Office Dispatch No.: PBIP/2023/3311 **Date:** 29/11/2023

To

NAVEEN CHOPRA
NANGAL UNA ROAD
RUPNAGAR, ANANDPUR SAHIB - 140126

Subject:- Grant Varied 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981 for discharge of emissions arising out of premises.

With reference to your application for obtaining Varied 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act,1981, you are, hereby, authorized to operate an industrial unit for discharge of the emission(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate.

1. Particulars of Consent to Operate under Air Act,1981 granted to the Industry:

PIN	19125175
Application No.:	2309247558
Date of Issue:	29-Nov-2023
Date of Expiry:	31-Mar-2025
Certificate Type:	Varied
Certificate No:	CTOA/Varied/PBIP/RPR/2023/2309247558

2. Particulars of the Industry:

Name & Designation of the Applicant:	NAVEEN CHOPRA, (Managing Director)
Name of Business Entity	PUNJAB ALKALIES & CHEMICALS LIMITED PUNJAB ALKALIES & CHEMICALS LIMITED
Name of the Project/Unit:	PRIMO CHEMICALS LIMITED , FORMERLY KNOWN AS
Address of Project/Unit:	NANGAL UNA ROAD , NAYA NANGAL , Nangal , Rupnagar
Capital Investment of the Industry(in lakhs):	63250.223
Category of Industry:	Red
Type of Industry:	1041 - Chlor Alkali
Scale of the Industry:	Large - > Rs. 50 Crore
Office District:	Roopnagar
Consent Fee Details:	Rs. 28,20,000/- vide UTR no. AUBLR62023031514540684 dated 15.03.2023 under the Water Act, 1974. Rs. 28,20,000/- vide UTR no. AUBLR62023031514521935 dated 15.03.2023 under the Air Act, 1981.
Raw Materials (Name with quantity per day):	Industrial Salt @ 262350 MTA, Soda Ash @ 660 MTA, Barium Carbonate @ 1320 MTA, Sodium Bi-Sulphite @ 247 MTA, Flocal @ 2.5 MTA, Alpha Cellulose @ 7.8 MTA,

	Sulphuric Acid @ 3268 MTA, Rice Husk @ 51800 MTA, Coal @ 165000 MTA, Caustic Soda For SBP Plant @ 660 MTA, Liquid Chlorine For SBP Plant @ 14850 MTA, Aluminium For Aluminium Chloride Plant @ 3432 MTA, Chlorine Gas For Aluminium Chloride Plant @ 13365 MTA.
Products (Name with quantity per day):	Caustic Soda @ 165000 MT/Year, Liquid Chlorine @ 146190 MT/Year, Hydrogen Gas @ 4125 MT/Year, Stable Bleaching Powder (SBP) @ 33000 MT/Year, Aluminium Chloride @ 16500 MT/Year, Caustic Soda Flakes @ 66000 MT/Year, Captive Power Plant (Electricity) @ 35 MW
By Products, if any (Name with quantity per day) :	Sodium Hypo Chlorite @ 3333 MT/Year, Hydrochloric Acid @ 66,000 MT/Year, Dilute Sulphuric Acid @ 3500 MT/Annum & 5% Aluminium Chloride Solution @ 150 MT/Year
Details of the machinery and processes:	As per application form.
Sources of emissions and type of pollutants:	Boilers: Thermax Unit I – 5 TPH - SPM Sterling Unit II - 10TPH - SPM Husk Unit II – 8 TPH - SPM Power Plant – 150 TPH - SPM Process/ Furnace: Hypo Plant Unit I – Chlorine Hypo Plant Unit II – Chlorine HCl Furnace I Unit II – Acid Mist HCl Furnace II Unit II – Acid Mist AlCl3 Plant – Chlorine Furnace Flaker Plant – SPM DG Sets: 500 KVA x 3, 515 KVA x 1 - SPM, SOx, NOx etc.
Mode of disposal of emissions with stack height:	Boilers: Thermax Unit I – 5 TPH – 40 m AGL Sterling Unit II - 10TPH – 40 m AGL Husk Unit II – 8 TPH – 30 m AGL Power Plant – 150 TPH – 93 m AGL Process/ Furnace: Hypo Plant Unit I – 15 m AGL Hypo Plant Unit II – 15 m AGL HCl Furnace I Unit II – 25 m AGL HCl Furnace II Unit II – 25 m AGL AlCl3 Plant – 22.5 m AGL Furnace Flaker Plant – 33 m AGL DG Sets: 500 KVA x 3, 515 KVA x 1 - Stack of height as per following formula: H = h+0.2 (KVA)0.5 where h = height of the building in meters where the generator set is installed
Quantity of fuel required in TPD:	Boilers: Thermax Unit I – 5 TPH – Hydrogen @ 1.591 MTD/ FO @ 0.332 MTD Sterling Unit II - 10TPH – Hydrogen @ 3.182 MTD Husk Unit II – 8 TPH – Rice Husk @ 27 MTD Power Plant – 150 TPH – Rice Husk/ Coal @ 197000 MTA Process/ Furnace: HCl Furnace I Unit II – Hydrogen @ 1.356 MTD/ Chlorine @ 36.185 MTD HCl Furnace II Unit II – Hydrogen @ 1.356 MTD/ Chlorine @ 36.185 MTD Furnace Flaker Plant – 80 Lakh Kcal/hr - Rice Husk @ 72 MTD DG Sets: 500 KVA x 3, 515 KVA x 1 - HSD @ 1000 ltr/ day.
Type of Air Pollution Control Devices to be installed:	Boilers: Thermax Unit I – 5 TPH – Stack of adequate height Sterling Unit II - 10TPH – Stack of adequate height Husk Unit II – 8 TPH – Bag Filter House Power Plant – 150 TPH – ESP Process: Hypo Plant Unit I – Alkali Scrubber Hypo Plant Unit II – Alkali Scrubber HCl Furnace I Unit II – Wet Scrubber HCl Furnace II Unit II – Wet Scrubber AlCl3 Plant – Alkali Scrubber Furnace Flaker Plant – Bag Filter House DG Sets: 500 KVA x 3, 515 KVA x 1 - Canopies Provided
Standard to be achieved under Air(Prevention & Control of Pollution) Act, 1981:	As prescribed by the CPCB/MoEF&CC/PPCB, from time to time.

