

IN THE HON'BLE NATIONAL GREEN TRIBUNAL  
NEW DELHI.

O.A. No. 619/2022

IN THE MATTER OF:-

Mast Ram .....Applicant

Versus

State of H.P. & Ors. .... Respondents

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PLACE: SHIMLA

DATED: 16.01.2024

REPLYING RESPONDENT No. 1 & 2

Director,  
Department of Environment, Science Technology &  
Climate Change, Shimla, H.P.

Through

*Divyanshu Kumar Srivastava*

**(DIVYANSHU KUMAR SRIVASTAVA)**

Advocate for Respondent

32, Todarmal Road,

New Delhi-110001

Ph.: 9711872319, Email: dksrivastava0511@gmail.com

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL  
NEW DELHI.**

**O.A. No. 619/2022**

**IN THE MATTER OF:-**

Sh. Mast Ram village Masulkhana, P.O.-  
Masulkhana, Tehsil-Kasauli, District-Solan, H.P.

.....Applicant

Versus

1. State of H.P. through its Chief Secretary, to the Govt. of Himachal Pradesh.
2. Director, Department of Environment Science Technology & Climate Change, Himachal Pradesh.
3. District Magistrate, Solan.
4. Member-Secretary, Himachal Pradesh Pollution Control Board (HPPCB), Him Parivesh, Phase-III, New Shimla, 171 009.
5. The Project Proponent-M/s Morepen Laboratories Pvt. Ltd, Village and Post Office Masulkhana, Parwanoo, District Solan, H.P.

.....Respondents

**MAY IT PLEASE YOUR LORDSHIPS**

**MOST RESPECTFULLY SHOWETH**

**REPLY ON MERITS:**

1. That the contents of para 1 relates to address of the applicant and his source of livelihood from

livestock/cattle stock and farming and hence needs no reply.

2. That the content of para-2, relates to the respondent No. 5 i.e. M/s Morepen laboratories Private Limited, which is a red category pharmaceutical company situated at village & Post office- Masulkhana, Tehsil- Kasauli, District-Solan, which is averred to be situated in the vicinity of the agriculture land owned and possessed by the complainant. That the consent to operate was issued in favour of the unit vide Consent No. CTO/ BOTH /RENEW/RO /2022 4535120 which is valid upto 31.03.2025.
3. That the content of para-3, as per the complainant (s) are related to the release of hazardous waste, effluents, which are being emitted into the nearby fields/air/land of the villagers, which is being monitored by Regional Pollution Control Board office of that area. It is submitted that as per the directions of this Hon'ble Tribunal in this matter vide order dated 29.09.2022 a Joint Inspection Committee comprising of CPCB, State PCB and Deputy Commissioner, Solan was constituted to look into the grievances of the applicant, along with the representatives from M/s Morepen laboratories Private Limited. The joint committee

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BY THE COMMISSIONER

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could not submit their report as per the stipulated time period. Thereafter, two month time was granted to the committee vide order dated 24.01.2023 to submit a report. Earlier, the meeting of the Joint Committee and site visit was conducted on 31.10.2022 but could not compile the complete inspection report. Both the representatives of the applicant and the project proponent were associated as per the directions of the Hon'ble Tribunal.

4. The following grievances were shared by the representatives of the village:-

Sr. no.	Grievances made by applicant and other representatives of the village-Masulkhana.	Findings by the committee
1	Discharge of hazardous waste effluent into the nearby drain, which is a source of water for animals and irrigation	The Comprehensive and stage wise study of Effluent Treatment Plant (ETP) installed by the industry indicated that the ETP was not in operation during the surprise

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		<p>inspection by the Committee on 09.02.2023 hence, the comprehensive stage wise study was not conducted.</p> <p>Secondly, as per the Consent to Operate (COP) granted by the HP PCB with the condition that the industry shall treat and recycle all the trade effluents i.e. Zero Liquid Discharge.</p>
2	<p>Illegal extraction of ground water /surface water, leading to water scarcity.</p>	<p>Further, it was observed by the Joint Inspection Committee that industry is sending its untreated trade effluents to CETP Baddi for last 04 years, in violation</p>

ATTESTED

OATH COMMISSIONER



to the conditions of the Consent to Operate from HPPCB. It is pertinent to mention that according to Member Secretary, HPPCB, in order to restrict discharge of effluents and up gradation of ETP, the unit was temporarily allowed to send its effluents to CETP Baddi, but even after the lapse of 04 years the unit is sending its CETP without meeting the norms notified by the Government of Himachal Pradesh. However, the unit is unable to operationalize the ETP of the industry

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		for treatment of the entire effluent as per CTO granted by HPPCB.
3	Contamination of Soil.	That concentration of <b>Nickel (Ni)</b> in the soil samples taken from the down streams location was on much higher side in comparison of target values of soil specified by WHO. That concentration of Zinc taken from the agricultural downstream of the industry was on much higher side (100 mg/Kg) against the target value of 50mg/Kg as specified by

ATTACHED

OATH CONFIRMED

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WHO. The outcome of the analysis is a concern for the State Authorities as the heavy metals (Zn and Ni) in the soil of adjoining farms despite low heavy metal concentration observed in the effluent samples collected by the Joint Committee, is to be monitored seriously, though no discharge was observed by the Joint Committee at the time of the visit to the unit.

The committee also collected the samples of the soil, agriculture crops and produce to

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DATE: 20/11/2011



		<p>determine the accumulation of contaminants in the soil, crop &amp; produce and the correlation with the effluent parameters during the site visit on 31.10.2022 and the said samples were analysed in Punjab</p> <p>Biotechnology Incubator (PBTI) Laboratory, Mohali.</p>
4	<p>Damage to crops and health risk to villagers and domestic animals, due to mixing of hazardous waste effluent into the nearby natural drain.</p>	<p>That the industry is neither meeting the norms/conditions of recycle (ZLD) prescribed in the CTO issued by the PCB and not meeting the inlet norms of CETP prescribed by the</p>

ATTENDED  
OATH COMMISSIONER

*[Signature]*

		<p>Himachal Government HPPCB for sending the effluents to CETP in violation of CTO.</p> <p>As for the averments/ grievances illegal extraction of the ground water, it was observed by the Joint Inspection Committee that the industry had installed one bore well and obtained permission for abstraction of ground water @100m<sup>3</sup>/day. It was observed during the site visit that, industry has taken water connection from surface water</p>
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WATH COMMISSIONER



		<p>supply which is meant for nearby villages for irrigation, without obtaining any permission. The Joint Inspection Committee recommended that the industry be directed to immediately disconnect this water connection till permission is obtained from the concerned authority. It is submitted that the HPPCB shall ensure compliance to the said recommendation which is pertinent to the wellbeing of the villagers.</p>
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AT THE

OATH COMMISSIONER



Further, in view of the Hon'ble NGT order dated 29.09.2022, the report of the Joint Inspection Report was also supplied to the unit i.e. M/s Morepen Laboratories Limited for which following compliances were made by the unit, which are as below:-

- a) Unit is in process of Effluent Treatment plant (ETP) up-gradation.
- b) Modification and up-gradation of Multi Effect Evaporator (MEE), Agitated Thin Film Dryer (ATFD), Stripping Column and Reverse Osmosis (RO) has been completed and is under trials to comply with ZLD (Zero Liquid Discharge) Conditions.
- c) The illegal water connection from the surface source has been removed by the industry.

