2309247558 dtd.29.11.2023 valid ti 31.03.2025
		2 The work for the said projects: i.e Caustic Soda Expansion from 300 TPD to 500 TPD, 100 TPD Stable Bleaching Powder Plant, 35 MW Power plant, 50 TPD Aluminium Chloride Plant an 100 TPD Flaker Plant have been completed. The total investment for above projects is = RS 365.14 Cr.
	(ii) The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	Authorization obtained under the HWR Rules,2016, NHWM/Auth/PBIP/RPN/2024/2409449323 28.10.2024 which is valid up to 31.03.2025.
	(iii) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as	ambit of the Manufacture, Storage and Import

	amended time to time. All transportation of Hazardous	per the provisions of the said rules. Also, the
	Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	approval of Chief Inspectorate of Factories (Factory License) and Chief Controller of Explosives have been obtained.
ı.	Air quality monitoring and preservation	
	(i) The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Complied as the industry has installed OCEMS on the stack of HCl Plant and Sodium Hypo Plant Flaker Furnace and at Power Plant and for monitoring of parameters like HCl mist (vapours), Chlorine gas, PM, Sox Nox, Temperature, which are connected with the server of PPCB/CPCB. The unreacted Cl2 gas (if any) from SBP plant is neutralized at our existing sodium hypo plant /neutralizer.
	(ii) The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Complied with as we have installed 50 no. of Cl2 sensors to monitor the leakages of chlorine gas in the plant area, which can detect chlorine to the level of 100.0 $\mu g/Nm^3$. (0.10 mg/Nm³).
	(iii) The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of120°each), covering upwind and downwind directions.	We have installed three HVS at different locations inside the industrial premises to monitor the ambient air quality, which are being operated on regular basis to monitor PM, Chlorine and HCl-Vapours in ambient air. In addition, PPCB has installed RDS to monitor PM, SO ₂ , chlorine and NO _x in ambient air in the premises of our unit. This data is being uploaded by the PPCB on its website.
	(iv) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	The commissioning activity of the Power Plant is
	(v) Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions	Common Salt is the raw material, which is stored in a shed. Coal as a fuel is used as fuel in the Captive-power plant, which is stored in a shed to rule out the possibility of generation of any kind of fugitive

Cha Road

		emissions. To control dust pollution the water sprinkling system is provided
	(vi) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July 2010 and amended from time to time shall be followed.	Our is a Caustic-Chlor plant for which industry specific effluent/emission standards have been laid down by the MoEF&CC, which are being complied with in letter and spirit.
	(vii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November 2009 shall be complied with.	Compliance of the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November 2009 is being ensured in letter and spirit.
III.	Water quality monitoring and preservation	
	(i) The project proponent shall provide online continuous monitoring of effluent; the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	The industry has installed Online continuous Emission monitoring system (OCEMS) at the pipeline through which Treated Wastewater is being Re-used back into the processes and data (i.e. ph., TSS, COD, BOD & Flow) of the same is being transmitted to the portal of CPCB and PPCB.
	(ii) As already committed by the project proponent, Zero Liquid Discharge shall be ensured, and no waste/treated water shall be discharged outside the premises.	Complied. We are a ZLD plant and are maintaining our ZLD status and no waste/treated water is being discharged outside the premises.
	(iii) Total freshwater requirement shall not exceed 11936 cum/day, proposed to be met from Irrigation Department, Government of Punjab. Prior permission in this regard shall be obtained from the concerned regulatory authority.	Only surface water from river Sutlej is taken to meet the water supply demand and permission in this regard has been obtained from Department of Water Resources. A copy of the said permission is attached herewith.
	(iv) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.	To collect the storm water, a garland drain has been constructed. The process effluent/ wastewater is conveyed to collection tank through pipeline, to rule out the possibility of mixing of process water/wastewater from surface run-off.
	(v) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	site has been identified & approval process is
	(vi) The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.	and stacks of adequate heights.

