BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI (PRINCIPAL BENCH)

Original Application No. 173/2023

In the matter of

Shallabjit Singh

..... Applicant

V/s

State of Punjab and Others

..... Respondent

Reply/Status report of Punjab Pollution Control Board, in compliance to order dated 16.10.2023 through Environmental Engineer, Regional Office, Mohali.

RESPECTFULLY SHOWETH

1. That briefly submitted, the matter is related to letter petition dated 05.11.2022 sent by Shallabjit Singh that there is a pharmaceutical unit namely M/s Nectar Life Sciences Limited at Village Haibatpur, Tehsil DeraBassi, District SAS Nagar (Mohali) which is discharging highly polluted chemical effluents in the agricultural field causing damage to the crops and land. The letter petition was registered as Original Application No. 173 of 2023 titled as Shalbhjit Singh vs State of Punjab.

2. That the Hon'ble Tribunal has earlier constituted a Joint Committee vide orders dated 28.04.2023 and the report of the Joint Committee was filed vide email dated 15.07.2023. After considering the report of the Joint

Committee filed on 15.07.2023, the Hon'ble Tribunal was pleased to pass an order dated 17.07.2023 issuing directions to PPCB for ensuring compliance of environmental norms and action taken report was sought. The Action Taken Report in the matter was filed by the PPCB before the Hon'ble National Green Tribunal on 12.10.2023.

3. That after consideration of the matter, the Hon'ble National Green Tribunal was pleased to pass an order dated 16.10.2023thereby impleading the Member Secretary, Punjab Pollution Control Board; District Magistrate SAS Nagar and M/s Nectar Lifesciences Limited, Derabassi as respondents with direction to file their response. In this regard, the relevant extract of Para no. 3 and 4 of the order dated 16.10.2023 is reproduced below for kind perusal and reference:

> *3. In view of this, we deem it proper to implead following respondents in this OA:-*
>
> *i. Member Secretary, Punjab Pollution Control Board*
>
> *ii. District Magistrate, SAS Nagar, Mohali*
>
> *iii. M/s Nectar Life Sciences Limited, Village Haibatpur, Tehsil DeraBassi, District SAS Nagar, Mohali.*
>
> *4. Let Notice be issued to the above respondents to enable them to file their response/action taken report on or before the next date of hearing.*

4. That in compliance to order dated 17.07.2023 & 16.10.2023 and in continuation to the earlier report dated 12.10.2023 filed before the Hon'ble National Green Tribunal by the Punjab Pollution Control Board, it is submitted that the industry M/s Nectar Lifescience Ltd., had applied for obtaining the renewal of consents to operate under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention &Control of Pollution) Act, 1981, with the office of the Board.

5. That the industry was issued notice for refusal of renewal of 'consents to operate' under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981, with an opportunity of personal hearing before the Chairman of the PPCB on 17.11.2023. The hearing before the Chairman of the PPCB on 17.11.2023 was attended by Sh. H.P. Singh, Director and Sh. Tripathi Rao DGM (Environment) of M/s Nectar Lifesciences Ltd., Derabassi, Distt. SAS Nagar. The representatives of the industry submitted reply in case and the same was taken on record. The representatives however failed to give any satisfactory reply of the show cause notice issued by the Board and as well as to prove that their plant is based on ZLD technology. The industry has not submitted any water balance i.e. quantity of freshwater used in the process viz-a-viz the wastewater generated, treated and reused back in to the process.

6. That the Regional Office, SAS Nagar of PPCB during hearing apprised the Chairman PPCB that there are two units namely M/s Nectar Lifesciences (Unit-1) and Unit-2. The trade effluent being generated from the process of unit no. 1 is being taken in the ETP installed in unit no. 2 through pipeline for treatment. However, preliminary treatment i.e. neutralization is being given to the effluent in unit no. 1. During visit, 02 no. collection tanks for the storage of waste water of unit -1 were found filled upto brim level. The industry has also not complied with the decisions of the hearing held on 01.09.2023 before the Chairman of PPCB. The representatives failed to give any satisfactory reply as to why the collection tanks were filled upto brim level and also failed to submit any documentary proof to prove that the effluent treatment plant installed in unit 2 is based on ZLD Technology.

7. That after hearing the officers of the Board and the representatives of

the industry as explained in the preceding paragraphs, the Competent Authority of the Board, i.e. Chairman, has decided as under:

a) *The renewal of 'consent to operate' applied by the industry under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 be granted to the industry for a short period i.e.upto 31.01.2024.*

b) *The industry shall submit bank guarantee amounting to Rs. 25 Lakhs within 7-days as assurance to comply with the pollution control laws to the O/o Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar.*

c) *Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar shall encash the bank guarantee amounting to Rs. 15 Lakhs earlier deposited by the industry immediately and thereafter send the report to the Competent Authority.*

d) *A Committee headed by Sh. Paramjit Singh, SEE, Zonal Office-1, Ludhiana, Mrs. Anuradha Sharma, Environmental Engineer, Regional Office, Roopnagar, Sh. Mohit Singla, AEE, Regional Office, Patiala alongwith Dr. Anoop Verma, Professor, Thapar Institute of Engineering and Technology (TIET), Patiala, as Technical Expert shall visit the industry and submit technical report w.r.t water auditing, groundwater study In and around the industry, adequacy of ETP/ MEE, complete material balance including generation of sludge and study as to whether unit is based on ZLD Technology or not, within 20-days with concrete recommendations.*

e) A separate letter shall be written to Dr. Anoop Verma, Professor, School of Energy and Environment, TIET, Patiala to carry out water auditing, groundwater study in and around the industry, adequacy of ETP/ MEE, complete material balance including generation of sludge and study as to whether unit is based on ZLD Technology or not of the industry on its request.