Further, as per the report/ comments dated 19.12.2023 furnished by the HPPCB submitting that during the recent inspections no discharge of waste water and no hazardous wastes into the nearby nallah were observed. The unit is still sending its remaining effluents to CETP as the trial of ZLD (Zero Liquid Discharge) has not yet been completed. A true copy of the report dated 19.12.

2023 furnished by HPPCB is annexed herewith as Annexure –A.

5. That the content of para-4 of the petition/complainant pertains to the violation of laws under the Environment Protection Act & its Rules thereof, causing immense damage to the health and farm land of the villagers, their livestock and further flora and fauna of village-Masulkhana. It is submitted before the Hon'ble Tribunal that the entire area is being monitored by Regional Pollution Control Board office of that area. As per the information furnished by HPPCB, the unit has installed ETP of capacity 72 KLD and at present treating 15-20 KLD and recycling the treated effluent. The remaining effluent is being sent to CETP Baddi for treatment and disposal. As informed by HPPCB, in compliance to the directions passed by the Hon'ble Tribunal, the unit has installed the additional equipment in the ETP and trial –run to achieve Zero Liquid Discharge (ZLD) from process, has started and the same was verified by HPPCB during the visits. Unit has also installed STP of capacity 20 KLD For domestic sewerage followed by root zone treatment. That the unit has installed online Continuous Emission Monitoring System (CEMS) on final outlet of ETP

& on STACK. The results of CEMS are in the domain and results are well within prescribed standards. As per the latest report by HPPCB on 27.10.2023 the results for both ETP & STP were found within prescribed standards.

6. That the content of para-5, of the application/complainant pertains to the hazardous emission of waste water into the nearby Nallah and fields causing damage to the fields of the local inhabitants and due to contamination of the soil/land and air it has becomes unfit for human consumption. That a soil sample from the complainant field was also collected on 08.06.2022 and the higher values of Nicle and Zinc observed in the crop samples led to the Joint Committee recommend similar study to be conducted of more staple crops in the area.

As per the latest information from HPPCB, the unit has not conducted the study from the reputed institute as yet. The State Government shall take an earnest endeavour to restrict such activities causing public menace and will ensure statutory compliance by the unit through the HPPCB.

7. That the content of para-6, are related to the release of hazardous pharmaceutical waste emissions in to the field of complainant on date 05.04.2022 due to which his *Jersey cow* died of food poisoning /grazing

in the nearby field contaminated by the hazardous waste water released by M/s Morepen laboratories Private Limited, Masulkhana. It is submitted before the Hon'ble Tribunal that such an incidence calls for more conscious steps from the respondents towards preservation and conservation of the area around the industrial units. That an ardent effort would be ensued on the behalf of the respondents to prevent any such activities that cause loss to the life or livestock's lives of the local inhabitants near the industrial units. The HP PCB is monitoring the area and the steps shall be taken to recoup and recover the loss caused to the vicinity of agricultural farm land of the unit.

8. That the content of para-7 are related to the request made by the complainant (s) to the management of M/s Morepen laboratories Private Limited, Masulkhana and hence need no submission from the replying respondent.
9. That the content of para-8 are related to the grievances made by complainant (s) against the management of M/s Morepen laboratories Private Limited, Masulkhana regarding violation of Environment Protection Act, which is duty of Regional Pollution Control Board office of that

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area to check the regulation under Water and Air Act, hence need no comments.

Now, it has been requested by Sh. Mast Ram, S/o Sh. Jivanu Ram, R/o Village & Post Office-Masulkhana, Tehsil-Kasauli, District-Solan, H.P. to take necessary legal actions against the pharmaceutical company, M/s Morepen laboratories Private Limited for violation of the Environment Laws and damage to the villagers, animals and farms of village Masulkhana, Tehsil-Kasauli, Solan.

It is however, submitted that as far as Himachal Pradesh State Level Environment Impact Assessment Authority (HP SEIAA) is concerned the Environment Clearance was granted as category "B-2" project as per EIA Notification, 2006 vide its notification number S.O.1223 (E) dated 27.03.2020 and subsequent notification vide S.D.3636 (E) dated 15.10.2020, where it has been stated that:-

*"All proposals for projects or activities in respect of Active Pharmaceutical Ingredients (API), received up to the 30<sup>th</sup> September 2020, shall be appraised, as Category 'B2' projects, provided that any subsequent amendment or expansion or change in product mix, after the 30th September 2020,*

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*shall be considered as per the provisions in force at that time."*

Thereafter, careful appraisal by State Expert Appraisal Committee (SEAC)/ State Level Environment Impact Assessment Authority (HP SEIAA) on the basis of documents/approval submitted by project proponent from various concerned Department's, the Environment Clearance was granted with standard terms and conditions of Ministry of Environment, Forest & Climate Change (MoEF&CC) vide this office letter no. HP SEIAA/2020/811-555-562 dated 02.07.2021 for expansion of API's, bulk drug manufacturing unit under category 5(f)-Synthetic Organic chemicals at khasra number Khasra number 1330,1329, 828, 824, 1328, 1327, 1325, 1324, 832, 833, 834, 1323 falling in village- Masulkhana, Tehsil- Kasauli, District-Solan, H.P. That if in any circumstance or at any stage the present unit or any other project proponent is found to be non-compliant to the provisions of the act the State shall ensure levy heavy environment compensation under the Polluter Pays Principle thereby, setting forth the deterrence for all the erring industrial units.

**PRAYER:**

The submissions made here in above in paras supra, may be taken on record on the behalf of the replying respondents No. 1&2.

PLACE: SHIMLA  
DATED: 16.01.2024

**REPLYING  
RESPONDENTS**

Director,  
Department of Environment, Science Technology &  
Climate Change, Shimla, H.P

Through



**(DIVYANSHU KUMAR SRIVASTAVA)**

Advocate for Respondent

32, Todarmal Road,

New Delhi-110001

**Ph.:** 9711872319, **Email:**

[dksrivastava0511@gmail.com](mailto:dksrivastava0511@gmail.com)

ATTESTED  
OATH COMPLETED

**BEFORE THE NATIONAL GREEN TRIBUNAL  
(PRINCIPAL BENCH), NEW DELHI  
ORIGINAL APPLICATION NO.619/2023**

**IN THE MATTER OF:**

**Mast Ram & Anr.**

**....APPLICANTS**

**Vs.**

**State of H.P. & Ors.**

**....RESPONDENTS**

**AFFIDAVIT**

I, Duni Chand Rana S/o Late Sh. S.R. Rana, aged about 52 years presently working as Director, Department of Environment, Science Technology & Climate Change (DEST&FCC) in the State of Himachal Pradesh, do hereby solemnly affirm and state as under: -

1. That I am the Authorised Signatory of the Respondent State in the present matter and I am fully conversant with the facts and circumstances of the case, and I have been duly authorized and am, therefore, competent to affirm this affidavit.
2. I state that I have read the contents of the Reply from paras 1 to 9 and pages 1 to 18. I state that the facts contained therein are true to the best of my knowledge and belief as derived from the record.
3. I state that the legal argument in the Reply is based on the legal advice given to me by my Counsel and factual statements are based on documents/records relied upon.



