***Regd.***
***Time Bound***
***Court Matter***

# HP STATE POLLUTION CONTROL BOARD,
## BELOW BCS, PHASE-III, NEW SHIMLA

**No. HPPCB/ OA No. 136/2020 /-** 1391 **Dated:** 5.5.2021

From: The Member Secretary

To

The Registrar General,
Hon'ble National Green Tribunal, Copernicus Marg,
New Delhi

**Subject:-** **Supplementary Report in the matter of OA No. 136/2020 titled Veteran Forum for Transparency in Public Life V/s State of HP & Ors. pending before the Hon'ble National Green Tribunal.**

Sir,

It is submitted that in the afore-cited matter, the Hon'ble NGT vide order dated 22-07-2020 has constituted a joint committee comprising of representatives of CPCB, HPSPCB and District Magistrate Solan and passed the following directions:-

*".....3. Let a joint Committee of CPCB, State PCB and District Magistrate, Solan look into the above issues in the light of contents of the application and take such further action as may found necessary. The State PCB will be the Nodal Agency for compliance and coordination. A factual and action taken report may be furnished to this Tribunal within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF....."*.

In compliance to afore-cited order dated 22-7-2020, the joint committee had visited the site on 12th to 13th October 2020 and filed a report in the Hon'ble NGT vide HPSPCB letter No. HPPCB/OA No. 136/2020/- 21384 dated 30-12-2020 with the prayer that complete sample analysis results are awaited from the Laboratory, hence joint committee may allowed to file conclusive report after receipt of results.

The matter was listed on 4-1-2021 wherein after perusing the report dated 30-12-2020 Hon'ble NGT passed the following directions:-

*".....Accordingly, further action taken report may be separately filed by the State PCB before the next date by e-mail at judicialngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. ....."*.

It is further submitted that now the joint committee has submitted its supplementary report which is annexed as **Annexure R-1/1**. Based on the inspections and

sampling conducted the conclusion and recommendations made by the joint committee are as under:-

i) *There are no standards notified by MoEF & CC w.r.t. residual antibiotics in industrial effluents.*

ii) *Draft notified standards are yet to be decided by MoEF & CC.*

iii) *The concentration of residual antibiotics at outlet of CETP in Sirsa river is much higher than the draft notified standards.*

iv) *The treatment efficiency of CETP w.r.t. residual antibiotics is not at par with the reports and data available in the literature.*

v) *The CETP is not meeting the prescribed norms of BOD, FDS and chloride and discharging effluent into Sirsa River without complying with the prescribed norms. ……".*

The copy of Supplementary Report submitted by the joint committee dated 10-03-2021 (annexed as **Annexure–R-1/1**) may be placed on record please.

It is submitted that as of now there are no specific standards notified by the Govt. of India for residual antibiotics parameters in the existing notification of standards for pharmaceutical (Manufacturing and Formulation Industry). However, it is worthwhile to mention here that all the bulk drugs/pharmaceutical manufacturing units (if not connected with CETP) are being regulated for the compliance as per standards notified in MoEF & CC Notification dated 9-7-2009 (copy annexed as **Annexure R-1/2**). If the pharmaceutical (manufacturing and formulation industry) is member of CETP, then the unit is bound to comply with inlet quality standards notified by the Govt. of HP vide notification dated 17-3-2018 and 26-12-2019 (copies annexed as **Annexure R-1/3 and R-1/4**) The notification of specific standards for residual antibiotics (annexed as Annexure -5 with joint report) is still under proposed stage and shall be implemented for regulatory aspect as and when finalized by the MoEFF & CC.

(Encl. As Above)

3/5/21

**Dr. Nipun Jindal**
**Member Secretary**
HPSPCB Shimla

Annexure R-1/1

16257
12/3/2021

**HP STATE POLLUTION CONTROL BOARD**
HIMUDA COMPLEX, Phase –I, Baddi
Tehsil Baddi, Distt. Solan (HP) Phone-01795- 245374

**No. PCB/ RO Baddi/ Joint Inspection (NGT O.A. No.136/2020) /2021-** 3037-38 **Dated:-** 10.03.21

To

**The Member Secretary,**
H.P. State Pollution Control Board,
Phase-III, New Shimla-171 009.

**Sub:** **Regarding Supplementary Report in the matter of O.A. No.136/2020 (Veteran Forum for Transparency in Public Life Versus State of H.P. & Ors. Pending before the Hon'ble National Green Tribunal.**

Sir,

Kindly refer to letter No. HPPCB/OA No.136/2020-15899-15901 dated 01.10.2018 on the subject cited above. In this regard, please find enclosed herewith the **Supplementary Report in the matter of O.A. No.136/2020 (Veteran Forum for Transparency in Public Life Versus State of H.P. & Ors. Pending before the Hon'ble National Green Tribunal.**

Submitted for kind information and further necessary action, please.

Yours faithfully,

**Sr. Environmental Engineer,**
**HP State Pollution Control Board.**
**Baddi, Distt. Solan-173205.**

Copy forwarded to the Assistant Law Officer, H.P. State Pollution Control Board, Shimla for information and further necessary action please.

**Sr. Environmental Engineer,**
**HP State Pollution Control Board.**
**Baddi, Distt. Solan-173205.**

**Supplementary Report in the matter of O.A. No. 136/2020; Veteran Forum for Transparency in Public Life versus State of Himachal Pradesh & Ors., by of the Joint Committee constituted, in compliance of the order of Hon'ble NGT dated 22.07.2020**

## 1. Background:

In the O.A. No. 136/2020, Veteran Forum for Transparency in Public Life versus State of Himachal Pradesh & Ors., a prayer has been by the applicant before the Hon'ble NGT, to direct remedial action against discharge of waste in CETP at Baddi by Acme Life Sciences, Nalagarh and Helios Pharmaceuticals at Solan to prevent pollution of river Sirsa and Satluj.

Hon'ble NGT vide its order dated 22/7/2020 observed and directed as under:

> *"The above issue may need to be looked into and action taken to prevent discharge of untreated chemical waste in water bodies in the interest of environment and public health.*
>
> *Let a joint Committee of CPCB, State PCB and District Magistrate, Solan look into the above issues in the light of contents of the application and take such further action as may found necessary. The State PCB will be the Nodal Agency for compliance and coordination. A factual and action taken report may be furnished to this Tribunal within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF."*

*In the progress report filed on 28/12/2020 (**Annexure-1**), it was submitted by the Joint Committee that:*

"The laboratory of the State Pollution Control Board, does not have the facility for analysis of residual antibiotics in the effluent samples. Hence, it was decided by the Joint Committee to hire approved external laboratory for sampling and analysis of effluent samples to be drawn from CETP and pharma units.

The results of analysis for the samples collected by the Joint Committee have been received from HPPCB Regional Laboratory, Paonta Sahib and evaluation of the results indicated that CETP is not meeting the norms prescribed for COD (264 mg/l > 250 mg/l), BOD (35 mg/l > 30 mg/l), FDS (2252 mg/l > 2100 mg/l) and Chloride (1838 mg/l > 1000 mg/l). Therefore, it is concluded that CETP is discharging the effluent into the Sirsa River without complying with the prescribed norms. The results of the analysis of the samples are awaited from two other laboratories.

Additional Deputy Commissioner
Solan, Distt. Solan (H.P.)

The samples from CETP, upstream and downstream of Sirsa River and the pharma units under question, were collected by the joint committee on 09/12/2020 for analysis of 12 Nos. residual antibiotic residues from Shri Ram Institute of Industrial Research, Delhi. The results of analysis of effluent samples for residual antibiotics is expected by 09/02/2021. The issue of discharge of residual antibiotics as raised by the applicant may be concluded by the Joint Committee after receipt of the analysis results".

