



PUNJAB POLLUTION CONTROL BOARD

Zonal Office-1, Vatavaran Bhawan, Nabha Road, Patiala - 147001

Website:- www.ppcb.gov.in

Office Dispatch No : Registered/Speed Post Date:
Industry Registration ID: R14RPN1803536 Application No : 16314815

To,
Mps Walia
Pacl Nangal Una Road Naya Nangal
Nangal,Rupnagar-140126

Subject: Grant of "Consent to Establish"(NOC) for Expansion of an existing industrial unit u/s 25 of Water (Prevention & Control of Pollution) Act, 1974 and u/s 21 of Air (Prevention & Control of Pollution) Act, 1981.

With reference to your application for obtaining 'Consent to Establish'(NOC) for Expansion of an existing industrial plant u/s 25 of Water (Prevention & Control of Pollution) Act, 1974 and u/s 21 of Air (Prevention & Control of Pollution) Act, 1981, you are, hereby, permitted to expand the existing industrial unit to discharge the effluent(s) & emission(s) arising out of your premises subject to the Terms and Conditions as specified in this Certificate.

1. Particulars of Consent to Establish (NOC) for Expansion granted to the Industry

Certificate No.	CTE/Exp/RPN/2021/16314815
Date of issue :	25/10/2021
Date of expiry :	12/07/2022
Certificate Type :	Expansion
Previous CTE/CTO No. & Validity :	CTOW/Varied/RPN/2020/11808036 From:01/09/2020 To:31/03/2021

2. Particulars of the Industry

Name & Designation of the Applicant	, ()
Address of Industrial premises	Punjab Alkalies And Chemicals Limited, Naya Nangal , Anandpur Sahib,Rupnagar-140126
Existing Capital investment of the industry	24766.713 lakhs
Capital investment for Expansion Project	19800 lakhs
Category of Industry	Red
Type of Industry	1041-Chlor Alkali
Scale of the Industry	Large
Office District	Rupnagar
Consent Fee Details	Rs. 144000/- vide R. no. SBIN221176183459 dated 25.06.2021 and Rs. 72000 vide UTR no. SBIN221187117436 dated 06.07.2021

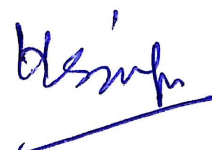
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Punjab Alkalies And Chemicals Limited,Naya Nangal ,Anandpur Sahib,Rupnagar,140126

Page1

Raw Materials (Name with quantity per day)	<p>Existing : SALT @ 133947.113 MT/Year, SODA ASH @ 277.5 MT/Year, BARIUM CARBONATE @ 466.56 MT/Year, SBS @ 93.13 MT/Year, FLOCAL @ 1361.5 Kg/Year</p> <p>Proposed : COAL @ 165000 MT/Year, HUSK @ 32000 MT/Year, WATER @ 225 m³/h, HYDRATED LIME @ 24090 MT/Year, CAUSTIC SODA @ 660 MT/Year, LIQUID CHLORINE @ 14850 MT/Year, Steam @ 45 MTD, SALT FOR PROPOSED CAUSTIC SODA LYE EXPANSION (FROM EXISTING 300 TPD TO 500 TPD) @ 104940 MT/Year, SODA ASH FOR PROPOSED CAUSTIC SODA LYE EXPANSION (FROM EXISTING 300 TPD TO 500 TPD) @ 264 MT/Year</p>
Products (Name with quantity per day)	<p>Existing : CAUSTIC SODA LYE @ 99000 MT/Year, CHLORINE GAS @ 87714 MT/Year, HYDROGEN GAS @ 2475 MT/Year</p> <p>Proposed : CAUSTIC SODA LYE @ 66000 MT/Year, Stable bleaching powder (SBP) @ 33000 MT/Year, Power Plant @ 35 MW, Steam @ 150 TPH</p> <p>Total after expansion: CAUSTIC SODA LYE @ 165000 MT/Year, CHLORINE GAS @ 87714 MT/Year, Stable bleaching powder (SBP) @ 33000 MT/Year, HYDROGEN GAS @ 2475 MT/Year, Steam @ 150 TPH from Power Plant of 35 MW capacity</p>
By-Products, if any,(Name with quantity per day)	<p>Existing : HYDROCHLORIC ACID @ 39600 MT/Year, LIQUID CHLORINE @ 89900 MT/Year, SODIUM HYPO CHLORITE @ 2000 MT/Year</p> <p>PROPOSED : HYDROCHLORIC ACID @ 26400 MT/Year, LIQUID CHLORINE @ 59933 MT/Year, SODIUM HYPO CHLORITE @ 1333 MT/Year</p>
Details of the machinery and processes	<p>As per application form no. 16314815</p>
Details of the Effluent Treatment Plant	<p>Existing : Trade Effluent @ 300 KLD, Domestic Effluent @ 80 KLD</p> <p>Total after proposed expansion : Trade effluent @ 1075 KLD</p> <p>ETP of 1400 KLD capacity followed by RO & MEE Plant is proposed to be provided for treatment of trade effluent</p>
Mode of Disposal of Effluent	<p>Trade effluent : 900 KLD to be recirculated back in the process, 80 KLD to be utilized for dust supersession and remaining 95 KLD to be utilized in 3 acres green area developed as per Karnal Technology.</p> <p>Domestic effluent : 15 KLD from industrial premises - onto land for plantation after treatment through septic tank</p> <p>80 KLD from residential colony : Into MC Sewer leading to terminal STP</p>