Director,  
Department of Environment, Science Technology &  
Climate Change, Shimla, H.P.

DEPONENT

VERIFICATION

Director,  
Department of Environment, Science Technology  
Climate Change, Shimla,

I, Duni Chand Rana, the Deponent above named, do hereby verify that the contents of paragraph no. 1 to 3 of the above affidavit are true and correct to the best of my knowledge and belief, no part of it is false and nothing material has been concealed there from.

*Sujata*  
Identified by

Verified at Shimla on this 17<sup>th</sup> day of January 2024.

DEPONENT

Director,  
Department of Environment, Science Technology &  
Climate Change, Shimla, H.P.

ATTESTED

OATH COMMISSIONER

On this 17<sup>th</sup> day of January 2024, the above deponent was declared before me and made an affirmation on this 17<sup>th</sup> day of January 2024 at Shimla, the District of Shimla by Sh. Duni Chand Rana who was identified by Sh. Sujata who is personally known to me and the contents of the above affidavit have been read over & explained to the deponent in vernacular who admitted them to be correct and true at the time of making thereof.

All Cuttings and Corrections are duly attested by me.

*[Signature]*  
Oath Commissioner.

Oath Commissioner  
HP High Court, Shimla



**BEFORE THE NATIONAL GREEN TRIBUNAL  
(PRINCIPAL BENCH), NEW DELHI  
ORIGINAL APPLICATION NO.619/2023**

**IN THE MATTER OF:**

**Mast Ram & Anr.**

....APPLICANTS

Vs.

**State of H.P. & Ors.**

....RESPONDENTS

**VAKALTNAMA**

KNOW ALL to whom these presents shall come that I, Duni Chand Rana, working as Director, Department of Environment, Science Technology & Climate Change (DEST&CC) in the State of Himachal Pradesh, do hereby appoint **SHRI DIVYANSHU SRIVASTAVA (D/1383/2015)**, hereinafter called the Advocate to be My/our Advocates in the above noted case and authorize them/him:

- a) To act, appear and plead in the above noted case in this court in any other court in which the same may be tried or heard and also in the appellate courts.
- b) To sign, file, verify and present pleading, applications, appeals, cross-objections or petitions for execution, review, revision, withdrawal, compromise or other petition, replies, objections affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case in all its stages.
- c) To file and take back documents.
- d) To withdraw, or compromise the said case or submit to arbitration any differences or disputes that may arise touching or in any manner relating to the said case.
- e) To take out execution proceedings.
- f) To deposit, draw and receive moneys, cheques and grant receipts therefor and to do all other acts and things which may be necessary to be done for the progress and in the course of the prosecution of the said case.
- g) To appoint and instruct any other Legal Practitioner authorising him to exercise the powers and authorities hereby conferred upon the Advocate whenever he may think fit to do so and to sign the power of attorney on my/our behalf.

And I/we the undersigned do hereby agree to ratify and confirm acts done by the Advocate or his substitute in the matter my/our own acts as if done by me/us to all intents and purposes.

And I/we undertake that I/we or my/our authorised agent would appear in the court on all hearings and will inform the Advocate for appearance when the case is called.

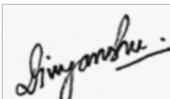
And I/we the undersigned do hereby agree not to hold the Advocate or his substitute responsible for the result of the said case in consequence of his absence from the court when the said case is called up for hearing, or for any negligence of the said Advocate or his substitute.

And I/we the undersigned do hereby agree that in the event of the whole or any part of the fee agreed by me/us to be paid to the Advocate remaining unpaid, he shall be entitled to withdraw from the prosecution of the said case until the same is paid up. If any costs are allowed for an adjournment, the Advocate would be entitled to the same.

IN WITNESS WHERE OF I/we do hereunto set my/our hand to these presents of which have been understood by me/us this **16th** day of December, 2023.

**January, 2024**

ACCEPTED:



**(DIVYANSHU KUMAR SRIVASTAVA)**

32, Todarmal Road, New Delhi -110001

[Dksrivastava0511@gmail.com](mailto:Dksrivastava0511@gmail.com)

9711872319



CLIENT

**Director,  
Department of Environment, Science Technology &  
Climate Change, Shimla, H.P.**

1.300328/2023

(68)

Urgent Court Matter**HP STATE POLLUTION CONTROL BOARD,  
BELOW BCS, PHASE-III, NEW SHIMLA**No. PCB/OA No. 619/2022 - 13278  
Dated: 19.12.2023

From: The Member Secretary

To

The Director,  
Department of Environment, Science & Technology,  
Paryavaran Bhawan, US Club,  
Shimla-171001.**Sub: - OA No. 619/2022 titled Mast Ram & Anr. V/s State of  
HP pending before the Hon'ble NGT.**

Sir,

Kindly refer to your office letter No. Env. S&T (E)-5-91/2023-O.A.619/2022-3251 dated 12-12-2023 on the subject cited above. In this connection, please find enclosed herewith para-wise information of the Original Application (indicating action taken by the State Board in the matter) received from the Regional Office, Parwanoo for your information and necessary action.

(Encl: As above)

Yours faithfully,

Signed by

Anil Joshi, (IFS)

Member Secretary  
HPSPCB, Shimla-9  
Date: 19.12.2023 08:36:25

d/c

Attested

Section Officer (Env. S&T)  
H.P. Sect Shimla - 2



## H.P. STATE POLLUTION CONTROL BOARD

SCF- 6, 7, 8, Sec-4, Parwanoo, Distt. Solan (H.P.) 173220  
Telefax- 01792-234081, Website: <http://hppcb.nic.in/>

No. PCB/RO Pwn/ M/s Morepen Laboratories Limited/20- 1268 Dated: 16-12-2023

To

The Member Secretary,  
H. P. State Pollution Control Board,  
Phase-III, New Shimla-09

**Subject:** Reg. Reply w.r.t. order dated 19.10.2023 in the Hon'ble NGT matter  
Mast Ram vs. State of HP O.A. No 619 of 2022.

Sir,

This is in reference to orders passed by Hon'ble NGT in the matter of O.A. No 619 of 2022 titled as Mast Ram vs State of H.P dated 19.10.2023. In this context the point wise reply with reference to the complaint registered in the Hon'ble NGT and present status is placed as below:

Sr. No.	Point No.	Action taken/Submission
1	1	For Record only
2	2	The unit in the name and style of M/s Morepen Laboratories Ltd. Established at Vill. Masoolkhana, Tehsil Kasauli, Distt. Solan H.P. is engaged in Bulk Drugs Manufacturing having annual production capacity as: i) Loratadine (LB-L10) 180 M.T. per annum, ii) Montelukast 72 M.T. per annum and iii) Desloratadine 24 M.T. per annum. The Renewal of Consent to operate was issued in favor of the unit vide Consent No. CTO/BOTH/RENEW/RO/2022/4535120 which is valid upto 31.03.2025 (Copy Attached Annexure - I) and unit falls under Red Large category.
3	3	The unit is regularly being inspected and no effluent discharge and no hazardous waste discharge were observed into nearby field/air/land of the villagers. Further, a joint committee was constituted in compliance Hon'ble NGT orders dated 29.09.2022.