*In view of the above, it was prayed by the Joint Committee before that Hon'ble National Green Tribunal that :*

"The analysis report of the samples collected from CETP and Pharma Units by the Joint Committee, for analysis in three different laboratories is expected by 10/01/2020. Further, the report of analysis w.r.t. samples collected by the Joint Committee from CETP, Pharma Units and Sirsa River from the approved external laboratory is expected by 09/02/2021.

In view of the fact that complete analysis reports will be available by 09/02/2021, it is humbly prayed to Hon'ble National Green Tribunal that Joint Committee may kindly be permitted to file the final conclusive report by 15/02/2020."

**Supplementary Report:**

The analysis results from the remaining two laboratories w.r.t samples collected by the Joint Committee have been received (**Annexure-2 and Annexure-3**), Further, the report of analysis w.r.t. samples collected by the Joint Committee from CETP, Pharma Units and Sirsa River for the presence of antibiotics from the approved external laboratory has also been received (**Annexure-4**). Accordingly, supplementary report in this matter is being filed by the Joint Committee as follows:

i) The results of analysis as received from three different laboratories of HPPCB, indicated that CETP is not meeting the norms prescribed for BOD (41, 35 & 38 mg/l > 30 mg/l), FDS (2252 & 3190 mg/l > 2100 mg/l) and Chloride (1209, 1838 & 1209 mg/l > 1000 mg/l). Therefore, it may

Additional Deputy Commissioner
Solan, Distt. Solan (H.P.)

be concluded that CETP is discharging the effluent into the Sirsa River without complying with the prescribed norms.

ii) The results of analysis of the samples collected from various stages of CETP and also final discharge point in River Sirsa for the presence of residual antibiotics indicate that two antibiotics viz. Ciprofloxacin and Ofloxacin are present in the final treated effluent of CETP as a concentration of 22.8 ug/l and 69.8 ug/l respectively.

iii) There are no standards notified by MoEF&CC for residual antibiotics in industrial effluents. However, these values are 1140 time higher for Ciprofloxacin (22.8 ug/l Vs. 0.02 ug/l) and 349 times higher for Ofloxacin (69.8 ug/l Vs. 0.2 ug/l) when compared with the proposed standards in the draft notification issued by MoEF&CC vide No. CG-DL-E-27012020-215690 dated January 23, 2020 (**Annexure-5**), for pharmaceutical industry effluent and CETPs with membership of Bulk drug and formulation units.

iv) Similarly, the samples collected by the Joint Committee from the outlets of two Pharmaceutical Industries viz. Helios Pharmaceutical and M/s Acme City Tech LLP, leading to CETP, were found be much higher than the standards proposed in the draft notification issued by MoEF&CC. Also, the values reported as below quantification limit (BQL), in the analysis report of the external laboratories may not be considered as conclusive and within the proposed limits as draft notified by MoEF&CC, since the BQLs of external laboratory for various antibiotics tested in the samples, as shared with the Joint Committee, are much higher than the proposed standards.

v) As per reports and research data available in the literature, the concentration of residual antibiotics has been found to be reduced by 60-90 % in conventional biological treatment plant. In view to assess the performance of the biological treatment system installed by CETP, the samples were collected from various stages of CETP. The results of

Additional Deputy Commissioner
Solan, Distt. Solan (H.P.)

analysis indicated that the performance of biological treatment system installed by CETP is not in line with the reports and data available in the literature, w.r.t. treatment of residual antibiotics. The inefficient performance of biological treatment system is also evident from the non-compliance of CETP with regard to biochemical oxygen demand (BOD).

**Conclusion and Recommendations:**

In view of the fact that:

i) There are no standards notified by MoEF&CC w.r.t. residual antibiotics in industrial effluents;

ii) Draft notified standards are yet to be decided by MoEF&CC;

iii) The concentration of residual antibiotics at outlet of CETP in Sirsa River, is much higher than the draft notified standards;

iv) The treatment efficiency of CETP w.r.t residual antibiotics is not at par with the reports and data available in the literature;

v) The CETP is not meeting the prescribed norms of BOD, FDS and chloride and discharging effluent into Sirsa River without complying with the prescribed norms

It is recommended that Pharmaceutical (both bulk drug and formulation units) may be directed by Himachal Pradesh Pollution Control Board to provide primary treatment to the level of predicted no effect concentration (PNEC) as developed by members of AMR Industry Alliance (**Annexure-6**), as a site (Baddi) specific preventing measure, so that there is no adverse impact of residual antibiotics on the environment and also to prevent development of antimicrobial resistance (AMR).

This supplementary report is being submitted by the Joint Committee, for the consideration of Hon'ble National Green Tribunal

10/3

Er. P C Gupta
HPPCB, Baddi

10/3/21

Dr. Narender Sharma
CPCB, Chandigarh

Representative of
District Magistrate/Deputy Commissioner
Solan Dist. Solan (H.P.)

Dated: 10/3/2021

Annexure-I

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Regd.
Time Bound
Court Matter

# HP STATE POLLUTION CONTROL BOARD,
## BELOW BCS, PHASE-III, NEW SHIMLA

**No. HPPCB/ OA No. 136/2020 /-** 21384 **Dated:** 30.12.2020

From: The Member Secretary

To

The Registrar General,
Hon'ble National Green Tribunal, Copernicus Marg,
New Delhi

**Subject:-** **Second Progress Report in compliance of order dated 22-07-2020 passed in OA No. 136/2020 titled Veteran Forum for Transparency in Public Life V/s State of HP & Ors. pending before the Hon'ble National Green Tribunal.**

Sir,

This has reference to order dated 22-07-2020 passed by Hon'ble National Green Tribunal, Delhi in the afore-cited matter related to alleged discharge of waste water into rivers by M/s Acme Life Sciences, Nalagarh and Helios Pharmaceuticals, village Malpur Distt. Solan HP wherein following directions has been passed:-

*".....3. Let a joint Committee of CPCB, State PCB and District Magistrate, Solan look into the above issues in the light of contents of the application and take such further action as may found necessary. The State PCB will be the Nodal Agency for compliance and coordination. A factual and action taken report may be furnished to this Tribunal within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF....."*.

In compliance to afore-cited order dated 22-7-2020, the joint committee comprising of Additional District Magistrate Solan, Senior Environmental Engineer, HPSPCB Baddi and Scientist E, CPCB, Delhi had visited the pharma units and CETP Baddi on 12th to 13th October 2020 and filed an interim report dated 14-10-2020.

It is further submitted that as per the information received from the Sr. Environmental Engineer, Regional Office, Baddi the joint committee again visited the pharma units and CETP Baddi on 9th and 10th December 2020 and submitted second progress report

dated 28-12-2020 (annexed as **Annexure R-1**). Based on the inspections and sampling conducted the conclusion drawn by the joint committee is as under:-

i. The CETP has not installed the system to completely treat category IV effluent (High TDS/FDS Stream). Despite the fact that CETP does not have the capacity to treat this type of effluent, CETP has entered into the tripartite agreement with the Industries generating Category IV effluent has been receiving this category of effluent since 2016.

ii. As per Environmental Clearance granted to CETP Baddi by the Ministry of Environment, Forests and Climate Change (MoEF&CC), the member industries with hydraulic loading more than 200 KLD shall treat the effluent in the existing onsite ETPs and then discharge into CETP for further treatment and discharge. However, it was informed that Units with hydraulic loading of 200 KLD are not treating effluent in the onsite ETPs and supplying primary treated effluent to CETP. Therefore, CETP has not been complying with this condition of the Environmental Clearance granted by MoEF&CC for the last 04 years. Accordingly, the sampling of these units was done by HPPCB team on 10/12/2020 and the samples were sent to HPPCB Central Laboratory. The results of the analysis are expected by 10/01/2021.

iii. The observations made by the Joint Committee during visit to the two Pharma units i.e. M/s Acme Life Sciences and M/s Helios Pharmaceuticals mentioned in the original application are as follows:

- Both the pharma units have connectivity with the CETP for supplying the primary treated effluent, for further treatment at CETP.
- No effluent was found to be discharged directly by the Units, in the drain.
- The Joint Committee collected the samples from the final outlet of the pharma units under reference, to see the concentration of residual antibiotics in the primary treated effluent which is being sent to CETP for further treatment. The results of the analysis are expected by 09/02/2021.

iv. The evaluation of the results of the analysis of the CETP samples collected by the Joint Committee on 12-13 October, 2020, indicated intended dilution by CETP so as to achieve the prescribed norms. Therefore, the Joint Committee conducted unannounced re-sampling and sent the samples for analysis from three different laboratories.

v. The results of analysis for the samples collected by the Joint Committee have been analyzed in HPPCB Regional Laboratory, Paonta Sahib and evaluation of the results

indicated that CETP is not meeting the norms prescribed for COD (264 mg/l > 250 mg/l), BOD (35 mg/l > 30 mg/l), FDS (2252 mg/l > 2100 mg/l) and Chloride (1838 mg/l > 1000 mg/l). Therefore, it is concluded that CETP is discharging the effluent into the Sirsa River without complying with the prescribed norms. The results of the analysis of the samples are awaited from two other laboratories.

vi. The samples from CETP, upstream and downstream of Sirsa River and the pharma units under question, were collected by the joint committee on 09/12/2020 for analysis of 12 Nos. residual antibiotic residues from Shri Ram Institute of Industrial Research, Delhi. The results of analysis of effluent samples for residual antibiotics is expected by 09/02/2021. The issue of discharge of residual antibiotics as raised by the applicant may be concluded by the Joint Committee after receipt of the analysis results.

In view of the fact that complete analysis reports will be available by 09/02/2021, it is humbly prayed to Hon'ble National Green Tribunal that Joint Committee may kindly be permitted to file the final conclusive report by 15/02/2020.

The copy of Second Progress Report submitted by the joint committee dated 28-12-2020 (annexed as **Annexure–R-1**) may be placed on record and in view of above submissions, the joint committee may kindly be allowed to file final conclusive report after 15-2-2021 please.

(Encl. as above)

29/12/20.

**Dr. Nipun Jindal**
**Member Secretary**
HPSPCB Shimla

**HP STATE POLLUTION CONTROL BOARD**
HIMUDA COMPLEX, Phase –I, Baddi
Tehsil Baddi, Distt. Solan (HP) Phone-01795- 245374

**No. PCB/ RO Baddi/ Joint Inspection (NGT O.A. No.136/2020) /2020-**2516-17 **Dated:-** 28-12-20

To

**The Member Secretary,**
H.P. State Pollution Control Board,
Phase-III, New Shimla-171 009.

**Sub:** **Regarding progress report in the matter of O.A. No.136/2020 (Veteran Forum for Transparency in Public Life Versus State of H.P. & Ors. Pending before the Hon'ble National Green Tribunal.**

Sir,

Kindly refer to letter No. HPPCB/OA No.136/2020-15899-15901 dated 01.10.2018 on the subject cited above. In this regard, please find enclosed herewith the **progress report in the matter of O.A. No.136/2020 (Veteran Forum for Transparency in Public Life Versus State of H.P. & Ors. Pending before the Hon'ble National Green Tribunal.**

Submitted for kind information and further necessary action, please.

Yours faithfully,

**Sr. Environmental Engineer,**
**HP State Pollution Control Board.**
**Baddi, Distt. Solan-173205.**

# Progress Report in the matter of O.A. No. 136/2020; Veteran Forum for Transparency in Public Life versus State of Himachal Pradesh & Ors., by of the Joint Committee constituted, in compliance of the order of Hon'ble NGT dated 22.07.2020

## 1. Background:

In the O.A. No. 136/22020, Veteran Forum for Transparency in Public Life versus State of Himachal Pradesh & Ors., a prayer has been by the applicant before the Hon'ble NGT, to direct remedial action against discharge of waste in CETP at Baddi by Acme Life Sciences, Nalagarh and Helios Pharmaceuticals at Solan to prevent pollution of river Sirsa and Satluj.

Hon'ble NGT vide its order dated 22/7/2020 observed and directed as under:

> *"The above issue may need to be looked into and action taken to prevent discharge of untreated chemical waste in water bodies in the interest of environment and public health.*
>
> *Let a joint Committee of CPCB, State PCB and District Magistrate, Solan look into the above issues in the light of contents of the application and take such further action as may found necessary. The State PCB will be the Nodal Agency for compliance and coordination. A factual and action taken report may be furnished to this Tribunal within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF."*

The Joint Committee Constituted in this matter comprised of the following members:

- ADC, Solan (Nominated by District Magistrate, Solan); Sh. Ajay Kumar Yadav, IAS, SDM having charge of ADC represented District Administration, Solan during first visit of the Committee on 12-13 October, 2020; Mr. Mukesh Sharma, Tehsildar, Baddi represented District Administration during second visit on 9-10 December, 2020.
- Er. Praveen Gupta, Senior Environmental Engineer (SEE), HPPCB, Baddi (Nodal Officer, Nominated by HPPCB)
- Dr. Narender Sharma, Scientist 'E', CPCB, Delhi (Nominated by CPCB)

The joint Committee was also accompanied by Er. Sunil Sharma, AEE,, Er. Pawan Kumar, JEE and Er. Abhay Gupta, JEE, HPPCB, RO, Baddi.

The examination of the original application filed by the applicant, by the joint committee revealed that the following major issues have been raised by the applicant:

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1. Prior study of carrying capacity before granting permission /CTE/CTO to the industries.
2. Discharge of untreated water and chemical waste by Acme Life Sciences and Helios Pharmaceuticals in Sirsa River that finally meets to Sutlaj river, environmental compensation and revival of Sirsa river and Sutlaj River by taking appropriate measures.
3. Design and adequacy of CETP, Baddi, to neutralize API.
4. Presence of antibiotics in the environment and antimicrobial resistance.
5. No connectivity of industries located in Nalagarh area with CETP and discharge of untreated waste into open drains.
6. Underutilization of CETP capacity showing that the industries are directly discharging trade effluents and incapability to neutralize API.
7. Non-disposal of sludge generated at industrial units located at Nalagarh, at TSDF Plant, Doaba Village, Nalagarh.

**2. Progress Report:**

In order to assess the adequacy and performance of the CETP and verify the facts w.r.t. two pharma units listed in the original application, the joint committee visited CTEP and pharma units on 12 – 13 October, 2020.

The following preliminary observations were made by the Joint Committee during first visit to the CETP:

i. The CETP has not installed the system to completely treat category IV effluent. Despite the fact that CETP does not have the capacity to treat this type of effluent, CETP has entered into the tripartite agreement with the Industries generating Category IV effluent has been receiving this category of effluent since 2016. The CETP was requested to provide details of the industries generating and routing Category IV effluent from the industries through CETP along with characteristics of such effluent, to further examine the issue and submit authentic and validated report to Hon'ble NGT.

ii. As per Environmental Clearance granted to CETP Baddi by the Ministry of Environment, Forests and Climate Change (MoEF&CC), the member



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industries with hydraulic loading more than 200 KLD shall treat the effluent in the existing onsite ETPs (as already these industries have provided onsite ETP consisting of primary/secondary and tertiary treatment system) to the standards mentioned in the consent orders issued by the State PCB and then discharge into CETP for further treatment and discharge. However, it was informed that Units with hydraulic loading of 200 KLD are not treating effluent in the onsite ETPs and supplying primary treated effluent to CETP. Therefore, CETP has not been complying with this condition of the Environmental Clearance granted by MoEF&CC for the last 04 years. The CETP was requested to provide volume and characteristics of the effluents supplied by the industries generated effluent > 200 KLD, to further examine the issue and its impact on the performance of CETP.

iii. The Joint Committee collected effluents samples from the various stages of treatment, to assess the adequacy and efficiency of CETP w.r.t prescribed standards. The samples were also drawn from the upstream and downstream of the adjoining Sirsa River. The samples were sent to Central Laboratory of SPCB.