8. That in compliance to the decisions of the hearing explained herein above, the Punjab Pollution Control Board has encashed Bank Guarantees amounting to Rs. 15 lakhs of the industry for violations. The industry has further submitted a new bank guarantee amounting to Rs. 25 lakh as an assurance to comply with environmental laws.

9. That in further compliance of the decisions of the hearing held on 17.11.2023, the site of the industry was visited by the Committee consisting of Dr. Anoop Verma, Head School of Energy & Development, Thapar Institute, Patiala (Technical Expert), Er. Paramjit Singh, Senior Environmental Engineer, PPCB, Er. Anuradha Sharma, Environmental Engineer, PPCB and Er. Mohit Singla, Asstt. Environmental Engineer, PPCB on 22.12.2023 and again on 29.12.2023. The committee noticed that Low TDS stream is treated in ETP followed by Ultrafiltration (UF) system and Reverse Osmosis (RO) system. The treatment facility installed by the industry was in operation. The team also noticed that High TDS stream was taken into MEE of capacity 350 KLD having four calandrias followed by ATFD, which was also operational at the time of visit. The committee has carried out effluent monitoring of different components of ETP and MEE. The Committee observed stagnation of effluent in plantation area, traces of effluent in the drain near the boundary wall of the industry and permanent pipeline for usage of treated wastewater onto land for plantation. The Committee has thus concluded that the industry is not achieving ZLD practice in its unit.

The copy of interim report submitted by the committee aforementioned is enclosed herewith as **Annexure-A** for kind perusal of the Hon'ble Tribunal. The committee has further sought certain details and documents from the industry and stated that the complete verification of environmental compliances of the industry shall be done after submission of documents sought from the industry.

10. That the detailed environment audit of the industry to be carried out by the School of Energy and Environment, Thapar Institute of Engineering & Technology (TIET), Patiala shall include water auditing, adequacy of ETP/ MEE, ZLD based treatability of the pharma effluent, complete material balance including generation of sludge etc. and shall also carry out the groundwater study in and around the industry. This study shall require a period of 45-60 days.

11. That keeping in view of the interim report of the committee to the effect that the industry is not achieving ZLD alongwith other observations, the Board has taken action against the industry by issuing following directions u/s 33-A of the Water (Prevention & Control of Pollution) Act, 1974 vide letter no. 9954-55 dated 4.01.2024:

    i. *The industry shall reduce the production capacity of the unit by 25%, till the technical report is received from Thapar Institute of Engineering and Technology, Thapar, Patiala*
    ii. *The industry shall not discharge any quantity of treated/ untreated trade effluent outside its premises/ plantation area (earlier used by it), under any circumstance.*
    iii. *The industry shall obtain revised consent to operate under the Water (Prevention & Control of*

Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981, for reduce production capacity i.e. 75% of the existing production capacity..

A copy of the directions issued to the industry u/s 33-A of Water (Prevention & Control of Pollution) Act, 1974 are enclosed herewith as **Annexure-B.**

12. That further action shall be taken against the industry on receipt of the technical report from the the Institute of Repute (IoR) assigned to carry out detailed study, i.e. School of Energy and Environment, Thapar Institute of Engineering & Technology (TIET), Patiala.

13. That the factual action taken report is hereby submitted in compliance to order dated 16.10.2023 for kind perusal and consideration of the Hon'ble National Green Tribunal. Further action taken report shall be submitted after receipt of final report by the committee constituted by the Board as mentioned in para 9 above and Technical Report by the School of Energy and Environment, Thapar Institute of Engineering & Technology (TIET), Patiala.

14. That the status report is being submitted in compliance to order dated 16.10.2023 for kind perusal, consideration and appropriate order.

04/01/2024

(Er. Gursharan Dass)
Environmental Engineer
Punjab Pollution Control Board
Regional Office, Mohali

Subject:- Regarding visit to the industry - M/s Neeta Lifesciences (Unit-2), Village- Saidpura, Derabassi by the team consisting of members (Er Paramjit Singh, SEE, Er. Anuradha Sharma, EE, Dr. Anoop Verma and Er. Mohit Singla, AEE), as constituted by Worthy Chairman of the Board.

In compliance of the orders of the competent authority dated 02.12.2023, the site of the industry was visited by the above said team on 22.12.2023 and on 29.12.2023. On 22.12.2023, the team started its visit from back side of the industry and the following observation were made:

1. There was stagnation in the plantation area of the industry at the back side of boiler section.
2. Traces of industrial effluent were also observed in the drain near retaining wall of industry provided towards the side of drain (Haripur Hinduan).
3. The API as well as sterile plant was found operational except Menthol plant.
4. The trade effluent (Low & High TDS) of its unit no.1 is also received in this unit (unit-2) for treatment.
5. The tanks (constructed in unit-2) earlier used for collection of effluent (for Low & High TDS) from Unit-I were found having effluent. The tank for High TDS effluent was found filled almost upto brim level and the tank for Low TDS effluent was found approx. half filled.
6. The industry has only provided transfer pump at the tank earlier used for collection of High TDS effluent and no transfer pump has been provided at Low TDS tank for sending into the treatment plants.
   The TDS of these collection tanks was also checked at the spot in the industry's lab and readings are mentioned below:

   Low TDS stream from tank = 8005 ppm
   High TDS stream from tank = 13127 ppm

7. The representative of industry informed that they have now stopped taking effluent of Unit-I in these tanks and the High & Low TDS effluent from the unit-1 have now been diverted directly into the MEE feed tank and ETP respectively.
8. The industry (unit-2) has separated Low TDS and High TDS streams in respective sections and provided separate holding tanks for LTDS and HTDS streams, each having capacity of 300 KLD. During visit, it was observed that lines coming from different sections are coming to these collection tanks, but all the lines are not having water meter/ EMF provided on it.
9. The ETP installed by the industry was found operational and is being used to treat Low TDS effluent generated from both the units, which is further taken to Ultra Filtration system and Reverse Osmosis system (RO).
10. The RO permeate is being sent for utility purpose i.e. cooling tower makeup water and also onto land for plantation purpose.
11. The RO Reject is being further, sent Multi Effect Evaporator (MEE) for further treatment.
12. The industry has provided 2 MEEs of capacity 300 KL and 90 KL. However, only MEE of capacity 300 KL is being operated.

Inspection

AEE

13. The High TDS effluent from both the units and RO reject is being taken into Multi effect Evaporator (MEE). The condensate of MEE is being taken back into equalization tank of ETP for treatment and the MEE concentrate is being fed to Agitated Thin Film Dryer (ATFD), the solid so produced are being disposed off through Common Hazardous Waste Treatment Storage Disposal Facility (CHWTF) at Nimbua, SAS Nagar.
14. Effluent samples from the following points were collected and sent to Punjab Pollution Control Board's Water Laboratory, Head Office, Patiala for analysis and the results of the same are still awaited:-

    om stagnation in the plantation area.

    II. From upstream and downstream of drain at backside of industry (2 samples)
    III. From ETP inlet.
    IV. From aeration tank-2 of ETP
    V. From RO inlet.
    VI. From final RO Reject.
    VII. From final RO permeate
    VIII. From MEE feed tank
    IX. From line carrying MEE condensate to ETP equalization tank.

To check the unscientific disposal by the industry (if any), the site of the industry was again visited by the team on 29.12.2023 and following observations were observed:-

1. The stagnation earlier observed by the team in the plantation area of the industry at the back side of boiler section was found filled/ covered with boiler ash.
2. Fresh traces of probable industrial effluent were observed in the drain near the retaining wall of industry. The comparative photographs of both visits are as under:-

Traces of probable industrial effluent observed during visit on 22.12.2023

Fresh traces of probable industrial effluent at different location observed during visit on 29.12.2023

3. The quantity of effluent stored in the tanks earlier used for collection of effluent from Unit-I and status of providing transfer pumps was also found same.

SEE AEE

4. The ETP installed by the industry was found operational and is being used to treat Low TDS effluent generated from both the units, which is further taken to UF system and RO system.
5. The Multi effect Evaporator (MEE) of capacity 300 KL was found in operation only. The High TDS effluent from both the plants and complete RO reject is being taken into this Multi effect Evaporator (MEE).
6. No separate water meter is provided on the line carrying RO permeate to utilize the same onto land for planation.
7. The status of installation of water meters at different locations was found same as observed during last visit.
8. The water meter readings noted at various water meters installed by the industry during both the visit is as under:-

Sr. No	Source of reading	Reading on 22.12.2023	Reading on 29.12.2023
1.	Inlet of ETP	701622 m^3	705343 m^3
2.	ETP outlet (RO1 feed)	149783.2 m^3	152530.7 m^3
3.	RO parameter to utility area	346505.1 m^3	348711.9 m^3
4.	RO reject (final)	35410 m^3	36160 m^3
5.	MEE feed (High TDS – 300 KL capacity)	128521.7 m^3	129904.17 m^3
6.	MEE condensate	16363.1 m^3	165103 m^3
7.	MEE concentrate	8164.81 m^3	8223.4 m^3
8.	Tubewell -1 (canteen area)	466827.0 m^3	467440.1 m^3
9.	Tubewell – 2	602527.0 m^3	603461 m^3

In view of the above said observations made by the team during the visit to the industry on 22.12.2023 & 29.12.2023, observations of the team are as under:-

1. The water auditing could not be done due to absence of proper metering of streams. The following details/ documents were sought form the industry:-
   - i. Water balance (of each stream)
   - ii. Water consumption record of both tubewells for the past 6 months.
   - iii. Component wise dimensional drawing of the ETP plant.
   - iv. Water used for cooling water make up.
   - v. Details of Ground water study conducted by the industry
   - vi. Technical data w.r.t depth and ground water hydrological data of 2 piezometers installed in the premises.
   - vii. Material balance including generation of sludge:-
   - viii. Product wise reaction chemistry along with material balance shall be provided by industry for evaluation and final report by the expert member (Thapar Institute).
2. The adequacy of ETP and MEE will be commented after provision of above detail by the industry.
3. The industry has not provided proper transfer pumps for sending the Low TDS effluent lying in the earlier collection tanks to its ETP plant, so it has not transfer the low TDS effluent into its

SEE AEE

treatment plant. Moreover, the level of the effluent in the High TDS tank is found almost same which shows that the same has not been taken to MEE for treatment.