Attested  
Section Officer (Env S&I)  
H.P. Sectt Shimla 2

The joint committee visited the site on date 31.10.2022. The committee comprises of following officials :

- i. *Sh. Gaurav Mahajan, HAS, SDM Kasauli (Member Nominated by Deputy Commissioner, Solan).*
- ii. *Dr. Narender Sharma, Additional Director, CPCB, RD, Chandigarh (Member, nominated by CPCB).*
- iii. *Er. Pradeep Moudgil, Regional Officer, HPPCB, Parwanoo (Member, nominated by HPSPCB).*

During the visit of the above said committee both the representatives i.e. applicant and the project proponents were present, as per directions of the Hon'ble National Green Tribunal. The following grievances were shared by the Applicant and other representatives of the Village Masulkhana which are as below:

- i. *Discharge of hazardous waste effluent into the nearby drain, which is a source of water for animals and irrigation.*
- ii. *Illegal extraction of ground water/surface water, leading to water scarcity.*
- iii. *Contamination of Soil.*
- iv. *Damage to Crops and health risk to villagers and domestic animals, due to mixing of hazardous waste effluent into the nearby natural drain.*

Further in view of above grievances the following observations/recommendations were made by the joint committee and the committee has submitted the same before Hon'ble NGT. The observations/recommendations w.r.t. effluent and hazardous waste discharge are summarized as below:

- i. The Renewal of Consent to Operate (RCTO) granted in favor of the unit is for Zero Liquid Discharge (ZLD), however the unit is only treating 10-15 m<sup>3</sup>/day and the remaining untreated effluent is sent to CETP without complying with the Inlet norms for the last 04 years, and

*Added*  
Section Officer *Renew. S&T*  
H.P. Sectt Shimla - 2

it is a violation consent conditions.

- ii. The concentration of *nickel and Zinc* in the soil samples collected from downstream locations was found exceeding the limits specified by WHO. The high concentration of heavy metals (Zn and Ni) in the soil of adjoining farms, despite low heavy metal concentration observed in the effluent samples collected by the Joint Committee, is an area of concern and indicates discharge of concentrated waste, although no discharge was observed by the Joint Committee at the time of visit.
- iii. It was observed during the site visit that, industry has taken water connection from surface water supply which is meant for nearby villages for irrigation, without obtaining any permission. It is recommended that Industry be directed to immediately disconnect this water connection till permission is obtained from the concerned authority.

Further in view of Hon'ble NGT's order 29.09.2022, the Joint Committee report was supplied to the unit and the present status & details of compliance made by the units and as observed in recent inspections is as below:

- i. Unit is in process of ETP upgradation.
- ii. Modification and upgradation of Multi Effect Evaporator (MEE), Agitated Thin Film Dryer (ATFD), Stripping Column and Reverse Osmosis (RO) has been completed and is under trials to comply with ZLD Conditions.
- iii. The mentioned connection from illegal surface water source has been removed.

Whereas during recent inspections no discharge of waste water and no hazardous waste into the nearby nallah was observed. The results of the samples collected from Final Outlet of ETP and STP are complying with standards (copy of latest sampling is attached as **Annexure -II**). Whereas the unit is still sending its remaining effluent to the CETP as the trial of ZLD is not yet completed. In addition of this the water sampling form the

*Attended*

Section Officer (Env. S&I),  
H.P. Sectt Shimla - 2

		<p>adjoining nallah is being conducted on regular basis and copy of results (as attached Annexure - III) for reference as there is no process discharge observed in the adjoining nallah.</p> <p><i>However an accidental discharge of boiler fuel (Low Sulphur Heavy Stock: LSHS) occurred from the premises of the unit on 01.12.2023 for which necessary directions were issued to the unit. The unit was regularly inspected w.r.t. to the incident observed and the immediate corrective measures taken by the unit were monitored and the collected waste i.e. spilled boiler fuel is disposed to TSDF. The Further action is under process as the result of collected samples are awaited.</i></p>
4	4	<p>The unit has installed ETP of capacity 72 KLD and at present treating 15-20 KLD and recycling the treated effluent. The remaining effluent (as the total effluent generation is around 61.5 KLD), is sent to CETP Baddi for the further treatment and disposal. Further in view of direction issued and reply submitted by the unit for the upgradation of ETP, the unit has installed the additional equipment's in the ETP and trial-run to achieve the Zero Liquid Discharge (ZLD) from process, is started and same is verified during visits. Unit has installed STP of capacity 20 KLD for domestic sewage followed by root zone treatment. Unit has installed Online Continuous Emission Monitoring System (CEMS) on Final outlet of ETP &amp; on Stack. The results of CEMS are in the public domain and results are well within prescribed standards. As per latest sampling conducted on dated 27.10.2023 the results for both ETP &amp; STP were found within prescribed standards.</p>
5	5 ★	<p>A soil sample from the complainant field, has been collected on dated 08.06.2022. Further with reference to the higher values of Nickel and Zinc observed in crop samples on upstream and downstream of the unit, joint committee recommended that similar study should be conducted of more staple crops in the area.</p> <p>The unit has not submitted study report as per the recommendation</p>

*Attested*

Section Officer (Env. S&TV)  
H.P. Sectt. Shimla - 2

		of the joint committee till date, whereas unit stated that the study shall be conducted from the reputed institute.
6	6	Point does not pertain to this office.
7	7	Point does not pertain to this office.
8	8	Point does not pertain to this office.

Submitted for kind information and further necessary action, please.

Encls: As Above

Attested

Section Officer (Env. S&T)  
H.P. Sect. Sharma

Yours faithfully

*Pradeep*  
16/1/14  
Er. Pradeep Moudgil  
Asth. Environmental Engineer  
HPS PCB Parwanoo



## H.P.STATE POLLUTION CONTROL BOARD

HIM PARIVESH, PHASE-III, NEW SHIMLA-171009.

Website:- <http://hppcb.nic.in>

HPSPCB No : 193-C

Date: 29/03/2022

Industry Registration ID: 10026

Application No : 4535120

To,  
**M/s. Morepen Laboratories Limited**  
**Masulkhana, Kasauli Road Parwanoo District Solan, H.P.Masoolkhana**  
**Parwanoo**  
**Solan Parwanoo**  
**173220**

Subject: Renewal of 'Consent to Operate' u/s 25/26 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 Renewal of 'Consent to Operate' u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and u/s 21 of Air (Prevention & Control of Pollution) Act, 1981, you are hereby, authorized to operate an industrial unit subject to the Terms and Conditions as mentioned in this Consent letter.