Environmental Engineer (PBIP)
for & on behalf of
Chief Environmental Engineer (PBIP)

Endst. No. Dated:

A copy of the above is forwarded to the following for information and necessary action please:

Senior Environmental Engineer, Zonal Office-I, Patiala.

Environmental Engineer, Regional Office, Rupnagar is requested to ensure compliance of the decisions of the personal hearing dated 21.11.2023.

Environmental Engineer (PBIP)
for & on behalf of
Chief Environmental Engineer (PBIP)

A. GENERAL CONDITIONS

1. The industry shall apply for consent of the Board as required under the provision of Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981 & Authorization under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016, two months before the commissioning of the industry.

2. The industry shall provide adequate arrangements for fighting the accidental leakages/ discharge of any air pollutant/gas/liquids from the vessels, mechanical equipments etc. which are likely to cause environmental pollution.

3. The Industry shall apply for further extension in the validity of the CTE atleast two months before the expiry of this CTE, if applicable.

4. The industry shall comply with any other conditions laid down or directions issued by the Board under the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act,1981 from time to time.

5. The project has been approved by the Board from pollution angle and the industry shall obtain the approval of site from other concerned departments, if need be.

6. The industry shall get its building plans approved under the provisions of section 3-A of Punjab Factory Rules, 1952

7. The industry shall put up display board indicating the Environment data in the prescribed format at the main entrance gate

8. The industry shall provide port-holes, platforms and/or other necessary facilities as may be required for collecting samples of emissions from any chimney, flue or duct or any other outlets

Specifications of the port-holes shall be as under:

i) The sampling ports shall be provided atleast 8 times chimney diameter downstream and 2 times upstream from the flow disturbance. For a rectangular cross section the equivalent diameter (De) shall be calculated from the following equation to determine upstream, downstream distance:-

$$De = 2 LW / (L+W)$$

Where L= length in mts. W= Width in mts.

ii) The sampling port shall be 7 to 10 cm in diameter

9. The industry shall discharge all gases through a stack of minimum height as specified in the following standards laid down by the Board.