The following observations were made by the Joint Committee during visit to the two Pharma units i.e. M/s Acme Life Sciences and M/s Helios Pharmaceuticals mentioned in the original application:

1. Both the pharma units have connectivity with the CETP for supplying the primary treated effluent, for further treatment at CETP. No effluent was found to be discharged directly by the Units.

2. The samples were collected from various stages of treatment plant and sent to Central Laboratory of State Pollution Control Board for analysis. The results are expected in 2-3 weeks.

The laboratory of the State Pollution Control Board, does not have the facility for analysis of residual antibiotics in the effluent samples. Hence, it was decided by

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the Joint Committee to hire approved external laboratory for sampling and analysis of effluent samples to be drawn from CETP and pharma units.

The samples from CETP, upstream and downstream of Sirsa River and the pharma units under question, were collected by the joint committee on 09/12/2020 for analysis of 12 Nos. residual antibiotic residues from Shri ram Institute of Industrial Research, Delhi. The results of analysis of effluent samples for residual antibiotics is expected in 30 days (for 09 Nos antibiotics) i.e. on 09/01/2021 and 60 days (for 04 Nos. antibiotics) i.e. on 09/02/2021. The issue of discharge of residual antibiotics as raised by the applicant may be concluded by the Joint Committee after receipt of the analysis results.

The Joint Committee could not locate the point from where samples were drawn by the applicant as mentioned in the original application. Therefore, Joint Committee requested the applicant through HSPCB, to provide location details along with longitude and latitude, enabling the Joint Committee to address issue of discharge of untreated effluent by the pharma industries. However, no feedback has been received so far from the applicant. Therefore, the Joint Committee collected the samples from the final outlet of the pharma units under reference, to see the concentration of residual antibiotics in the primary treated effluent which is being sent to CETP for further treatment.

The evaluation of the results of the analysis of the CETP samples collected by the Joint Committee on 12-13 October, 2020, revealed that CETP is not meeting the norms prescribed for FDS and chloride. Further very low concentration of TSS in the samples collected from the aeration tanks indicated intended dilution by CETP so as to achieve the prescribed norms. Therefore, the Joint Committee decided to make unannounced visit; do resampling and get the analysis done from three different laboratories, for concluding the issue regarding capacity and efficiency of CETP. Accordingly resampling of CETP was conducted by CETP by the Joint Committee on 9-10 December, 2020 and the samples were sent to three different laboratories viz. HPPCB Regional Laboratory, Paonta Sahib, HPPCB Regional Laboratory, Shimla and HPPCB Central laboratory, Parwanoo.

The results of analysis for the samples collected by the Joint Committee have been received from HPPCB Regional Laboratory, Paonta Sahib and evaluation of the results indicated that CETP is not meeting the norms prescribed for COD (264 mg/l > 250 mg/l), BOD (35 mg/l > 30 mg/l), FDS (2252 mg/l > 2100 mg/l) and Chloride (1838 mg/l > 1000 mg/l). The results of the analysis of the samples are awaited from two other laboratories.

Since, the member industries with hydraulic loading more than 200 KLD are required to treat the effluent in the existing onsite ETPs, It was decided by the Joint Committee to get the sampling of such Units done from HPPCB, to see if the effluent is being treated by these units to meet the prescribed norms or not. Accordingly, the sampling of these units was done by HPPCB team on 10/12/2020 and the samples were sent to three different laboratories. The results of the analysis are expected by 10/01/2021.

## 3. Conclusion drawn based on the progress made so far in this matter by the Joint Committee:

Based on the progress made so far in this matter by the Joint Committee constituted in compliance of the orders of Hon'ble NGT, the following conclusions are drawn:

i. **The CETP has not installed the system to completely treat category IV effluent (High TDS/FDS Stream).** Despite the fact that CETP does not have the capacity to treat this type of effluent, CETP has entered into the tripartite agreement with the Industries generating Category IV effluent has been receiving this category of effluent since 2016.

ii. As per Environmental Clearance granted to CETP Baddi by the Ministry of Environment, Forests and Climate Change (MoEF&CC), the member industries with hydraulic loading more than 200 KLD shall treat the effluent in the existing onsite ETPs and then discharge into CETP for further treatment and discharge. However, it was informed that Units with hydraulic loading of 200 KLD are not

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treating effluent in the onsite ETPs and supplying primary treated effluent to CETP. **Therefore, CETP has not been complying with this condition of the Environmental Clearance granted by MoEF&CC for the last 04 years.** Accordingly, the sampling of these units was done by HPPCB team on 10/12/2020 and the samples were sent to HPPCB Central Laboratory. **The results of the analysis are expected by 10/01/2021.**

iii. The observations made by the Joint Committee during visit to the two Pharma units i.e. M/s Acme Life Sciences and M/s Helios Pharmaceuticals mentioned in the original application are as follows:

- Both the pharma units have connectivity with the CETP for supplying the primary treated effluent, for further treatment at CETP.
- **No effluent was found to be discharged directly by the Units, in the drain.**
- **The Joint Committee collected the samples from the final outlet of the pharma units under reference, to see the concentration of residual antibiotics in the primary treated effluent which is being sent to CETP for further treatment. The results of the analysis are expected by 09/02/2021.**

**iv.** The evaluation of the results of the analysis of the CETP samples collected by the Joint Committee on 12-13 October, 2020, **indicated intended dilution by CETP so as to achieve the prescribed norms. Therefore, the Joint Committee conducted unannounced resampling and sent the samples for analysis from three different laboratories.**

v. The results of analysis for the samples collected by the Joint Committee have been received from HPPCB Regional Laboratory, Paonta Sahib and evaluation of the results indicated **that CETP is not meeting the norms prescribed for COD (264 mg/l > 250 mg/l), BOD (35 mg/l > 30 mg/l), FDS (2252 mg/l > 2100 mg/l) and Chloride (1838 mg/l > 1000 mg/l). Therefore, it is concluded that CETP is discharging the effluent into**

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**the Sirsa River without complying with the prescribed norms.** The results of the analysis of the samples are awaited from two other laboratories.

**vi.** The samples from CETP, upstream and downstream of Sirsa River and the pharma units under question, were collected by the joint committee on 09/12/2020 for analysis of 12 Nos. residual antibiotic residues from Shri ram Institute of Industrial Research, Delhi. **The results of analysis of effluent samples for residual antibiotics is expected by 09/02/2021. The issue of discharge of residual antibiotics as raised by the applicant may be concluded by the Joint Committee after receipt of the analysis results.**

**Prayer:**

**The above progress report of the Joint Committee in this matter, is being filed for the consideration of Hon'ble NGT.**

The analysis report of the samples collected from CETP and Pharma Units by the Joint Committee, for analysis in three different laboratories is expected by 10/01/2020. Further, the report of analysis w.r.t. samples collected by the Joint Committee from CETP, Pharma Units and Sirsa River from the approved external laboratory is expected by 09/02/2021.

**In view of the fact that complete analysis reports will be available by 09/02/2021, it is humbly prayed to Hon'ble National Green Tribunal that Joint Committee may kindly be permitted to file the final conclusive report by 15/02/2021.**

The Joint Committee will abide by the further orders of Hon'ble National Green Tribunal in this matter.

| | | |
|---|---|---|
| Er. Praveen Gupta<br>SEE, HPPCB, Baddi | Dr. Narender Sharma<br>Scientist 'E', CPCB, Delhi | Representative of<br>District Magistrate, Solan |

Dated: 28/12/2020

Annexure-2 100

**Himachal Pradesh State Pollution Control Board**
**REGIONAL LABORATORY, SHIMLA**
**Him Parivesh, Phase-III, New Shimla-9**
Tel: 2673432 **e-mail: pcblabshimla@gmail.com**

No/PCB/RL Shimla/Analysis Report Online / 2019- 2193-94 Dated 28/12/2020

To

The Senior Environmental Engineer,
Regional Office "HIMUDA COMPLEX"
Phase-I, Baddi, HPSPCB,
Tehsil Baddi, Distt Solan (HP)

Sub: **Analysis results of water samples received offline in Regional Laboratory, Shimla.**

Please find enclosed herewith analysis report no.**3155-3170** of water samples received vide letter no. PCB/RO Baddi/Sample detail /20-2421-22 dated 10.12.2020. You are requested to send the analysis report to the concern. Bill of sample testing charging may be raised at your end please

Submitted for your kind information and necessary action please.