Ta Road

		IE1/IE2 • Installation of Energy efficient agitators for
		• IE3/IE4 Motors Installation in place of existing
		Replacement of V belts with composite V belt with vacuum pump
		 Replacement of conventional light with LED light in plant area and offices
		Air compressors
		cooling water pump Installation of variable frequency drive (VFD) in
		Installation of variable frequency drive (VFD) in
	preferably be LED based.	been provided. Use of hydrogen as fuel in boilers instead of petroleum fuels
	(i)The energy sources for lighting purposes shall	Complied with as LED based lighting system has
v.	dB(A) during daytime and 70 dB(A) during nighttime. Energy Conservation measures	within the prescribed standards.
	(iii)The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75	Noise levels at the prominent places of the unit are being monitored at regular basis and are found
	generation.	Report of the same is enclosed.
	noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise	control measures including acoustics.
	(ii) The overall noise levels in and around the plant area shall be kept well within the standards by providing	area is well within the standards by providing noise
	controlling the noise pollution.	The overall noise levels in and around the plant
	(i) Acoustic enclosure shall be provided to DG set for	Proper acoustic enclosures have been provided to DG set for controlling the sound pressure level.
V.	Noise monitoring and prevention	
		NABL Lab (3 rd party) has been done and report of the same is enclosed.
		While stack monitoring/testing of DG sets from
		The stack monitoring of DG Sets is not required as running hours are negligible.

Ma Road

Hazardous chemicals are being stored in the (i)Hazardous chemicals shall be stored in tanks, tank specified tanks, which are provided with necessary farms, drums, carboys etc. Flame Arrester shall be provided on tank farm and the solvent transfer through flame arrester system. pumps. The brine sludge is stored in the earmarked area. (ii) Process organic residue and spent carbon, if any, Possibility is being explored to manufacture bricks shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the as per SOP framed by the CPCB. TSDF. The ETP sludge is given to the operator of the common TSDF and Used oil is given to the registered recycler. Efforts are being made on regular basis to minimise (iii) The company shall undertake waste minimization the waste generation by recycling and reuse etc. measures as below: -(a) Metering and control of quantities of active (a) Water meters installed to monitor ingredients to minimize waste. consumption of fresh water. (b)Reuse of by-products from the process as raw (b) Reuse of treated effluent (permeate) in the materials or as raw material process (i.e in cooling tower). Substitutes in other processes. (c) To minimize spillage automated filling (c) Use of automated filling to minimize spillage. scheme is under process. (d)Use of Close Feed system into batch reactors. (d) Use of condensate water in the process. (e) Venting equipment through vapour recovery system. (e) Extraction/recovery & Use of brine from (f) Use of high-pressure hoses for equipment clearing to decanter sludge in the process. reduce wastewater generation. equipment High-pressure hoses for clearing are in use. **Green Belt** VII. (i). The green belt of 5-10 m width shall be developed in Complied with: At present, green belt has been provided in 33 % of more than 33% of the total project area, mainly along the total plant/project Area of 3,26,174 m2. the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be As on date over 33874 trees have been planted till as per the CPCB guidelines in consultation with the 30.09.2024. State Forest Department. Safety, Public hearing and Human health issues VIII Hazard Identification and Risk Assessment (HIRA) (i) Emergency preparedness plan based on the Hazard and Disaster Management Plan are already in identification and Risk Assessment (HIRA) and Disaster place. We have already submitted copies of the on-Management Plan shall be implemented. site emergency plan, off-site emergency plan and

		Disaster Management Plan to the Regional Office of MoEF&CC at Chandigarh.
	(ii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Adequate Firefighting system is available along with fire hydrants, extinguishers etc., duly approved by Third party.
	(iii) The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Complied with. All the PPE have been issued to individual employee as per Factory Act,1948 and all the workers are only allowed in the working area with Personal Protection Equipment (PPE) as per the norms of Factory Act.
	(iv) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Preemployment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Time to time training is being imparted to the workers regarding safety and health aspects. Their pre-employment medical check-up and routine medical check-up is mandatory. Accordingly medical check-up of all employees is carried out once in a year and those working in hazardous areas are covered twice in a year.
	(v) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied with as all the requisite facilities for the labour deployed in construction activities, are provided.
	(vi) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied with as Occupational health surveillance of the workers is being done on a regular basis and records in this regard is being maintained as per the Factories Act, 1948.
	(vii) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.	Complied with as there is adequate parking space is available in the premises of the unit.
IX.	Corporate Environment Responsibility	
	(i) As proposed, Rs.8 Crore shall be allocated for Corporate Environment Responsibility (CER). The CER plan shall be implemented during the plant construction stage and before commissioning of the project.	for which CER spending comes out to be Rs.2.35 Crore on pro-rata basis (i.e. Rs.8.00 Crore has to be spent on CER for project worth Rs.1240 Crore against which Rs.2.39 Crore has been spent on CE activities.
	(ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for 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. The	Complied as the company has prepare environmental policy, which has been dul approved by the Board of Directors. This polic contains SOPs for proper checks and balances and to bring into focus the environmental concerns.