### 1. Particulars of Consent to Operate under Water Act, 1974 and Air Act, 1981 granted to the industry

Consent No.	CTO/BOTH/RENEW/RO/2022/4535120
Consent valid from:	01/04/2020
Consent valid upto:	31/03/2025
Certificate Type :	RENEW
Previous CTO No. & Validity :	

### 2. Particulars of the Industry

Name & Designation of the Applicant	Morepen Laboratories Ltd, (Authorized Signatory)
Address of Industrial premises	M/s. Morepen Laboratories Limited, Masulkhana, Kasauli Road Parwanoo District Solan, H.P.Masoolkhana, Parwanoo, Solan Parwanoo-173220
Category of Industry	Red
Type of Industry	Basic drugs and Pharmaceuticals
Scale of the Industry	Micro
Office District	Solan Parwanoo
Capacity	
Raw Materials (Name with quantity per day)	

*Attested*  
  
 Section Officer (Env. S&T)  
 H.P Sectt. Shimla - 2

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M/s. Morepen Laboratories Limited, Masulkhana, Kasauli Road Parwanoo District Solan, H.P.Masoolkhana, Parwanoo, Solan Parwanoo, 173220

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Materials	Quantity	Unit
LN8	19.5	M.T./Month
HF	23.4	M.T./Month
BF3 Gas	11.7	M.T./Month
KOH	85.5	M.T./Month
NaCl	9.75	M.T./Month
Water	380.25	M.T./Month
Toluene	2.55	M.T./Month
Ethyl Chloro formate	12.15	M.T./Month
N.N. Diisopropyl Ethyl Amine	1.8	M.T./Month
HCl	0.6	M.T./Month
Isopropyl Ether	3.3	M.T./Month
Carbon	1.35	M.T./Month
Hyflo	1.5	M.T./Month
Ethyl Acetate	0.6	M.T./Month
Acetonitrile	0.9	M.T./Month
MT8	10.82	M.T./Month
Acetonitrile	67.23	M.T./Month
Di Isopropyl Ethyl Amine	4.56	M.T./Month
Methyl Sulfonyl Chloride	2.86	M.T./Month
Methanol	88.34	M.T./Month
DMF	15.48	M.T./Month
THF	28.90	M.T./Month
Liquid Nitrogen	216.53	M.T./Month
Caustic	1.73	M.T./Month
MN-7/ MTS-5	4.98	M.T./Month
Ethyl Acetate	64.95	M.T./Month
Sodium Sulphate	2.13	M.T./Month
Sodium Chloride	12.59	M.T./Month
Tartaric Acid	4.33	M.T./Month
Caustic prill	1.73	M.T./Month
Dicyclo Hexyl Amine	6.171	M.T./Month
Toluene	69.98	M.T./Month

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M/s. Morepen Laboratories Limited, Masulkhana, Kasauli Road Parwanoo District Solan, H.P. Masulkhana, Parwanoo, Solan Parwanoo, 173220

Page 2

Accepted  
Section Officer (Env. S&T.)  
H.P. Sectt. Shimla - 2

Hydrochloric Acid	25.11	M.T./Month
Caustic	2.24	M.T./Month
Caustic LR grade	0.44	M.T./Month
Carbon	0.459	M.T./Month
Hyflo	0.306	M.T./Month
MTS-4	5.24	M.T./Month
MDC	8.387	M.T./Month
Sodium Bi Carbonate	2.09	M.T./Month
Water	432	M.T./Month
Sulphuric Acid	0.26	M.T./Month
L10	2.78	M.T./Month
Caustic	3.07	M.T./Month
Ethyl Acetate	6.96	M.T./Month
Methanol	25.06	M.T./Month
Carbon	0.064	M.T./Month
Hyflo	0.278	M.T./Month
Water	74	M.T./Month
Sodium Chloride	0.167	M.T./Month

Products (Name with quantity per day)

Name of Products	Unit	Quantity	Intermediate Product	Principal Use
Loratadine	M.T./Year	180	Nil	For Medication
Montelukast Sodium	M.T./Year	72	Nil	For Medication
Desloratadine	M.T./Year	24	Nil	For Medication

Details of the Effluent Treatment Plant

Type of Effluent	Capacity(KLD)	Quantity(KLD)
STP	20 KLD	10
ETP	72 KLD	61.5

Mode of Disposal

Description	Quantity(In KLD)	Method of Treatment	Method of Disposal
Boller Cooling	5.7	ETP	Recycle
Domestic	10	STP	Irrigation/Gardening
Industrial Process	55.8	ETP	Recycle

required (in TPD) and capacity of boilers/ Furnace/Thermo heater etc.

	No. of Boiler/ Heater/ Evaporator/ Incinerator/DG Set/Other	Capacity	Type of Boiler/Heaters /Evaporators/ Incinerator/DG Sets/Others	Type of Fuel	Fuel consumption rate in MT/hour or KL/hour or M3/hour
DG Sets	2	500 KVA & 250 KVA	DG set	Diesel	65 Ltrs/ hr & 30 Ltrs/hr
Boilers	2	2.5 and 1.5 Ton/hr	Heaters	Furnace oil	60 Ltrs/hr
Incinerator	1	0.6 Ton/ hr	Heaters	Wastes from manufacturing process	80 Ltrs/hr

Type of Air Pollution Control Devices installed

Equipment Type	Equipment Name	Date/proposed date of installation	Efficiency(% reduction)	Final concentration of pollution being emitted
Wet Scrubber	Boilers	Fri Jan 19 00:01:00 IST 2018	98%	PM, SO <sub>2</sub> , NO <sub>2</sub> & Carbon Monoxide
Wet Scrubber	Incinerator	Sat Jan 15 00:01:00 IST 2000	98.5%	PM, SO <sub>2</sub> , NO <sub>2</sub> & carbon Monoxide

Sources of emissions and type of pollutants

Name and location of the process vessel to which the stack/ vent is attached	Rate of emission in Kg/hr	Concentration of pollution like SO <sub>2</sub> , NOX, H <sub>2</sub> S, Cl, HCl etc. in mg/NM <sup>3</sup>	Height of Vent/outlet/stack from ground level in meters
R-201 A-II & R-217 are attached with process scrubber at unit-II	HF-3.96 Kg/hr	Hydrogen Fluoride	6.1 Meters
RE-04 B-I is attached with process scrubber at unit-I	HCl -2.45 Kgs/hr	HCl	16 Meters

*Attested*

Section Officer ( Env. S&T )  
H.P. Sankar Sharma

APOORV  
DEVGAN  
Digitally signed  
by APOORV  
DEVGAN  
Date: 2022.03.11  
10:24:07 +05'30'

Apoorv Devgan, IAS  
Member Secretary  
For & on behalf of  
(H. P. State Pollution Control Board)

Regional Officer, HPSPCB, Parwanoo for kind information and shall ensure the operation of the unit with adequate Pollution control devices.

APOORV DEVGAN  
Digitally signed by APOORV DEVGAN  
Date: 2022.03.31 10:24:19 +05'30'

Apoorv Devgan, IAS  
Member Secretary  
For & on behalf of  
( H. P. State Pollution Control Board)

Section Officer (Env. S&T)  
H.P. Sect. Shimla - 2



**H.P.STATE POLLUTION CONTROL BOARD  
FORM X  
REPORT BY STATE BOARD ANALYST  
(See Rule 26)**

Report No: 44699/W-10053

08/11/2023

I hereby certify that I Rama Kant Awasthi, SO, State Board Analyst duly appointed under sub-section (3) of section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received on 27/10/2023 from Pradeep Moudgll, AEE, HP State Pollution Control Board RO Parwanoo a Grab sample of Final Outlet of STP of Morepen Laboratories Limited, 1330,1329,828,824,1328,13 Masulkhana, Kasauli Road Parwanoo District Solan, H.P.Masoolkhana, Arki Distt. Solan Parwanoo, H.P. 173220 on dated 27/10/2023 for analysis. The sample was in a condition fit for analysis reported below:

I further certify that I have analyzed the aforementioned sample on 27/10/2023 to 08/11/2023 and declare the result of analysis is to be as follows :-

Method of analysis					
IS- 2488(I-V), IS-3025(Part 44): 1933, 'Standard method for examination of water', 23rd edition prepared and published jointly by:-					
1. American Public Health Association 2. American Water Works Association 3. Water Pollution Control Federation					
SAMPLING PARAMETERS					
Sr. No.	Parameter Name	Results	Units	Permissible Limit	Remark/Result Analysis
1	BOD	24.0	mg/L	30	Within Permissible Limit
2	Oil and Grease	2.0	mg/L	10	Within Permissible Limit
3	pH	8.78		6.5-9.0	Within Permissible Limit
4	TSS	85.0	mg/L	99	Within Permissible Limit
5	COD	228.0	mg/L	250	Within Permissible Limit

The condition of the seals, fastening and container on receipt was as: sealed as 100

Signed this on 08/11/2023

Remarks of Lab Head:

*Attested*  
Section Officer (Env. S&I)  
H.P. Sectt Shimla-2

Rama Kant Awasthi, SO  
(State Board Analyst)  
CL Parwanoo



**H.P.STATE POLLUTION CONTROL BOARD  
FORM X  
REPORT BY STATE BOARD ANALYST  
(See Rule 26)**

Report No: 58464/W-10052

08/11/2023

I hereby certify that I **Rama Kant Awasthi**, SO, State Board Analyst duly appointed under sub-section (3) of section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received on **27/10/2023** from **Pradeep Moudgil**, AEE, HP State Pollution Control Board RO Parwanoo a Grab sample of Final Outlet of ETP of **Morepen Laboratories Limited**, 1330,1329,828,824,1328,13 Masulkhana, Kasauli Road Parwanoo District Solan, H.P.Masoolkhana, Arki Distt. Solan Parwanoo, H.P. 173220 on dated **27/10/2023** for analysis. The sample was in a condition fit for analysis reported below:

I further certify that I have analyzed the aforementioned sample on **27/10/2023** to **08/11/2023** and declare the result of analysis is to be as follows :-

Method of analysis					
IS- 2488(I-V), IS-3025(Part 44): 1933, 'Standard method for examination of water', 23rd edition prepared and published jointly by:-					
1. American Public Health Association 2. American Water Works Association 3. Water Pollution Control Federation					
SAMPLING PARAMETERS					
Sr. No.	Parameter Name	Results	Units	Permissible Limit	Remark/Result Analysis
1	BOD	14.0	mg/L	30	Within Permissible Limit
2	Oil and Grease	1.2	mg/L	10	Within Permissible Limit
3	Phenolic Compounds(as C <sub>6</sub> H <sub>5</sub> OH)	0.0	mg/L	1.0	Within Permissible Limit
4	Sulphide	0.0	mg/L	2	Within Permissible Limit
5	pH	7.61		6.0-8.5	Within Permissible Limit
6	TSS	58.0	mg/L	100	Within Permissible Limit
7	COD	136.0	mg/L	250	Within Permissible Limit
8	Total Phosphate	0.12	mg/L	5	Within Permissible Limit

The condition of the seals, fastening and container on receipt was as: sealed as 100

Signed this on **08/11/2023**

H.P. STATE POLLUTION CONTROL BOARD SHIMLA  
MINARS WATER QUALITY MONITORING RESULTS  
FOR THE MONTH OF OCTOBER, 2023  
MINARS PARWANOO

Sr. No.	Name of location	Lab code	Sample Code	Date	Time	Temp. °C	D.O. mg/l	pH	Cond. µS	BOD mg/l	NO3-N mg/l	NO2-N mg/l	T.C. MPN /100ml	F.C. MPN /100ml	F.S. MPN /100ml	Turbidity NTU	F. Alkalinity mg/l	T. Alkalinity mg/l	CY mg/l	COD mg/l
	Minimum Detectable Limits						0.3	2.0	5	1.0	0.3	0	<1.8	<1.8	<1.8	1.0	5.00	20.0	5.0	5
1	River Kanni Kannihar	W-357	4036	12.10.2023	11.00 AM	11.0	7.5	8.04	408.0	0.1	2.69	0.03	27	4	<1.8	1.0	8.0	178.0	123.96	4.0
2	Sukhsa Nallah at Parwanoo (near Khlaka Barrier, exit point of H/P)	W-360	1870	17.10.2023	1.10 PM	9.0	7.2	7.35	768.0	12.0	3.77	0.04	>1600	>1600	9.2	1.0	0.0	316.0	89.97	128.0
3	Surajmukhi Nallah D/S STP @ Shamti	W-355	4480	07.10.2023	9.40 AM	-	6.9	8.26	595.0	0.1	2.04	0.05	26	2	<1.8	1.0	14.0	218.0	55.98	4.0
4	Surajmukhi Nallah U/S DWSS Galyana	W-356	3875	07.10.2023	10.50 AM	-	7.3	8.29	619.0	0.1	3.10	0.04	26	4	<1.8	1.0	16.0	230.0	123.96	4.0
5	Ashwani khad U/s Yashwant Nagar	W-338	2620	06.10.2023	3.51 PM	-	6.7	8.44	358.0	0.3	2.29	0.04	39	4.5	<1.8	1.0	10.0	176.0	27.99	16.0
6	Giri river D/s Yashwant Nagar	W-340	2621	06.10.2023	5.20 AM	-	6.7	8.36	266.0	0.2	2.04	0.04	39.0	4	<1.8	1.0	14.0	110.0	17.99	8.0
7	Giri River after Confluence with Ashwani Khad at Vill Maryog	W-373	3876	26.10.2023	2.40 PM	18.0	7.9	7.53	446.0	0.2	0.23	0.00	34.0	4	<1.8	2.0	0.0	250.0	6.99	8.0
8	Ashwani River U/S Vill Sadhupul	W-335	4479	06.10.2023	11.0 AM	-	6.5	7.80	305.0	0.4	4.31	0.06	49.0	4.5	<1.8	1.0	0.0	260.0	30.99	16.0
9	Ashwani River D/S Vill Sadhupul	W-336	4461	06.10.2023	12.15 PM	-	6.7	7.92	292.0	0.2	2.32	0.03	34.0	2	<1.8	1.0	0.0	100.0	19.99	12.0
10	Spring Source below SWM Site at Sologra, Dist Solan (HP)	W-337	1874	06.10.2023	9.10 AM	-	6.9	7.60	799.0	0.4	2.47	0.04	49.0	4.5	<1.8	1.0	0.0	116.0	73.98	20.0
11	Sukhsa Nallah at Parwanoo (near Khlaka Barrier, exit point of H/P)	W-401	1870	31.10.2023	3.14 PM	11.0	4.0	7.48	842.0	8.0	3.41	0.09	>1600	1600	<1.8	1.0	0.0	398.0	113.96	64.0

Scientific Officer-II

Accepted  
Section Officer (Env. S&T)  
H.P. Sectt Shimla - 2

Scientific officer-I

Remarks of Lab Head:



Rama Kant Awasthi , SO  
(State Board Analyst)  
CL Parwanoo

From:  
H.P. STATE POLLUTION CONTROL BOARD,  
CL Parwanoo

To:  
Morepen Laboratories Limited  
1330,1329,828,824,1328,13 Masulkhana, Kasauli Road Parwanoo District Solan, H.P.Masoolkhana, Arki,  
Distt.Solan Parwanoo, H.P.173220