Standards to be achieved under Water (Prevention & Control of Pollution) Act, 1974	<i>As per effluent standards prescribed by the Board/ MoEF&CC from time to time.</i>
Sources of emissions and type of pollutants	<p><i>THERMAX BOILER UNIT-1 EXISTING : SO_x & NO_x</i> <i>STERLING BOILER UNIT-2 EXISTING : SO_x & NO_x</i> <i>HCL-FURNACE UNIT-1 EXISTING: ACID MIST</i> <i>HCL-FURNACE UNIT-2 EXISTING : ACID MIST</i> <i>SODIUM HYPO PLANT UNIT-1 EXISTING: CHLORINE GAS</i> <i>SODIUM HYPO PLANT UNIT-2 EXISTING: CHLORINE GAS</i> <i>PROPOSED SODIUM HYPO PLANT FOR PROPOSED SBP PLANT : CHLORINE</i> <i>COAL & RICE HUSK COMBUSTION FROM BOILER (150TPH) OF PROPOSED POWER PLANT : SPM, SO₂, NO_x</i> <i>HUSK FIRED BOILER UNIT-2 EXISTING: SPM, SO₂, NO_x</i></p>
Mode of disposal of emissions with stack height	<i>Into atmosphere through stacks attached to various source of emissions, after passing through APCDs.</i>
Quantity of fuel required in TPD	<p><i>Hydrogen gas and furnace oil in boiler furnace (5 TPH & 10 TPH capacity), Rice husk in boiler furnace (8 TPH capacity), Chlorine/hydrogen gas in 2 no. furnaces (5 TPH capacity each) and HSD for D.G. sets (3 x 500 KVA)</i></p> <p><i>Rice Husk / Coal in boiler furnace (150 TPH capacity)</i></p>
Type of Air Pollution Control Devices to be installed	<p><i>Bag filter house provided to control emissions from 8 TPH capacity boiler, Separate water Sprinklers provided with HCL furnace Unit 1 & 2, Separate Alkali scrubbers provided with Hypo Plant 1, 2.</i></p> <p><i>Alkali Scrubber to be provided with proposed hypo plant</i></p> <p><i>ESP to be provided with proposed 150 TPH capacity boiler.</i></p> <p><i>Canopies provided with 3 no. DG sets of 500 KVA capacity each.</i></p>
Standars to be achieved under Air (Prevention & Control of Pollution) Act, 1981	<i>As per emission standards prescribed by the Board/ MoEF&CC from time to time.</i>



25/10/2021

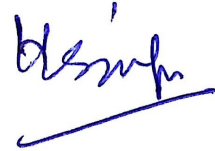
(Harjit Singh)
Environmental Engineer

For & on behalf
of
(Punjab Pollution Control Board)

Endst. No.:

Dated:

A copy of the above is forwarded to the following for information and necessary action please:
The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Roopnagar



25/10/2021

(Harjit Singh)
Environmental Engineer

For & on behalf
of
(Punjab Pollution Control Board)



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 (D_e) shall be calculated from the following equation to determine upstream, downstream distance:-
$$D_e = 2 LW / (L+W)$$

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 $H = 14 Q_g^{0.3}$ or $H = 74 (Q_p)^{0.24}$ Where Q_g = Quantity of SO ₂ in Kg/hr. Q_p = 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.