Thanking You,

Yours faithfully,

Encl:- As above

(Sanjeev Sharma)
Sr. Scientific Officer
**In-charge Regional Laboratory**
Shimla

O/C

Copy to:
The Member Secretary, H.P State Pollution Control Board, Shimla-9 for kind information please.

Encl:- As Above

(Sanjeev Sharma)
Sr.Scientific Officer

O/C

Analysis results of waste water samples received on 11.12.20 from Regional Office Baddi vide Letter no.PCB/RO Baddi/Sample Detail/20-2421-22 dated 10.12.2020

ANALYSIS REPORT

| Sr. No. | Report No. | Carboy mark | Date of receipt of sample | pH | COD mg/l | BOD mg/l | TSS mg/l | TDS mg/l | FDS mg/l | MLSS mg/l | MLVSS mg/l | NO3-N mg/l | NH3-N mg/l | T.Phosphate mg/l | Sulphate mg/l | Cl⁻ mg/l | Phenol mg/l | Residual Chlorine mg/l | $Cr^{+6}$ mg/l | TKN mg/l | O&G mg/l | Sulphide mg/l | Fe mg/l | Zn mg/l | T. Cr mg/l | Mn mg/l | Pb mg/l | Hg mg/l | As mg/l | Ni mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3155 | G | 12/11/2020 | 8.17 | 188.0 | 52.0 | 156.0 | 10908.0 | 6195.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 2 | 3156 | E | 12/11/2020 | 6.38 | 2640.0 | 1580.0 | 418.0 | 3655.0 | 2924.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 3 | 3157 | A | 12/11/2020 | 7.64 | 752.0 | 320.0 | 80.0 | 1996.0 | 1660.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 4 | 3158 | J | 12/11/2020 | 7.51 | 112.0 | 22.0 | 19.2 | 2739.0 | 2206.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 5 | 3159 | M | 12/11/2020 | ** | ** | ** | 2004.0 | ** | ** | 2004.0 | 1292.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 6 | 3160 | O | 12/11/2020 | 7.14 | 184.0 | 34.0 | 10.0 | 2363.0 | 1898.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 7 | 3161 | B | 12/11/2020 | 7.59 | 756.0 | 320.0 | 165.7 | 2442.0 | 1978.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 8 | 3162 | P | 12/11/2020 | 7.98 | 188.0 | 41.0 | 31.0 | 2237.0 | 1814.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 9 | 3163 | I | 12/11/2020 | 7.87 | 228.0 | 44.0 | 25.5 | 2816.0 | 2273.0 | ** | ** | 4.5 | 19.04 | 1.56 | 1067.22 | 1209.52 | 0.18 | 16.83 | ND | 19.6 | 4.0 | ND | 0.362 | 0.598 | ND | 0.098 | 0.06 | ND | ND | 0.043 |
| 10 | 3164 | C | 12/11/2020 | 2.48 | 3680.0 | 1550.0 | 660.9 | 4232.0 | 3914.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 11 | 3165 | L | 12/11/2020 | ** | ** | ** | 2898.0 | ** | ** | 2898.0 | 2028.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 12 | 3166 | D | 12/11/2020 | 2.43 | 3168.0 | 1440.0 | 12674.0 | 3419.0 | 2735.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 13 | 3167 | N | 12/11/2020 | ** | ** | ** | 3575.0 | ** | ** | 3575.0 | 2681.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 14 | 3168 | K | 12/11/2020 | 7.96 | 200.0 | 65.0 | 30.2 | 2480.0 | 2008.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 15 | 3169 | F | 12/11/2020 | 5.83 | 3612.0 | 1240.0 | 467.8 | 2709.0 | 2341.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 16 | 3170 | H | 12/11/2020 | 8.17 | 192.0 | 45.0 | 171.3 | 10945.0 | 6002.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |

Note: As the samples sent by Regional Officer ,Baddi area in coded form wthout any detail of Source of sample and location of samples. The results are given against the code marked by Regional Officer,Baddi samples received and analysis results are release in reference to permission accorded by competent authority vide letter no. HPSPCB/Misc.Matter (Sci Branch) /Vol/V/2020-20900-20902 dated 22-12-2020

Senior Scientific Officer

Annexure-3

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**H.P. STATE POLLUTION CONTROL BOARD**
Regional Laboratory, Shubhkhera, Paonta Sahib,
Distt. Sirmour (H.P.), Tele. & Facsimile 01704-265053

**No. PCB /Regional lab/ Paonta/ (74) Analysis Reports (Vol-III) / 2017-** 311 **Dated:-** 28/12/2

To

The Sr. Environmental Engineer,
H.P. State Pollution Control Board,
Regional Office, Baddi

**Subject: Analysis report**

Sir,

Please find enclosed herewith analysis report no W-567 to W-582 of samples received in this Laboratory on 11.12.2020 for further necessary action at your end, pl.

Thanking You.

Yours faithfully,

28/12/2020

**(Dr. Hitender kr. Sharma)**
**Sr. Scientific Officer**

En. As above.

| Sr. No. | REPORT No. | Sampling Location | Carboys Mark | Date | Time | PARAMETRES | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | pH | TSS (mg/l) | COD (mg/l) | BOD (mg/l) | TDS (mg/l) | FDS (mg/l) | MLSS (mg/l) | MVSS (mg/l) |
| 1 | W-567 | A | A | 10-12-20 | 11.05AM | 7.07 | 69.0 | 540.0 | 320.0 | 1577.0 | 1219.0 | --- | --- |
| 2 | W-568 | B | B | 10-12-20 | 11.10AM | 7.02 | 151.0 | 604.0 | 360.0 | 2145.0 | 1769.0 | --- | --- |
| 3 | W-569 | C | C | 10-12-20 | 11.20AM | 2.56 | 700.0 | 2796.0 | 1200.0 | 3746.0 | 3709.0 | --- | --- |
| 4 | W-570 | D | D | 10-12-20 | 11.30AM | 2.47 | 944.0 | 2824.0 | 1250.0 | 3591.0 | 2960.0 | --- | --- |
| 5 | W-571 | E | E | 10-12-20 | 11.40AM | 5.33 | 370.0 | 3120.0 | 1420.0 | 3226.0 | 3144.0 | --- | --- |
| 6 | W-572 | F | F | 10-12-20 | 11.50AM | 5.35 | 404.0 | 3040.0 | 1270.0 | 3075.0 | 2979.0 | --- | --- |
| 7 | W-573 | G | G | 10-12-20 | 12.05PM | 7.65 | 159.0 | 876.0 | 90.0 | 10280.0 | 10130.0 | --- | --- |
| 8 | W-574 | H | H | 10-12-20 | 12.20PM | 7.58 | 146.0 | 864.0 | 120.0 | 10540.0 | 10373.0 | --- | --- |
| 9 | W-575 | I | I | 10-12-20 | 12.35PM | 7.32 | 31.0 | 320.0 | 45.0 | 2480.0 | 2328.0 | --- | --- |
| 10 | W-576 | J | J | 10-12-20 | 12.45PM | 7.18 | 15.0 | 244.0 | 26.0 | 2499.0 | 2250.0 | --- | --- |
| 11 | W-577 | K | K | 10-12-20 | 12.50PM | 7.42 | 23.0 | 292.0 | 55.0 | 2392.0 | 2153.0 | --- | --- |
| 12 | W-578 | L | L | 10-12-20 | 12.55PM | --- | 2375.0 | --- | --- | --- | | 2620.0 | 2010.0 |
| 13 | W-579 | M | M | 10-12-20 | 01.05PM | --- | 1490.0 | --- | --- | --- | --- | 1610.0 | 1160.0 |
| 14 | W-580 | N | N | 10-12-20 | 01.20PM | --- | 3770.0 | --- | --- | --- | --- | 3880.0 | 3240.0 |
| 15 | W-581 | O | O | 10-12-20 | 01.30PM | 6.63 | 19.0 | 268.0 | 40.0 | 2654.0 | 2619.0 | --- | $Cr^{+6}$ |
| 16 | W-582 | P | P | 10-12-20 | 01.30PM | 7.18 | 18.0 | 264.0 | 35.0 | 2560.0 | 2253.0 | --- | ND |
| | | | | | | $NH_4$-N (mg/l) | TKN (mg/l) | $NO_3$-N (mg/l) | Phenol (mg/l) | Chloride (mg/l) | Sulphate (mg/l) | Fluoride (mg/l) | Sulphide (mg/l) |
| | | | | | | 0.9 | 1.12 | 0.242 | 0.28 | 1838.9 | 254.4 | 0.734 | Nil |
| | | | | | | T.Cr. (mg/l) | Zn (mg/l) | Fe (mg/l) | [illegible] | Mn (mg/l) | Ni (mg/l) | [illegible] | Pb (mg/l) |
| | | | | | | ND | 0.23 | 0.84 | 0.02 | 0.10 | ND | ND | ND |