*Accepted*  
Section Officer (Env. S&I)  
H.P. Secto Shimla - 2

H.P. STATE POLLUTION CONTROL BOARD SHIMLA  
MINARS WATER QUALITY MONITORING RESULTS  
FOR THE MONTH OF OCTOBER, 2023  
MINARS PARWANOO

(2/6)

NH <sub>4</sub> -N mg/l	Total Hardness mg/l	Ca as CaCO <sub>3</sub> mg/l	Mg as MgCO <sub>3</sub> mg/l	SO <sub>4</sub> mg/l	Ca <sup>++</sup> mg/l	Mg <sup>++</sup> mg/l	Na <sup>+</sup> mg/l	TDS mg/l	PO <sub>4</sub> mg/l	Boron mg/l	K <sup>+</sup> mg/l	F <sup>-</sup> mg/l	Fe mg/l	Zn mg/l	Ni mg/l	Cu mg/l	Mn mg/l	Pb mg/l	Cd mg/l	T.Cr mg/l	Use- monitoring	
0.40	10.0	5.0	4.00	5.0	5.0	4.0	5.0	10.0	0.200	0.5	1.0	0.2									D.L	S.L
0.0	264.0	158.0	78.0	31.92	74.49	18.95	9.23	281.00	0.05	0.22	0.82	0.28	0.216	0.055	0.0	0.0	0.0	0.0	0.0	0.0	-	-
0.0	340.0	196.0	144.0	41.04	78.49	34.98	10.79	529.00	0.14	0.15	1.26	0.39	1.761	0.399	0.0	0.0	0.0	0.0	0.0	0.0	0.49	7.2
0.0	366.0	274.0	92.0	32.88	109.73	22.35	9.55	410.00	0.07	0.21	0.97	0.31	0.882	0.286	0.0	0.0	0.0	0.0	0.0	0.0	-	-
0.0	372.0	282.0	90.0	29.76	112.93	21.86	8.11	420.00	0.27	0.17	0.69	0.27	0.455	0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
0.0	240.0	168.0	72.0	35.16	67.28	17.49	5.26	247.00	0.08	0.22	0.28	0.26	0.371	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.55	7.2
0.0	176.0	114.0	62.0	30.72	45.65	15.06	6.12	183.00	0.11	0.19	0.73	0.29	0.624	0	0.0	0.0	0.0	0.0	0.0	0.0	0.66	6.0
0.0	322.0	194.0	128.0	51.60	37.64	31.10	7.03	307.00	0.01	0.08	1.06	0.00	0.039	0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
0.0	164.0	114.0	50.0	42.24	45.65	12.15	4.63	210.00	0.12	0.20	0.25	0.45	0.427	0.145	0.0	0.0	0.0	0.0	0.0	0.0	-	-
0.0	144.0	102.0	42.0	34.44	40.85	10.20	5.91	198.00	0.09	0.24	0.84	0.34	0.315	0.039	0.0	0.0	0.0	0.0	0.0	0.0	-	-
0.0	466.0	294.0	172.0	32.16	117.74	41.79	3.29	559.00	0.10	0.23	0.23	0.44	0.329	0.096	0.0	0.0	0.0	0.0	0.0	0.0	-	-
0.0	282.0	184.0	98.0	95.40	73.69	23.81	11.42	580.00	0.05	0.08	1.39	0.00	0.747	0.277	0.0	0.0	0.0	0.0	0.0	0.0	-	-

*A*  
Principal Scientific Officer

*Accepted*  
Section Officer (Env S&T)  
H.P Sectt Shimla - 2

SWQM-2023

Sr. No.	Name of location	Lab code	Sample Code	Date	Time	Temp. °C	D.O. mg/l	pH	Cond. µS	BOD mg/l	NO <sub>3</sub> -N mg/l	NO <sub>2</sub> -N mg/l	T.C. MPN /100ml	F.C. MPN /100ml	F.S. MPN /100ml	Turbidity NTU	P. Alkalinity mg/l	T. Alkalinity mg/l	CF mg/l	COD mg/l
1	Handpump Near Shivalik Café, Parwanoo	W-363	-	17.10.2023	12.11 PM	-	-	7.03	849.0	0.4	3.40	0.04	-	-	-	1.0	0.0	308.0	87.97	20.0
2	Borewell at IIPMC, Parwanoo	W-364	-	17.10.2023	12.23 PM	-	-	6.96	885.0	0.8	3.64	0.04	-	-	-	1.0	0.0	300.0	91.97	28.0
3	Kaushlya River U/s Parwanoo Town	W-371	-	17.10.2023	12.51 PM	8.0	8.3	8.04	332.0	0.2	3.57	0.04	39.0	4.5	<1.8	1.0	0.0	196.0	19.99	8.0
4	Kaushlya river D/s Intake Channel of WSS	W-372	-	17.10.2023	12.59 PM	8.0	8.4	7.98	341.0	0.1	3.75	0.04	26.0	2	<1.8	1.0	0.0	182.0	29.99	4.0
5	Samtel Nallah before Confluence with sukhnā Nallah D/S Incometax Office Parwanoo	W-367	-	17.10.2023	10.36 AM	9.0	7.4	6.37	591.0	36.0	6.97	0.07	>1600	>1600	12	2.0	0.0	444.0	67.98	296.0
6	Borewell at Gabriel (Well at Parwanoo)	W-368	-	17.10.2023	11.57 AM	-	-	7.05	823.0	0.2	4.88	0.06	-	-	-	1.0	0.0	276.0	100.97	8.0
7	Giri River before Confluence with Ashwani Khad at Yashwant nagar	W-339	2621	06.10.2023	5.20 PM	-	6.7	8.30	236.0	0.1	2.37	0.03	39.0	4	<1.8	1.0	0.0	270.0	22.99	4.0
8	Sukhnā Nallah @Shivloli temple	W-361	-	17.10.2023	10.18 AM	8.0	7.9	7.12	267.0	0.1	3.05	0.03	21.0	2.0	<1.8	1.0	0.0	156.0	16.99	4.0
9	Sector-4 nallah before confluencing with Sukhnā nallah at sector-5	W-362	-	17.10.2023	10.05 AM	9.0	7.2	7.87	433.0	0.1	3.46	0.03	26.0	4.0	<1.8	1.0	0.0	216.0	21.99	4.0
10	Ghambar Khad D/s JSV WSS near Bridge	W-358	-	12.10.2023	2.30 PM	12.0	7.4	8.06	411.0	0.1	2.81	0.04	21	2	<1.8	1.0	10.0	176.0	22.99	4.0
11	Masulkhā Nallah U/s of Morepen lab at Village Masulkhā Parwanoo	W-365	-	17.10.2023	10.38 AM	8.0	7.8	7.23	272.0	0.1	3.86	0.04	26.0	4.0	<1.8	1.0	0.0	176.0	20.99	4.0
12	Masulkhā Nallah D/s of Morepen lab at Village Masulkhā Parwanoo	W-366	-	17.10.2023	10.57 AM	8.0	7.7	7.64	263.0	0.1	4.27	0.06	26.0	2	<1.8	1.0	0.0	176.0	13.99	4.0
13	Suknā nallah U/s of SWM site at sec-5 Parwanoo	W-369	-	17.10.2023	10.21 AM	9.0	7.3	6.52	557	32	6.00	0.062	>1600	>1600	11	2.0	0.0	352	43.99	248
14	Suknā nallah D/s of S site at sec-5 Parwanoo	W-370	-	17.10.2023	11.39 AM	9.0	7.4	6.22	442	14	5.67	0.042	>1600	>1600	4.5	1	0.0	320	34.99	113