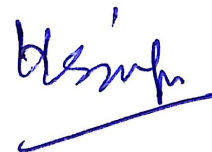
For higher KVA rating stack height H (in meter) shall be worked out according to the formula:

$$H = h + 0.2 (KVA)^{0.5}$$

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 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.
 - (i) Once in Year for Small Scale Industries.
 - (ii) Four in a Year for Large/Medium Scale Industries.
 - (iii) The industry will submit monthly reading/ data of the separate energy meter installed for running of effluent treatment plant/re-circulation system to the concerned Regional Office of the Board by the 5th of the following month.
12. 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.
13. 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.
14. The pollution control devices shall be interlocked with the manufacturing process of the industry.
15. 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.
16. 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.
17. 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.
18. The consent does not authorize or approve the construction of any physical structures or facilities for undertaking of any work in any natural watercourse.
19. 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.
20. 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.
21. The industry shall ensure that no water pollution problem is created in the area due to discharge of effluents from its industrial premises.

22. 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, if applicable.
23. 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.
24. The industry shall obtain and submit Insurance cover as required under the Public Liability Insurance Act, 1991.
25. The industry shall submit a site emergency plan approved by the Chief Inspector of Factories, Punjab as applicable.
26. The industry shall provide proper and adequate air pollution control arrangements for control emission from its coal/fuel handling area, if applicable.
27. 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
28. 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.
29. The industry shall submit a detailed plan showing therein, the distribution system for conveying waste-waters for application on land for irrigation along with the crop pattern to be adopted throughout the year.
30. The industry shall not irrigate the vegetable crops with the treated effluents which are used/ consumed as raw.
31. 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.
32. 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.
33. The industry shall not cause any nuisance/traffic hazard in vicinity of the area.
34. 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.
35. The industry shall ensure that there will not be significant visible dust emissions beyond the property line.
36. 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.
37. 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



25/10/2021

(Harjit Singh)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



B. SPECIAL CONDITIONS

1. The industry shall install effluent treatment facility followed by RO and MEE plant, of adequate capacity, as per proposal submitted by it, before commissioning of the unit in expanded capacity.
2. The industry shall obtain varied consent to operate under the Water Act, 1974 and the Air Act, 1981 before commissioning of the unit with expanded capacity.
3. The industry shall develop adequate plantation area as per Karnal Technology to utilize the treated wastewater onto land for plantation / irrigation purposes.
4. The industry will comply with the guidelines of Central Ground Water Authority (CGWA) for the ground water abstraction.
5. The industry shall not consume any fuel except hydrogen gas and furnace oil in boiler furnace (5 TPH & 10 TPH capacity) and rice husk in boiler furnace (8 TPH capacity).
6. The industry shall regularly maintain and operate its APCDs equipped with boiler furnaces, HCL plants (2 no. of 120 MTD capacity each, 2 no. hypo manufacturing units of 24 MTD and 12 MTD of capacity) and shall ensure that the emissions discharged conform to the prescribed emissions standards fixed by the Board.
7. The industry shall install ESP as APCD with the boiler of 150 TPH capacity proposed to be installed for power plant of 35 MW capacity.
8. The industry shall ensure that Online Continuous Effluent / Emission Monitoring System installed by it is operational and connected with server of Punjab Pollution Control Board as well as CPCB at all times.
9. The industry shall obtain authorization of the Board as required under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
10. The industry shall ensure compliance of all the conditions imposed in the Environmental Clearance granted by MoEF&CC for expansion of the unit.
11. The industry shall use only canal water supply to meet with various requirements for industrial purpose as well as domestic purpose within its premises.



25/10/2021

(Harjit Singh)
Environmental Engineer

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