Senior Scientific Offic

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Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org

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## TEST CERTIFICATE NO. : C1/0000248389

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-I, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 27/02/2021
**Job No.** 2012-1-411-2983
**Booking No.** RG2021/1/8306
**Booking Date** 30/12/2020
**Customer Ref No.** NO. PCB/RO
**Customer Ref Date** BADDI/NGT/20/2433 11/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF OUTLET OF PHARMA STREAM OF CETP DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S CETP PHARMA STREAM COLLECTION CUM EQUALIZATION TANK BADDI MARKED AS "PHARMA STREAM OF CETP" WAS RECEIVED.
(Supplementary Report to Report No. C1/0000246172 dtd. 11.02.2021)

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Ciprofloxacin, µg/l | 490.6 | - | LC - MS/ MS |
| 2. | Ofloxacin, µg/l | 1221.5 | - | LC - MS/ MS |
| 3. | Piperacillin, µg/l | BQL | 5 | LC - MS/ MS |
| 4. | Tazobactum, µg/l | BQL | 5 | LC - MS/ MS |
| 5. | Ceftazidime, µg/l | BQL | 50 | LC - MS/ MS |
| 6. | Cefixime, µg/l | BQL | 20 | LC - MS/ MS |

BQL - Below Quantification Limit

********

D.O.R. 31.12.2020
D.O.C. 27.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6083 )

GC-01(Rev-05)





Phone : 91-11-27000100, 27667267, 27667860 Fax : 91-11-27667207

SRI-C1 (Rev. 03)

See overleaf for terms & conditions

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E-mail id : customercare@shriraminstitute.org

## TEST CERTIFICATE NO. : C1/0000248391

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-1, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 27/02/2021 |
| **Job No.** | 2012-1-411-2984 |
| **Booking No.** | RG2021/1/8306 |
| **Booking Date** | 30/12/2020 |
| **Customer Ref No.** | NO. PCB/RO |
| **Customer Ref Date** | BADDI/NGT/20/2433 11/12/2020 |

**Sample Description :**
ONE GRAB SAMPLE OF CETP OUTLET WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S OUTLET OF 3°C OF CLARIFIER CAT-3 MARKED AS "OUTLET OF 3°C OF CLARIFIER CAT-3" WAS RECEIVED.
(Supplementary Report to Report No. C1/0000246174 dtd. 11.02.2021)

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Ciprofloxacin, µg/l | 322.8 | - | LC - MS/ MS |
| 2. | Ofloxacin, µg/l | 792.4 | - | LC - MS/ MS |
| 3. | Piperacillin, µg/l | BQL | 5 | LC - MS/ MS |
| 4. | Tazobactum, µg/l | BQL | 5 | LC - MS/ MS |
| 5. | Ceftazidime, µg/l | BQL | 50 | LC - MS/ MS |
| 6. | Cefixime, µg/l | BQL | 20 | LC - MS/ MS |

BQL - Below Quantification Limit

********

D.O.R. 31.12.2020
D.O.C. 27.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6083 )





Phone : 91-11-27000100, 27667267, 27667860 Fax : 91-11-27667207

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E-mail id : customercare@shriraminstitute.org

# TEST CERTIFICATE

NO. : C1/0000248392

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-1, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 27/02/2021 |
| **Job No.** | 2012-1-411-2985 |
| **Booking No.** | RG2021/1/8306 |
| **Booking Date** | 30/12/2020 |
| **Customer Ref No.** | NO. PCB/RO |
| **Customer Ref Date** | BADDI/NGT/20/2433 11/12/2020 |

**Sample Description :**
ONE GRAB SAMPLE OF CETP OUTLET WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S OUTLET OF SECONDARY CLARIFIER OF CETP PHARMA STREAM CATEGORY -3 BADDI (HP) MARKED AS "OUTLET OF SECONDARY CLARIFIER CAT-3" WAS RECEIVED.
(Supplementary Report to Report No. C1/0000246175 dtd. 11.02.2021)

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Ciprofloxacin, µg/l | 612.4 | - | LC - MS/ MS |
| 2. | Ofloxacin, µg/l | 1287.3 | - | LC - MS/ MS |
| 3. | Piperacillin, µg/l | BQL | 5 | LC - MS/ MS |
| 4. | Tazobactum, µg/l | BQL | 5 | LC - MS/ MS |
| 5. | Ceftazidime, µg/l | BQL | 50 | LC - MS/ MS |
| 6. | Cefixime, µg/l | BQL | 20 | LC - MS/ MS |

BQL - Below Quantification Limit

********

D.O.R. 31.12.2020
D.O.C. 27.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6083 )

GC-01(Rev-05)





Phone : 91-11-27000100, 27667267, 27667860 Fax : 91-11-27667207

SRI-C1 (Rev. 03)

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## TEST CERTIFICATE NO. : C1/0000248393

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-I, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 27/02/2021
**Job No.** 2012-1-411-2986
**Booking No.** RG2021/1/8306
**Booking Date** 30/12/2020
**Customer Ref No.** NO. PCB/RO
**Customer Ref Date** BADDI/NGT/20/2433 11/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF CETP OUTLET WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S FINAL DISCHARGE OF CETP IN RIVER SIRSA BADDI (HP) MARKED AS "CETP FINAL DISCHARGE" WAS RECEIVED.
(Supplementary Report to Report No. C1/0000246176 dtd. 11.02.2021)

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Ciprofloxacin, µg/l | 22.8 | - | LC - MS/ MS |
| 2. | Ofloxacin, µg/l | 69.8 | - | LC - MS/ MS |
| 3. | Piperacillin, µg/l | BQL | 5 | LC - MS/ MS |
| 4. | Tazobactum, µg/l | BQL | 5 | LC - MS/ MS |
| 5. | Ceftazidime, µg/l | BQL | 50 | LC - MS/ MS |
| 6. | Cefixime, µg/l | BQL | 20 | LC - MS/ MS |

BQL - Below Quantification Limit

********

D.O.R. 31.12.2020
D.O.C. 27.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6083 )





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## TEST CERTIFICATE NO. : C1/0000246172

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-I, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 11/02/2021
**Job No.** 2012-1-411-2983
**Booking No.** RG2021/1/8306
**Booking Date** 30/12/2020
**Customer Ref No.** NO. PCB/RO
**Customer Ref Date** BADDI/NGT/20/2433 11/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF OUTLET OF PHARMA STREAM OF CETP DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S CETP PHARMA STREAM COLLECTION CUM EQUALIZATION TANK BADDI MARKED AS "PHARMA STREAM OF CETP" WAS RECEIVED.