4. The industry has not provided separate water meter on the line carrying treated effluent onto land for plantation
5. The industry has not yet provided data/ documents as sought by the team during the last visit on 22.12.2023.
6. The stagnation of effluent in the plantation area , the traces of effluent observed in the drain near the boundary wall of the industry and the permanent pipeline for usage of treated wastewater onto land for plantation, shows that the industry has not achieved ZLD practice.

In view of above, the industry may be requested to submit the above said documents/data, so as to enable the Thapar Institute of Technology to carry out study including material balance, water audit and environment audit, which further requires the period of 45-60 days.

29/12/23

Er. Paramjeet Singh, SEE

Dr. Anoop Verma, TIET Thapar, Patiala

Er. Arshdeep Singh, AEE
for visit on 29/12/23 only

Er. Mohit Singla, AEE

ਪੰਜਾਬ ਪ੍ਰਦੂਸ਼ਣ ਰੋਕਥਾਮ ਬੋਰਡ
ਜ਼ੋਨਲ ਦਫ਼ਤਰ-1, ਵਾਤਾਵਰਣ ਭਵਨ, ਨਾਭਾ ਰੋਡ, ਪਟਿਆਲਾ-147001
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ਮਿਤੀ 4/1/2024

REGISTERED

To

M/s Nectar Life Sciences (Unit-2),
Vill. Saidpura, Dera Bassi,
Distt. SAS Nagar

Subject: **Directions u/s 33-A of the Water (Prevention and Control of Pollution) Act, 1974 -** *M/s M/s Nectar Life Sciences (Unit-2), Vill. Saidpura, Dera Bassi, Distt. SAS Nagar*

Whereas, it is obligatory on the part of the industry to obtain the consent to establish (NOC) of the Board as required u/s 25 of the Water (Prevention & Control of Pollution) Act, 1974 and u/s 21 of the Air (Prevention & Control of Pollution) Act, 1981, for establishment of an industrial plant.

And whereas, it is mandatory on the part of the industry to obtain the consent of the Board to operate an plant as required u/s 25 of the Water (Prevention & Control of Pollution) Act, 1974, for discharge of effluent arising from its premises.

And whereas, it is also mandatory on the part of the industry to provide adequate and appropriate effluent treatment facilities, so as to contain the various pollutants within the standards laid down by the Board, in the effluent discharged by the industry.

And whereas, earlier, the industry was granted consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 vide no. CTOW/Renewal/SAS/2022/ 20441856 dated 20/12/2022 and the Air (Prevention & Control of Pollution) Act, 1981 vide no. CTOA/Renewal/ SAS/2022/20443954 dated 20/12/2022, valid upto 30/6/2023 for production of Menthol Crystals @16.6T/day, Menthol Flakes @ 6.6T/day, Menthol liquid/powder @16.6T/day, Cefixime Trihydrate @1.786T/day, Cefuroxime Axetil (Amorphous) @1.65T/day, Cefpodoxime Proxetil (Coated) @0.007 T/day, Cefpodoxime Proxetil @0.01T/day, Cefditoren Pivoxil @0.0035T/day, Cefdinir @0.05T/day, Ceftriaxone Sodium @0.84T/day, Cefotaxime Sodium @0.4T/day, Cefepime Injection @0.0577T/day, Cefuroxime sodium @0.02723T/day, Cephalothin Sodium @0.05T/day, Cefazolin Sodium @0.00321T/day, Cefprozil @0.0005T/day, Cefoxitin Sodium @0.001T/day, Ceftiofur @0.00003T/da,y Ceftaroline @0.00002T/day, Metformin HCL @0.07T/day, Cefcapine Pivoxil @0.00002T/day, Sodium Carbonate @0.002T/day, L-Arginine @0.002T/day, Ceftazime Pentahydrate @0.015T/day, Ceftibutene Hydrate @0.02T/day and Cefotium HCL @0.015T/day with certain conditions mentioned therein.

And whereas, the industry was issued notice for 33-A of the under the Water (Prevention & Control of Pollution) Act, 1974 and 31-A of the Air (Prevention & Control of Pollution) Act, 1981, along with an opportunity of personal hearing before the Hon'ble Chairman of the Board on 01.09.2023 in the said hearing, it was decided as under:

1. Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar shall immediately encash bank guarantee amounting to Rs. 10.0 lakhs which is already deposited with the Board by the industry as an assurance and send the report thereafter.
2. The industry shall submit a new bank guarantee amounting to Rs. 10.0 lakhs as an assurance to comply environmental laws all the times.
3. The industry shall get the re-verification of premises from Director of Factories, Punjab and shall submit certificate to the effect that measures provided by the industry are adequate and all safety measure are in place to avoid such incident in future within one month.
4. The industry shall get safety audit of its premises from institute of repute and shall submit the report within one month.
5. The industry shall provide additional precautionary measures such as handheld gas analyzers and highly sensitive gas sensors on overall boundary wall of the unit with siren system.
6. Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar shall visit the industry in the last week of September, 2023 to verify the contention of the industry w.r.t various compliance made by it and carry out complete monitoring of ETP , APCDs & groundwater and thereafter to send the consolidates report alongwith concrete recommendations so as to enable the competent authority to proceed further in the matter.

And whereas, the proceedings of the personal hearing were conveyed to the industry vide Board's letter no. 7337-38 dated 22/9/2023 for compliance.