Scientific Officer-II

Scientific Officer-I

Section Officer (Env)  
 P.O. Sec-5 Shimla-2

NH <sub>3</sub> -N mg/l	Total Hardness mg/l	Ca as CaCO <sub>3</sub> mg/l	Mg as MgCO <sub>3</sub> mg/l	SO <sub>4</sub> - mg/l	Ca <sup>++</sup> mg/l	Mg <sup>++</sup> mg/l	Na <sup>+</sup> mg/l	TDS mg/l	PO <sub>4</sub> <sup>-</sup> mg/l	Baron mg/l	K <sup>+</sup> mg/l	F <sup>-</sup> mg/l	SWQM													
													Fe mg/l	Zn mg/l	Ni mg/l	Cu mg/l	Mn mg/l	Pb mg/l	Cr mg/l	T.Cr mg/l	Bio- monitors mg					
0.0	410.0	254.0	156.0	74.64	101.72	37.90	2.09	577.0	0.010	0.23	0.18	0.66	0.104	0.223	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	368	218	150	72.72	87.23	36.44	3.97	567.00	0.01	0.27	0.57	0.68	0.427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	272.0	158.0	114.0	29.64	63.27	27.70	6.93	232.00	0.16	0.39	1.27	0.28	0.000	0.043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	154.0	82.0	72.0	27.84	32.84	17.49	5.91	238.00	0.29	0.32	1.21	0.22	0.000	0.039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	294.0	162.0	132.0	35.16	64.87	32.07	9.85	413.00	0.03	0.43	1.67	0.31	19.460	15.36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	386.0	226.0	160.0	39.48	90.51	38.86	7.25	584.00	0.01	0.29	1.56	0.42	0.569	0.498	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	166.0	104.0	62.0	28.92	41.65	15.06	5.36	162.00	0.01	0.24	1.33	0.40	0.343	0.138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	190.00	112.0	78.0	15.84	44.85	19.0	4.67	184.00	0.06	0.17	1.04	0.47	0.596	1.454	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	248.00	142.0	106.0	36.72	56.87	25.8	8.66	303.00	0.29	0.24	1.28	0.58	0.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.72	5.25		
0.0	254.0	168.0	86.0	30.96	67.28	20.89	8.22	291.00	0.07	0.26	1.64	0.22	0.343	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	162.0	94.0	68.0	20.28	37.64	16.52	7.36	187.00	0.08	0.26	1.29	0.36	0.202	0.138	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	164.0	88.0	76.0	14.04	35.24	18.46	7.98	184.00	0.03	0.30	1.37	0.27	0.150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	266	166	100	40.2	66.48	24.29	8.12	389	0.01	0.4	1.34	0.38	0.779	0.109	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		
0.0	304	174	130	35.04	69.68	31.58	8.66	304	0.05	0.29	1.69	0.25	0.456	0.096	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-		

*Attest*

Section Officer (Env. & H.P. Secy. Unit-2)

Principal Scientific Officer

**H.P. STATE POLLUTION CONTROL BOARD SHIMLA**  
**MINARS AND SWQM WATER QUALITY MONITORING CLASSIFICATION**  
**FOR THE MONTH OF OCTOBER, 2023**

Sr. No.	Name of location	D.O. mg/l	BOD mg/l	T.C. MPN /100ml	F.C. MPN /100ml	Water Quality Status
	Water Quality Criteria	>4.0 mg/l	<3.0 mg/l	<5000 MPN/100 ml	<2500 MPN/100 ml	
1	River Kunni Kunnhar	7.5	0.1	27	4	Satisfactory
2	Sukhna Nallah at Parwanoo (near Klaka Barrier, exit point of HP)	7.2	12.0	>1600	>1600	Not Satisfactory
3	Surajmukhi Nalaah D/S STP @ Shantl	6.9	0.1	26	2	Satisfactory
4	Surajmukhi Nalaah U/S DWSS Galyana	7.3	0.1	26	4	Satisfactory
5	Ashwani khad U/s Yashwant Nagar	6.7	0.3	39	4.5	Satisfactory
6	Giri river D/s Yashwant Nagar	6.7	0.2	39.0	4	Satisfactory
7	Giri River after Confluence with Ashwani Khad at Vill Maryog	7.9	0.2	34.0	4	Satisfactory
8	Ashwani River U/S Vill Sadhupul	6.5	0.4	49.0	4.5	Satisfactory
9	Ashwani River D/S Vill Sadhupul	6.7	0.2	34.0	2	Satisfactory
10	Spring Source below SWM Site at Salogra, Distt Solan (HP)	6.9	0.4	49.0	4.5	Satisfactory
11	Sukhna Nallah at Parwanoo (near Klaka Barrier, exit point of HP)	4.0	8.0	>1600	1600	Not Satisfactory
12	Handpump Near Shivalik Café, Parwanoo	-	0.4	-	-	Satisfactory
13	Borewell at HPMC, Parwanoo	-	0.8	-	-	Satisfactory
14	Kaushlya River U/s Parwanoo Town	8.3	0.2	39.0	4.5	Satisfactory
15	Kaushlya river D/s Intake Channel of WSS	8.4	0.1	26.0	2	Satisfactory
16	Samtel Nallha before Conflence with sukhna Nallah D/S Incometax Office Parwanoo	7.4	36.0	>1600	>1600	Not Satisfactory
17	Borewell at Gabriel (Well at Parwanoo)	-	0.2	-	-	Satisfactory

*(Signature)*  
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18	Girl River before Confluence with Ashwani Khad at Yashwant nagar	6.7	0.1	39.0	4	Satisfactory
19	Sukhna Nallah @Shivloti temple	7.9	0.1	21.0	2.0	Satisfactory
20	Sector-4 nallah before confluencing with Sukhna nallah at sector-5	7.2	0.1	26.0	4.0	Satisfactory
21	Ghambhar Khad D/s JSV WSS near Bridge	7.4	0.1	21	2	Satisfactory
22	Masulkhana Nallah U/s of Morepen lab at Village Msulkhana Parwanoo	7.8	0.1	26.0	4.0	Satisfactory
23	Masulkhana Nallah D/s of Morepen lab at Village Msulkhana Parwanoo	7.7	0.1	26.0	2	Satisfactory
24	Sukna nallah U/s of SWM site at sec-5 Parwanoo	7.3	32	>1600	>1600	Not Satisfactory
25	Sukna nallah D/s of SWM site at sec-5 Parwanoo	7.4	14	>1600	>1600	Not Satisfactory

*[Signature]*  
Scientific Officer-II

*[Signature]*  
Scientific Officer-I

*[Signature]*  
Principa Scientific Officer

*[Signature]*  
Section Officer (Env. S&T)  
H.P. Sectt Shimla - 2