(i) Stack height for boiler plants

S.No.	Boiler with Steam Generating Capacity	Stack heights
1	Less than 2 ton/hr	9 meters or 2.5 times the height of neighboring building which ever is more
2	More than 2 ton/hr to 5 ton/hr	12 meters
3	More than 5 ton/hr to 10 ton/hr	15 meters
4	More than 10 ton/hr to 15 ton/hr	18 meters
5	More than 15 ton/hr to 20 ton/hr	21 meters
6	More than 20 ton/hr to 25 ton/hr	24 meters

7	More than 25 ton/hr to 30 ton/hr	27 meters
8	More than 30 ton/hr	30 meters or using the formula H = 14 Qg0.3or H = 74 (Qp)0.24 Where Qg = Quantity of SO2 in Kg/hr. Qp = Quantity of particulate matter in Ton/day.

Note : Minimum Stack height in all cases shall be 9.0 mtr. or as calculated from relevant formula whichever is more.

(ii) For industrial furnaces and kilns, the criteria for selection of stack height would be based on fuel used for the corresponding steam generation.

(iii) Stack height for diesel generating sets:

Capacity of diesel generating set		Height of the Stack
0-50 KVA	Height of the building	+ 1.5 mt
50-100 KVA	-do-	+ 2.0 mt
100-150 KVA	-do-	+ 2.5 mt
150-200 KVA	-do-	+ 3.0 mt
200-250 KVA	-do-	+ 3.5 mt
250-300 KVA	-do-	+ 3.5 mt

For higher KVA rating stack height H (in meter) shall be worked out according to the formula:

$$H = h+0.2 (KVA)0.5$$

where h = height of the building in meters where the generator set is installed.

10. The industry shall put up canopy on its DG sets and also provide stack of adequate height as per norms prescribed by the Board and shall ensure the compliance of instructions issued by the Board vide office order no. Admin./SA-2/F.No.783/2011/448 dated 8/6/2010.

11. The industry shall provide flow meters at the source of water supply, at the outlet of effluent treatment plant and shall maintain the record of the daily reading and submit the same to the concerned Regional Office by the 5th day of the following month.

12. The industry shall make necessary arrangements for the monitoring of stack emissions and shall get its emissions analyzed from lab approved / authorized by the Board:-

(i) Once in Year for Small Scale Industries.

(ii) Twice/thrice/four time in a Year for Large/Medium Scale Industries

13. The pollution control devices shall be interlocked with the manufacturing process of the industry.

14. The Board reserves the right to revoke this "consent to establish" (NOC) at any time, in case the industry is found violating any of the conditions of this "consent to establish" and/or the provisions of Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 as amended from time to time

15. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per acre along the boundary of the industrial premises.

16. The issuance of this consent does not convey any property right in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local Laws or Regulations.

17. The consent does not authorize or approve the construction of any physical structures or facilities for undertaking of any work in any natural watercourse.

18. Nothing in this NOC shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected under this or any other Act.

19. The diversion or bye pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this consent is prohibited except.

(i) Where unavoidable to prevent loss of life or some property damage or

(ii) Where excessive storm drainage or run off would damage facilities necessary for compliance with terms and conditions of this consent. The applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.

20. The industry shall ensure that no water pollution problem is created in the area due to discharge of effluents from its industrial premises.

21. The industry shall comply with the conditions imposed if any by the SEIAA/MOEF in the Environmental Clearance granted to it as required under EIA notification dated 14/9/06.

22. The industry shall earmark a land within their premises for disposal of boiler ash in an environmentally sound manner, and / or the industry shall make necessary arrangements for proper disposal of fuel ash in a scientific manner and shall maintain proper record for the same, if applicable.

23. The industry shall obtain and submit Insurance cover as required under the Public Liability Insurance Act,1991.

24. The industry shall submit a site emergency plan approved by the Chief Inspector of Factories, Punjab as applicable

25. The industry shall provide proper and adequate air pollution control arrangements for control emission from its coal/fuel handling area, if applicable.

26. The Industry shall comply with the code of practice as notified by the Government / Board for the type of Industries where the siting guidelines / code of practice have been notified

27. Solids, sludge, filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed off in such a manner so as to prevent any pollutants from such materials from entering into natural water

28. The industry shall submit a detailed plan showing therein,the distribution system for conveying wastewaters for application on land for irrigation along with the crop pattern to be adopted throughout the year

29. The industry shall not irrigate the vegetable crops with the treated effluents which are used/ consumed as raw.

30. The industry shall ensure that its production capacity & quantity of trade effluent do not exceed the quantity mentioned in the NOC and shall not carry out any expansion without the prior permission/NOC of the Board.

31. All amendments/revisions made by the Board in the emission/stack height standards shall be applicable to the industry from the date of such amendments/revisions.