And whereas, the industry has submitted the compliance of decisions of hearing and same is as under:

Sr. N.	Decisions of the Hearing	Reply	Comments of RO
1.	Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar shall immediately encash bank guarantee amounting to Rs. 10.0 lakhs which is already deposited with the Board by the industry as an assurance and send the report thereafter.	Noted	This office has encashed Bank Guarantee amounting to Rs. 10 lakhs of the industry vide Receipt No. 10/5502 dated 28.09.2023..
2.	The industry shall submit a new bank guarantee amounting to Rs. 10.0 lakhs as an assurance to comply environmental laws all the times.	Noted & Complied We have deposited INR 10 lakhs on 09.10.2023, reference ID:42070ILG001623, valid upto 08.10.2024. In favor of the Environmental Engineer at the Punjab Pollution Control Board.	The industry has submitted a Bank Guarantee amounting to Rs. 10 lakhs vide bearing no. 42070ILG001623 dated 09.10.2023, having validity upto 08.10.2025.
3.	The industry shall get the re-verification of premises from Director of Factories, Punjab and shall submit certificate to the effect that measures provided by the industry are adequate and all safety measure are in place to avoid such incident in future within one month.	Noted We submitted a request letter via speed post to the Director of Factories, Punjab on 10.10.2023 regarding the issuance of a certificate for the re-verification of premises from the Director of Factories, Punjab.	The industry has not yet got the said re-verification done, till date.
4.	The industry shall get safety audit of its premises from institute of repute and shall submit the report within one month.	Noted The release of the PO is currently in progress and we will submit a safety audit of our premises from an institute of repute authorized by third-party-approved factories within a two months timeline.	The industry has submitted a copy of PO. However, the gas analyzer and sensor are yet to be provided.
5.	The industry shall provide additional precautionary measures such as handheld gas analyzers and highly sensitive gas sensors on overall boundary wall of the unit with siren system.	Noted We released the PO for an ammonia gas detector with a hooter system on 06.10.2023. Ref: PO no. NLL/ENGG/II/1438/23-24 and will install fixed gas analyzers and highly sensitive gas sensors on the overall boundary wall of the unit, alongwith a siren system, within a two-month timeline.	The industry has submitted a copy of PO. However, the gas analyzer and sensor are yet to be provided.

And whereas, the industry had not yet fully complied with the decisions of the hearing held on 1/9/2023 under the stipulated time period given by the Competent Authority of the Board.

And whereas, the industry has applied for renewal of consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 with same products along with requisite documents.

And whereas, the matter - O.A no. 173/2023 titled as Shalbhjit Singh V/s State of Punjab is pending in the Honble National Green tribunal. The said matter is related to the industry M/s Nectar Lifesciences Unit-II, Saidpura, Derabassi. The said matter was listed on 16.10.2023. In the hearing held on 16.10.2023, Hon'ble NGT has passed following orders:

2. *"The report dated 12.10.2023 has been filed on behalf of the Punjab Pollution Control Board. The said report does not disclosed that the earlier Tribunal's direction dated 17.07.2023 in respect of ZLD has been achieved nor the reports on record reflect any effective action, though the violation is clear."*

3. *In view of this, we deem it proper to implead following respondents in this O.A:*

   i. *Member Secretary, Punjab Pollution Control Board.*

   ii. *District Magistrate, SAS Nagar, Mohali*

   iii. *M/s Nectar Life Sciences Limited, Village Haibatpur, Tehsil Derabassi, Distt. SAS Nagar*

4. *Let notice be issued tot the above respondents to enable them to file their responses/ action taken report on or before the next date of hearing.*

The matter is now listed of hearing on 5/1/2024.

And whereas, the site of the industry was visited by officer of the Board on 19/9/2023 and it was observed as under:

1) The industry Nectar Lifesciences, Unit-II which is a bulk drugs manufacturing unit was in operation. The industry is also having its sister concern company involved in manufacturing of bulk drugs located in Village Haripur Hinduan namely Nectar Lifesciences, Unit-I and the effluent generated from this company is also treated along with its own effluent. The effluent of unit no.1 is being carried through underground/overhead pipeline to unit no.II for treatment.

2) The industry has installed 02 no. boiler of capacity 40 TPH each, both of which are provided with separate ESPs as APCD. Both were in operation during the visit. The industry has installed another standby boiler of capacity 25 TPH, which was not in operation during visit. The industry is using rice husk and chopped wood as fuel in the boiler. The representative informed that on an average 50-60 tonnes of ash is produced per day. The industry has installed one no. ash storage silo of capacity 50 tonnes with 02 no. boiler of capacity 40 TPH each. As per OCEMS reading, SPM was 43. Mg/Nm3 and 57.2 mg/Nm3. OCEMS is yet to be installed on standby boiler of capacity 25 TPH. However, some of the boiler ash was found dumped/ scattered near the silo. The industry is sending fly ash to local brick kiln units.

3. During visit, stack emission sampling was carried out on 21/9/2023 and same was analysed by the Board's Lab. The industry is now achieving prescribed stack emissions standards.

4. The industry has installed incinerator for incineration of hazardous waste being generated from the unit. However, the said incinerator was not in operation due to maintenance, during the visit.

5. The industry has installed 03 no. SRPs in its premises. The industry has installed only VOC meter with the SRP and the industry has not yet installed meter with TOC.