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | 571 | 10 | LC - MS/ MS |
| 2. | Amoxicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 3. | Ampicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 4. | Cefpodoxime, µg/l | BQL | 10 | LC - MS/ MS |
| 5. | Sulbactum, µg/l | BQL | 10 | LC - MS/ MS |
| 6. | Cefoperazone, µg/l | BQL | 10 | LC - MS/ MS |
| 7. | Ceftriaxone, µg/l | BQL | 50 | LC - MS/ MS |

BQL - Below Quantification Limit
Note : Remaining Parameters will be reported later.

********

D.O.R. 31.12.2020
D.O.C. 11.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 4105 )





Phone : 91-11-27000100, 27667267, 27667860 Fax : 91-11-27667207

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E-mail id : customercare@shriraminstitute.org

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## TEST CERTIFICATE NO. : C1/0000246174

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-I, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 11/02/2021
**Job No.** 2012-1-411-2984
**Booking No.** RG2021/1/8306
**Booking Date** 30/12/2020
**Customer Ref No.** NO. PCB/RO
**Customer Ref Date** BADDI/NGT/20/2433 11/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF CETP OUTLET WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S OUTLET OF 3°C OF CLARIFIER CAT-3 MARKED AS "OUTLET OF 3°C OF CLARIFIER CAT-3" WAS RECEIVED.

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | 313 | 10 | LC - MS/ MS |
| 2. | Amoxicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 3. | Ampicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 4. | Cefpodoxime, µg/l | BQL | 10 | LC - MS/ MS |
| 5. | Sulbactum, µg/l | BQL | 10 | LC - MS/ MS |
| 6. | Cefoperazone, µg/l | BQL | 10 | LC - MS/ MS |
| 7. | Ceftriaxone, µg/l | BQL | 50 | LC - MS/ MS |

BQL - Below Quantification Limit
Note - Remaining Parameters will be reported later.

********

D.O.R. 31.12.2020
D.O.C. 11.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 4105 )





Phone : 91-11-27000100, 27667267, 27667860 Fax : 91-11-27667207

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## TEST CERTIFICATE NO. : C1/0000246175

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-I, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 11/02/2021
**Job No.** 2012-1-411-2985
**Booking No.** RG2021/1/8306
**Booking Date** 30/12/2020
**Customer Ref No.** NO. PCB/RO
**Customer Ref Date** BADDI/NGT/20/2433 11/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF CETP OUTLET WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S OUTLET OF SECONDARY CLARIFIER OF CETP PHARMA STREAM CATEGORY -3 BADDI (HP) MARKED AS "OUTLET OF SECONDARY CLARIFIER CAT-3" WAS RECEIVED.

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | 392 | 10 | LC - MS/ MS |
| 2. | Amoxicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 3. | Ampicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 4. | Cefpodoxime, µg/l | BQL | 10 | LC - MS/ MS |
| 5. | Sulbactum, µg/l | BQL | 10 | LC - MS/ MS |
| 6. | Cefoperazone, µg/l | BQL | 10 | LC - MS/ MS |
| 7. | Ceftriaxone, µg/l | BQL | 50 | LC - MS/ MS |

BQL - Below Quantification Limit
Note : Remaining Parameters will be reported later.

*********

D.O.R. 31.12.2020
D.O.C. 11.02.2021

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EMPLOYEE CODE : (4105)





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## TEST CERTIFICATE NO. : C1/0000246176

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REGIONAL OFFICE HIMUDA COMPLEX, PHASE-1, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 11/02/2021 |
| **Job No.** | 2012-1-411-2986 |
| **Booking No.** | RG2021/1/8306 |
| **Booking Date** | 30/12/2020 |
| **Customer Ref No.** | NO. PCB/RO |
| **Customer Ref Date** | BADDI/NGT/20/2433 11/12/2020 |

**Sample Description :**
ONE GRAB SAMPLE OF CETP OUTLET WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S FINAL DISCHARGE OF CETP IN RIVER SIRSA BADDI (HP) MARKED AS "CETP FINAL DISCHARGE" WAS RECEIVED.

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | BQL | 10 | LC - MS/ MS |
| 2. | Amoxicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 3. | Ampicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 4. | Cefpodoxime, µg/l | BQL | 10 | LC - MS/ MS |
| 5. | Sulbactum, µg/l | BQL | 10 | LC - MS/ MS |
| 6. | Cefoperazone, µg/l | BQL | 10 | LC - MS/ MS |
| 7. | Ceftriaxone, µg/l | BQL | 50 | LC - MS/ MS |

BQL - Below Quantification Limit
Note : Remaining Parameters will be reported later.

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D.O.R. 31.12.2020
D.O.C. 11.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : (405)






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## TEST CERTIFICATE NO. : C1/0000246178

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-1, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 11/02/2021 |
| **Job No.** | 2012-1-411-1194 |
| **Booking No.** | RG2021/1/7745 |
| **Booking Date** | 11/12/2020 |
| **Customer Ref No.** | PCB/RO BADDI/NGT/20-2401 |
| **Customer Ref Date** | 03/12/2020 |

**Sample Description :**
ONE GRAB SAMPLE OF WATER DRAWN BY OUR REPRESENTATIVE ON 09/12/2020 FROM M/S RIVER SIRSA UPSTREAM OF CETP BADDI (HR) MARKED AS "UPSTREAM OF CETP" WAS RECEIVED.

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | BQL | 10 | LC - MS/ MS |
| 2. | Amoxicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 3. | Ampicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 4. | Cefpodoxime, µg/l | BQL | 10 | LC - MS/ MS |
| 5. | Sulbactum, µg/l | BQL | 10 | LC - MS/ MS |
| 6. | Cefoperazone, µg/l | BQL | 10 | LC - MS/ MS |
| 7. | Ceftriaxone, µg/l | BQL | 50 | LC - MS/ MS |

BQL - Below Quantification Limit
Note : Remaining Parameters will be reported later.

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D.O.R. 12.12.2020
D.O.C. 11.02.2021

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## TEST CERTIFICATE NO. : C1/0000246179

**Issued To:**
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REGIONAL OFFICE HIMUDA COMPLEX, PHASE-I, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 11/02/2021
**Job No.** 2012-1-411-1195
**Booking No.** RG2021/1/7745
**Booking Date** 11/12/2020
**Customer Ref No.** PCB/RO BADDI/NGT/20-2401
**Customer Ref Date** 03/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF WATER DRAWN BY OUR REPRESENTATIVE ON 09/12/2020 FROM M/S DOWNSTREAM OF CETP BADDI IN SIRSA RIIVER (APP 3 KM) MARKED AS "DOWNSTREAM OF CETP" WAS RECEIVED.

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | BQL | 10 | LC - MS/ MS |
| 2. | Amoxicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 3. | Ampicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 4. | Cefpodoxime, µg/l | BQL | 10 | LC - MS/ MS |
| 5. | Sulbactum, µg/l | BQL | 10 | LC - MS/ MS |
| 6. | Cefoperazone, µg/l | BQL | 10 | LC - MS/ MS |
| 7. | Ceftriaxone, µg/l | BQL | 50 | LC - MS/ MS |

BQL - Below Quantification Limit
Note : Remaining Parameters will be reported later.