32. The industry shall not cause any nuisance/traffic hazard in vicinity of the area.

33. The industry shall maintain the following record to the satisfaction of the Board :-

(i) Log books for running of air pollution control devices or pumps/motors used for it.

(ii) Register showing the result of various tests conducted by the industry for monitoring of stack emissions and ambient air.

(iii) Register showing the stock of absorbents and other chemicals to be used for scrubbers.

34. The industry shall ensure that there will not be significant visible dust emissions beyond the property line.

35. The industry shall establish sufficient number of piezometer wells in consultation with the concerned Regional Office, of the Board to monitor the impact on the Ground Water Quantity due to the industrial operations, if applicable.

36. The industry shall provide adequate and appropriate air pollution control devices to contain emissions from handling, transportation and processing of raw material & product of the industry

Environmental Engineer (PBIP)
for & on behalf of
Chief Environmental Engineer (PBIP)

B. SPECIAL CONDITIONS

1. The industry shall ensure time-bound completion of the activities as per the timelines proposed by it and submit progress report to the Regional Office on monthly basis.

2. The industry shall install Fugitive Emission Management System with Water Spray/ Misting Capability on boundary of coal loading/ unloading section(s), within 3 months and submit compliance to the Board.

3. The industry shall ensure that the APCDs & Suction Hoods installed with the Aluminium Chloride Plant shall always remain operable during plant operation to avoid any fugitive emissions. For the same purpose, the industry shall provide/ connect the power source of APCDs & Suction Hoods with a DG Set equipped with auto-changeover facility within 3 months.

4. The industry shall explore the possibility of installation of suction hood (connected to APCD) over the uncovered part of the Open Furnace installed in the Aluminium Chloride Plant.

5. The industry shall ensure compliance of the provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and ensure to store its hazardous wastes generated from different manufacturing activities/ otherwise, within its premises in an environmentally sound manner as well as regular lifting of hazardous waste, as per provisions of the said Rules.

6. The industry shall utilize treated effluent from the septic tank for plantation purpose only.

7. The industry will not emit black smoke from its stacks under any circumstances.

8. The industry will operate and maintain its pollution control devices/ plants, regularly and efficiently, so as to achieve the effluent standards, consistently as prescribed by the Board/ MoEF&CC from time to time and maintain records regarding operation of the same.

9. The industry will not discharge any of its wastewater into any drain/river/nallah/choe/inland surface water under any circumstances.

10. The industry shall comply with the Hazardous Waste Management, Handling & Transboundary Movement) Rules, 2016.

11. The industry shall obtain permission from Punjab Pollution Control Board before disposing off the brine sludge.

12. The industry shall promote use of alternatives of single use plastics (SUP) and awareness to discourage use of plastic, through their Corporate Environment Responsibility (CER) activities.

13. The industry shall ensure that there are no usages of single use plastic- thermocol disposable items such as water bottles / water pouches/water cups, plates, forks, spoons, straw etc. and single use decorating material made of plastic-thermocol or any other non-biodegradable material in the premises.

14. The industry shall properly handle and manage the solid wastes as per the provisions of the Solid Waste Management Rules 2016 and ensure that the solid waste is segregated & disposed of in an environmentally sound manner.

15. The industry has been approved by the Board from pollution angle and the industry shall obtain the statutory clearances / permissions from all other concerned departments.

16. The industry shall ensure that the activities of unit does not create any nuisance in the surrounding areas and no public complaints are received.

17. The Consent is being issued to the industry based upon the documents/ information/ undertakings submitted by it alongwith the online application form. The Board would be at liberty to take penal action against the industry and its responsible/ concerned person(s) in case information/document is detected as incorrect/false/misleading at any point of time.

18. The sole responsibility for any wrong information/ declaration and/or any litigation/loss arising due to grant of this Consent to Establish shall be of the industry/ project proponent and its all the responsible/ concerned person(s).

19. The Punjab Pollution Control Board shall not be responsible for any financial liability and/ or any other liability of the project proponent, due to grant of this Consent to Operate.

20. The Punjab Pollution Control Board shall have the liberty to revoke this consent & take penal action against the industry/project proponent and its responsible/ concerned person(s), in case any information/document provided by the industry/ project proponent is found to be incorrect/false/misleading at any point of time.

-Sd-

Environmental Engineer (PBIP)
for & on behalf of
Chief Environmental Engineer (PBIP)