6. The industry has installed 02 no. tubewells for abstraction of ground water in its premises. Reading during visit is tubewell no. 1 @ 463336 KL (near canteen area) and tubewell no. 2 @ 574944 KL (near admin building). The reading of flow meter observed during visit was found mismatching with the records maintained by the industry in record register. As per the record maintained by the industry, the detail of abstraction of ground water is as under:

Tubewell no.	Month		
	July 2023	August 2023	September 2023 (till date)
Tubewell 1	9194 KL	9336 KL	5319 KL
Tubewell 2	18478 KL	18598 KL	10699 KL

8) There are 02 no. of separate holding tanks for storage of HTDS and LTDS being transported from unit 1. Both the thanks were found to be filled upto brim level.

9) The industry has constructed one tank of capacity 300 KL for storage of HTDS being generated from this unit and one tank of capacity 300 KL for storage of LTDS effluent. During visit leakage from pumps of HTDS tank was observed and spillage of HTDS near the tank was observed. The leaked HTDS effluent was stored near the main tank itself and the industry is then transferring the same to tank again with the help of pumps.

10) For treatment of HTDS of unit 1 & 2, the industry has installed 02 MEEs of capacity 350 KLD & 90 KLD. Reading of flow meter at MEE inlet (common for both the units) was noted as

108753.82 KL during visit. As per record maintained by the industry, the details of quantity of HTDS being treated in the MEEs is as under:

Effluent Detail	Month		
	July, 2023	August, 2023	September, 2023 (till date)
MEE inlet flow meter	6608 KL	6676 KL	5318 KL

11) During visit, leakages from seals & pump of MEE of capacity 350 KLD was observed, leading to spillage of effluent in MEE area. The industry has constructed a dedicated tank of capacity 100 KL, for storage of over spillage effluent.

12) The industry has installed ATFD for thickening of MEE concentrate MEE condensate is being sent to ETP for treatment along with LTDS of unit 1 & 2.

13) The industry has installed ETP based on physic-chemical treatment followed by biological treatment for treatment of LTDS being generated from unit 1, unit 2 & MEE condensate. As per record maintained by the industry, the details of quantity of LTDS being treated in the ETP is as under:-

Effluent Detail	Month		
	July, 2023	August, 2023	September, 2023 (till date)
ETP inlet	23894 KL	22481 KL	15716 KL

14) The industry is reusing treated effluent for cooling tower makeup as well as plantation purpose within its premises. As per record maintained by the industry, the details of quantity of RO permeate being used for cooling tower makeup & for plantation within the premises is as under:

RO Detail	Month		
	July, 2023	August, 2023	September, 2023 (till date)
R.O, Permeate (cooling tower)	8393 KL	9085 KL	6572KL
R.O permeate (plantation)	3096 KL	5247 KL	3023 KL

15) The industry has developed plantation area as per karnal technology near Admin Building in an area of around 4.5 acres and another starch of area at the backside of the industry measuring 44 acres. Besides the plantation area developed as per karnal technology, the industry has also developed green area as lawns inside the premises of the industry.

16) It was observed that there was same flow of domestic effluent into the said drain from Haripur Hinduan village. During visit, samples of the drain from downstream of the industry were collected to ascertain any contamination in the drain. From above, sampling results it can be deduced that there is no significant presence of contaminants in the Haibatpur Drain on the downstream of the unit. However, as per the analysis results, there is slight presence of phosphates, sulphates and zinc (very less).

17) The industry has installed CCTV camera near the main garland storm water drain near MEE area. The industry has been asked to install CCTV at following locations, immediately:

a) Near final outfall of storm water drain of the industry into natural choe.

b) Near subsidiary storm water drain of the industry near the plantation area.

18) The industry has kept drums of chemicals near the ETP area in open space.

19) The industry has covered around half of the old ash storage area converted to green area by planting trees and green lawns. However, remaining half area is yet to be developed as green area and ash was seen lying in the said area.

20) The road leading from ETP old ash area is katcha and is required to be stabilized by the industry. The representative of the industry informed that the work of interlocking tiles shall be started within 15 days.

21) The industry is yet to provide gas leakage detection system with siren system in its premise. The representative informed that same shall be installed within 01 month, positively.

And whereas, as the industry was found not maintaining records properly i.e flow meter readings were found mismatched with the record maintained by the industry, due to which as to whether the industry is achieving ZLD conditions could not be adjudged.

And whereas, the industry is not complying with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 as well as decisions of hearing held on 1/9/2023.

And whereas, the action taken report in the NGT matter of OA no. 173 of 2023 was filed by Regional Office, SAS Nagar on behalf of the Board on 12/10/2023.

And whereas, after consideration of the matter, the Hon'ble National Green Tribunal was pleased to pass an order dated 16.10.2023 and the relevant extract of Para no. 3 and 4 of the order dated 16.10.2023 is reproduced as under:

> *3. In view of this, we deem it proper to implead following respondents in this OA:-*
>
> *i. Member Secretary, Punjab Pollution Control Board*
> *ii. District Magistrate, SAS Nagar, Mohali*
> *iii. M/s Nectar Life Sciences Limited, Village Haibatpur, Tehsil DeraBassi, District SAS Nagar, Mohali.*
>
> *4. Let Notice be issued to the above respondents to enable them to file their response/action taken report on or before the next date of hearing.*

And whereas, the industry was served show cause notice for refusal of renewal of consent to operate applied under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 alongwith an opportunity of personal hearing vide Board's letter no. 8710-11 dated 10/11/2023 before the Chairman of the Board on 17/11/2023.