Environment policy duly signed by competent company shall have defined system of reporting authority is attached. infringements/deviation/violation Norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MOEF & CC as a part of six-monthly report. Environmental Management Cell has been set up (iii) A separate Environmental Cell both at the project both at HO and site under the control of Sr. and company head quarter level, with qualified personnel shall be set up under the control of senior Executives of the company. Executive, who will directly to the head of the A) AT HO: organization. 1. Sr. Vice President 2. Chief Financial Officer B) AT SITE Sr. Vice President (Operation) 2. GM (Works) 3. GM (Projects) 4. DM (Env. & Pollution Control) Agreed & following has been completed in current for implementing EMP (iv) Action plan environmental conditions along with responsibility year matrix of the company shall be prepared and shall be Soil: duly approved by competent authority. The year wise funds earmarked for environmental protection Lifting of MEE Sludge i) measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress ii) **Plantation** of implementation of action plan shall be reported to Air: the Ministry/Regional Office along with the Six-Installation of APCD as ESP, bag filters at Monthly Compliance Report. iii) crushers & Silo in PP Covering of coal conveyer belts in PP iv) Installation coal shed & showers in PP v) Installation of APCD as cyclone & bag filters vi) at in Flaker boiler Covering of husk conveyer belts in flaker vii) plant Installation of 10 feet sheets around flaker viii) husk storage. Installation alkali scrubber as APCD in AlCl3 ix) plant. Cost of running OCEMS x) Quarterly 3rd party stack analysis. xi)

		Water: xii) Running of RO plant which include cost of electricity, cost of steam, cost of chemicals, manpower cost & maintenance cost. xiii) Pumping of septic tank water to plantation xiv) Rainwater harvesting xv) Lifting of used oils. xvi) Quarterly 3rd party analysis of piezometers, ETP O/L, drinking water, & ground waters.
		xvii) Cost of running OCEMS
		xviii) Environment consultancy fees on monthly basis
		xix) Environment audit and Environment statement.
	(v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Compliance of this is ensured. Regular environmental audit from third party is being got done.
X.	Miscellaneous	
	(i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Complied with: An advertisement was published in two newspapers on 12.01.2020 regarding the EC granted by the MoEF&CC was published.
	(ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayat 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	Complied with
	(iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied: with: Half yearly compliance report of EC conditions is being prepared and submitted to the MoEF&CC/PPCB on regular basis.
	(iv) The project proponent shall monitor the criteria pollutants level namely, PM-10, SO2, NOx lambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the	inside the industrial premises to monitor the cambient air quality, which are being operated on

ma Road

same at a convenient location for disclosure to the public and put on the website of the company.	regular basis to monitor PM, chlorine and HCl-mist in ambient air if any.
	In addition, PPCB has installed RDS to monitor PM, SO_2 , chlorine and NO_x in ambient air in the premises of our unit. This data is being uploaded by the PPCB on its website.
	The data for disclosure to the public has been displayed at a convenient location at the Factory Main Gate.
(v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied as Half yearly compliance report of EC conditions is being prepared and submitted to the MoEF&CC/PPCB and same was uploaded on the company's website and also submitted on MoEF Portal (parivesh).
(vi) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied as Environmental statement in Form-V is being prepared every year and submitted to the PPCB and same was uploaded on the company's website.
(vii) The project proponent 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, commencing the land development work and start of production operation by the project.	Complied.
(viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	All PPCB Directions complied.
(ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Complied.
(x) No further expansion or modifications in the plant shall be carried out without prior approval of the	Noted to comply.
Ministry of Environment, Forests and Climate Change. (xi) The Regional Office of this Ministry shall monitor	Complied
compliance of the stipulated conditions. The project	Complied
authorities should extend full cooperation to the officer	Proper cooperation was provided and will be
(s) of the Regional Office by furnishing the requisite	during the visits.
data / information/monitoring reports	
Naya Naya	