And whereas, the representatives of the industry attended the hearing and submitted its reply, which was taken on record. They failed to give any satisfactory reply of the show cause notice issued to the industry as well as to prove that their plant is based on ZLD technology. Also, the industry was not submitted any water balance i.e quantity of fresh water used in the process viz-a-viz wastewater generated treated and reuse back into process.

And whereas, Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar, visiting officer to the industry informed that there are two units namely M/s Nectar Lifesciences (Unit-1) and Unit-2. The trade effluent being generated from the process of the unit-1 is being taken in the ETP installed in the unit-2 through pipeline for treatment. However, preliminary treatment i.e. neutralization is being given to the said effluent in Unit-1. He also informed that two no. collection tanks were found filled upto brim level during visit to the industry. Also, he apprised that the industry is not complied with decisions of hearing held on 1/9/2023 before the Chairman of the Board. The representative of the industry failed to give any satisfactory reply as to why the said tanks are filled upto brim level, if the plant is based on ZLD technology. He also informed that the Hon'ble NGT has taken a serious note that the industry has not achieved ZLD conditions and no effective action has been taken against the industry, though the violation is clear. The matter has been listed for hearing 5/1/2024.

And whereas, after hearing, the Chairman of the Board decided as under:

1) The renewal of consent to operate applied by the industry under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 be granted to the industry for a short period i.e upto 31/1/2024.

2) The industry shall submit bank guarantee amounting to Rs. 25 Lakhs within 7-days as assurance to comply with the pollution control laws to the O/o Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar.

3) Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar shall encash the bank guarantee amounting to Rs. 15 Lakhs earlier deposited by the industry immediately and thereafter send the report to the Competent Authority.

4) A Committee headed by Sh. Paramjit Singh, SEE, Zonal Office-1, Ludhiana, Mrs. Anuradha Sharma, Environmental Engineer, Regional Office, Roopnagar, Sh. Mohit Singla, AEE, Regional Office, Patiala alongwith Dr. Anoop Verma, Professor, Thapar Institute of Engineering and Technology (TIET), Patiala, as Technical Expert shall visit the industry and submit technical report w.r.t water auditing, groundwater study in and around the industry, adequacy of ETP/ MEE, complete material balance including generation of sludge and study as to whether unit is based on ZLD Technology or not, within 20-days with concrete recommendations.

5) A separate letter shall be written to Dr. Anoop Verma, Professor, School of Energy and Environment, TIET, Patiala to carry out water auditing, groundwater study in and around the industry, adequacy of ETP/ MEE, complete material balance including generation of sludge and study as to whether unit is based on ZLD Technology or not of the industry on its request.

6) The expanses which will incurred to conduct the study by TIET, Patiala shall be bear by the industry. Also, the industry shall approach the TIET, Patiala immediately to get the study conducted.

And whereas, the proceedings of the aforesaid personal hearing were conveyed to the industry as well as Environmental Engineer, Regional Office, SAS Nagar vide letter no. 9157-58 dated 30/11/2023 for making compliance.

And whereas, the Competent Authority of the Board has constituted a Committee of officers of the Board othe than concerned Regional Office, dealing with the industry to visit subject cited the industry. Further, the Competent Authority of the Board decided to engage the service of Dr. Anoop Verma, Professor, School of Energy and Environment, Thapar Institute of Engineering and Technology, Patiala in the said Committee as Technical Expert. The scope of the above Committee is as under:

(a) To carry out water auditing, groundwater study in and around the industry, adequacy of ETP/ MEE, complete material balance including generation of sludge and study as to whether unit is based on ZLD Technology or not.

(b) The Committee shall submit its technical report to the Board within 20-days.

And whereas, in compliance with the directions of the Competent Authority of the Board, the site of the industry was visited by the team on 22/12/2023. The team started its visit from back side of the industry and the following observation were made:

1. There was stagnation in the plantation area of the industry at the back side of boiler section.
2. Traces of industrial effluent were also observed in the drain near retaining wall of industry provided towards the side of drain (Haripur Hinduan).
3. The API as well as sterile plant was found operational except Menthol plant.
4. The trade effluent (Low & High TDS) of its unit no.1 is also received in this unit (unit-2) for treatment.
5. The tanks (constructed in unit-2) earlier used for collection of effluent (for Low & High TDS) from Unit-I were found having effluent. The tank for High TDS effluent was found filled almost upto brim level and the tank for Low TDS effluent was found approx. half filled.
6. The industry has only provided transfer pump at the tank earlier used for collection of High TDS effluent and no transfer pump has been provided at Low TDS tank for sending into the treatment plants.
   i. The TDS of these collection tanks was also checked at the spot in the industry's lab and readings are mentioned below:
   ii. Low TDS stream from tank = 8005 ppm
   iii. High TDS stream from tank = 13127 ppm
7. The representative of industry informed that they have now stopped taking effluent of Unit-I in these tanks and the High & Low TDS effluent from the unit-1 have now been diverted directly into the MEE feed tank and ETP respectively.
8. The industry (unit-2) has separated Low TDS and High TDS streams in respective sections and provided separate holding tanks for LTDS and HTDS streams, each having capacity of 300 KLD. During visit, it was observed that lines coming from different sections are coming to these collection tanks, but all the lines are not having water meter/ EMF provided on it.
9. The ETP installed by the industry was found operational and is being used to treat Low TDS effluent generated from both the units, which is further taken to Ultra Filtration system and Reverse Osmosis system (RO).
10. The RO permeate is being sent for utility purpose i.e. cooling tower makeup water and also onto land for plantation purpose.
11. The RO Reject is being further, sent Multi Effect Evaporator (MEE) for further treatment.
12. The industry has provided 2 MEEs of capacity 300 KL and 90 KL. However, only MEE of capacity 300 KL is being operated.
13. The High TDS effluent from both the units and RO reject is being taken into Multi effect Evaporator (MEE). The condensate of MEE is being taken back into equalization tank of ETP for

treatment and the MEE concentrate is being fed to Agitated Thin Film Dryer (ATFD), the solid so produced are being disposed off through Common Hazardous Waste Treatment Storage Disposal Facility (CHWTF) at Nimbua, SAS Nagar.

14. Effluent samples were collected and sent to Punjab Pollution Control Board's Water Laboratory, Head Office, Patiala for analysis.

And whereas, the Competent Authority of the Board vide Board's letter dated 27/12/2023 directed the team to revisit the industry and submit conclusive report regarding achievement of ZLD by the industry, before 2/1/2024.

And whereas, the team revisited the industry on 29/12/2023. During visit, following observations were made by the Committee:

1. The stagnation earlier observed by the team in the plantation area of the industry at the back side of boiler section was found filled/ covered with boiler ash.
2. Fresh traces of probable industrial effluent were observed in the drain near the retaining wall of industry.
3. The quantity of effluent stored in the tanks earlier used for collection of effluent from Unit-I and status of providing transfer pumps was also found same.
4. The ETP installed by the industry was found operational and is being used to treat Low TDS effluent generated from both the units, which is further taken to UF system and RO system.
5. The Multi effect Evaporator (MEE) of capacity 300 KL was found in operation only. The High TDS effluent from both the plants and complete RO reject is being taken into this Multi effect Evaporator (MEE).
6. No separate water meter is provided on the line carrying RO permeate to utilize the same onto land for planation.

And whereas, as per the analysis results, obtained from Board's Lab, Patiala vide letter no. 127-29 dated 1/1/2024, the industry is not achieving prescribed effluent standards laid down by the Board.

And whereas, as per the visit on 22/12/2023 and 29/12/2023, the Committee constituted by the Board has submitted as under:

1. The water auditing could not be done due to absence of proper metering of streams. The following details/ documents were sought form the industry:-
   i. Water balance (of each stream)
   ii. Water consumption record of both tubewells for the past 6 months.
   iii. Component wise dimensional drawing of the ETP plant.
   iv. Water used for cooling water make up.
   v. Details of Ground water study conducted by the industry
   vi. Technical data w.r.t depth and ground water hydrological data of 2 piezometers installed in the premises.
   vii. Material balance including generation of sludge:-
   viii. Product wise reaction chemistry along with material balance shall be provided by industry for evaluation and final report by the expert member (Thapar Institute).
2. The adequacy of ETP and MEE will be commented after provision of above detail by the industry.
3. The industry has not provided proper transfer pumps for sending the Low TDS effluent lying in the earlier collection tanks to its ETP plant, so it has not transfer the low TDS effluent into its treatment plant. Moreover, the level of the effluent in the High TDS tank is found almost same which shows that the same has not been taken to MEE for treatment.
4. The industry has not provided separate water meter on the line carrying treated effluent onto land for plantation.
5. The industry has not yet provided data/ documents as sought by the team during the last visit on 22.12.2023.
6. The stagnation of effluent in the plantation area , the traces of effluent observed in the drain near the boundary wall of the industry and the permanent pipeline for usage of treated wastewater onto land for plantation, shows that the industry has not achieved ZLD practice.

And whereas, the industry is violating the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and also not achieving the ZLD conditions and discharging its effluent onto land for plantation without the permission of the Board. Thus, the industry is violating the conditions of consent earlier granted to it under the Water (Prevention and Control of Pollution) Act, 1974.

And whereas, after considering all the aspects of the case, the Competent Authority of the Board is of the view that it is a fit case to issue directions by invoking the provisions of Section 33-A of the Water (Prevention & Control of Pollution) Act, 1974.

Now, therefore, the Competent Authority of the Board in exercise of the powers conferred u/s 33-A of the Water (Prevention & Control of Pollution) Act, 1974 and after thoroughly examining the case of the industry, has decided to issue the following directions:

1) The industry shall reduce the production capacity of the unit by 25%, till the final technical report w.r.t water auditing, groundwater study in and around the industry, adequacy of ETP/ MEE, complete material balance including generation of sludge, is received from Thapar Institute of Engineering and Technology, Thapar, Patiala

2) The industry shall not discharge any quantity of treated/ untreated trade effluent outside its premises/ plantation area (earlier used by it), under any circumstance.

3) The industry shall obtain revised consent to operate under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981, for reduce production capacity i.e. 75% of the existing production capacity.

This issue with the approval of the Chairman of the Board.

9/11/24

Sr. Environmental Engineer
for & on behalf of the
Punjab Pollution Control Board

Endst. no. _____ Dated _____

A copy of the above is forwarded to the Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar for information and **shall ensure to make the compliance of the above said directions, immediately. He is also requested to keep strict vigil on the operations of the industry to the effect that unit shall not be operated more than 75% capacity.**

-Sd-

Sr. Environmental Engineer
for and on behalf of the
Punjab Pollution Control Board