********

D.O.R. 12.12.2020
D.O.C. 11.02.2021

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EMPLOYEE CODE : ( 4105 )





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## TEST CERTIFICATE NO. : C1/0000248395

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-I, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 27/02/2021
**Job No.** 2012-1-411-1195
**Booking No.** RG2021/1/7745
**Booking Date** 11/12/2020
**Customer Ref No.** PCB/RO BADDI/NGT/20-2401
**Customer Ref Date** 03/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF WATER DRAWN BY OUR REPRESENTATIVE ON 09/12/2020 FROM M/S DOWNSTREAM OF CETP BADDI IN SIRSA RIIVER (APP 3 KM) MARKED AS "DOWNSTREAM OF CETP" WAS RECEIVED.
(Supplementary Report to Report No. C1/0000246179 dtd. 11.02.2021)

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Ciprofloxacin, µg/l | BQL | 5 | LC - MS/ MS |
| 2. | Ofloxacin, µg/l | BQL | 5 | LC - MS/ MS |
| 3. | Piperacillin, µg/l | BQL | 5 | LC - MS/ MS |
| 4. | Tazobactum, µg/l | BQL | 5 | LC - MS/ MS |
| 5. | Ceftazidime, µg/l | BQL | 50 | LC - MS/ MS |
| 6. | Cefixime, µg/l | BQL | 20 | LC - MS/ MS |

BQL - Below Quantification Limit

********

D.O.R. 12.12.2020
D.O.C. 27.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6062 )







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## TEST CERTIFICATE NO. : C1/0000248394

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BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 27/02/2021
**Job No.** 2012-1-411-1194
**Booking No.** RG2021/1/7745
**Booking Date** 11/12/2020
**Customer Ref No.** PCB/RO BADDI/NGT/20-2401
**Customer Ref Date** 03/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF WATER DRAWN BY OUR REPRESENTATIVE ON 09/12/2020 FROM M/S RIVER SIRSA UPSTREAM OF CETP BADDI (HR) MARKED AS "UPSTREAM OF CETP" WAS RECEIVED.
(Supplementary Report to Report No. C1/0000246178 dtd. 11.02.2021)

| S.No. | Tests | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Ciprofloxacin, µg/l | BQL | 5 | LC - MS/ MS |
| 2. | Ofloxacin, µg/l | BQL | 5 | LC - MS/ MS |
| 3. | Piperacillin, µg/l | BQL | 5 | LC - MS/ MS |
| 4. | Tazobactum, µg/l | BQL | 5 | LC - MS/ MS |
| 5. | Ceftazidime, µg/l | BQL | 50 | LC - MS/ MS |
| 6. | Cefixime, µg/l | BQL | 20 | LC - MS/ MS |

BQL - Below Quantification Limit

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D.O.R. 12.12.2020
D.O.C. 27.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6087 )

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## TEST CERTIFICATE NO. : C1/0000248176

**Issued To:**
Client Code : H1157
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REGIONAL OFFICE HIMUDA COMPLEX, PHASE-1, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 26/02/2021 |
| **Job No.** | 2012-1-411-2320 |
| **Booking No.** | RG2021/1/8055 |
| **Booking Date** | 22/12/2020 |
| **Customer Ref No.** | NO. PCB/RO |
| **Customer Ref Date** | BADDI/NGT/20/2433 11/12/2020 |

**Sample Description :**
ONE GRAB SAMPLE OF OUTLET DISCHARGE TO CETP DRAWN BY OUR REPRESENTATIVE ON 09/12/2020 FROM M/S HELIOS PHARMACEUTICAL, VILL. MALPUR BADDI WAS RECEIVED.

| S.No. | Test | Result | Technique Used |
|---|---|---|---|
| 1. | Ofloxacin, mg/l | 0.96 | LC - MS/ MS |

*********

D.O.R. 22.12.2020
D.O.C. 26.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6083 )

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## TEST CERTIFICATE NO. : C1/0000248152

**Issued To:**
Client Code : H1157
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BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 26/02/2021 |
| **Job No.** | 2101-1-411-599 |
| **Booking No.** | RG2021/1/8562 |
| **Booking Date** | 08/01/2021 |
| **Customer Ref No.** | NO. PCB/RO BADDI / NGT/20/2433 |
| **Customer Ref Date** | 11/12/2020 |
| **ULR NO.** | TC544421000002725F |

**Sample Description :**
ONE GRAB SAMPLE OF WATER DRAWN BY OUR REPRESENTATIVE ON 09/12/2020 FROM OUTLET DISCHARGE TO CETP, M/S ACME CITY TECH LLP, PLOT NO.103,104,105, EPIP PHASE - I, JHARMAJRI, BADDI MARKED AS " ETP OUTLET, AFTER PRIMARY TREATMENT" WAS RECEIVED.
(Supplimentry report to report no. C1/0000246152, Dated: 11.02.2021)

| S.No. | Test | Result | Technique Used |
|---|---|---|---|
| 1 | Ofloxacin, mg/l | 0.17 | LC - MS/ MS |

********

D.O.R. 08.01.2021
D.O.C. 26.02.2021

AUTHORISED SIGNATORY
EMPLOYEE CODE : ( 6083 )

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# TEST CERTIFICATE

NO. : C1/0000246152

**Issued To:**
Client Code : H1157
H.P. STATE POLLUTION CONTROL BOARD,
REGIONAL OFFICE HIMUDA COMPLEX, PHASE-1, BADDI, TEHSIL BADDI, DISTRICT SOLAN
BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 11/02/2021 |
| **Job No.** | 2101-1-411-599 |
| **Booking No.** | RG2021/1/8562 |
| **Booking Date** | 08/01/2021 |
| **Customer Ref No.** | NO. PCB/RO BADDI / NGT/20/2433 |
| **Customer Ref Date** | 11/12/2020 |

**Sample Description :**
ONE GRAB SAMPLE OF WATER DRAWN BY OUR REPRESENTATIVE ON 09/12/2020 FROM OUTLET DISCHARGE TO CETP, M/S ACME CITY TECH LLP, PLOT NO.103,104,105, EPIP PHASE - I, JHARMAJRI, BADDI MARKED AS " ETP OUTLET, AFTER PRIMARY TREATMENT" WAS RECEIVED.

| S.No. | Test | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | 423 | 10 | LC - MS/ MS |

Note : Parameter Ofloxacin will be reported later.

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D.O.R. 08.01.2021
D.O.C. 11.02.2021

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## TEST CERTIFICATE NO. : C1/0000248153

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BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

| | |
|---|---|
| **Date** | 26/02/2021 |
| **Job No.** | 2012-1-411-1863 |
| **Booking No.** | RG2021/1/7952 |
| **Booking Date** | 18/12/2020 |
| **Customer Ref No.** | NO. PCB/RO BADDI/NGT/ 20/2433 |
| **Customer Ref Date** | 11/12/2020 |

**Sample Description :**
ONE GRAB SAMPLE OF OUTLET DISCHARGE TO CETP WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S ALKEM LABORATORIES, VILLAGE THANA BADDI (HP) MARKED AS "ETP CUM STP OUTLET" WAS RECEIVED.

(Supplementary report to report no. C1/0000246153 dated 11.02.2021)

| S.No. | Test | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Piperacillin, µg/l | BQL | 5 | LC - MS/ MS |

BQL - Below Quantification Limit

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D.O.R. 18.12.2020
D.O.C. 26.02.2021

AUTHORISED SIGNATORY
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# TEST CERTIFICATE

NO. : C1/0000246153

**Issued To:**
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BADDI
HIMACHAL PRADESH-173205
Kind Attn: -

**Date** 11/02/2021
**Job No.** 2012-1-411-1863
**Booking No.** RG2021/1/7952
**Booking Date** 18/12/2020
**Customer Ref No.** NO. PCB/RO BADDI/NGT/ 20/2433
**Customer Ref Date** 11/12/2020

**Sample Description :**
ONE GRAB SAMPLE OF OUTLET DISCHARGE TO CETP WATER DRAWN BY OUR REPRESENTATIVE ON 09.12.2020 FROM M/S ALKEM LABORATORIES, VILLAGE THANA BADDI (HP) MARKED AS "ETP CUM STP OUTLET" WAS RECEIVED.

| S.No. | Test | Result | Limit of Quantification | Technique Used |
|---|---|---|---|---|
| 1. | Azithromycin, µg/l | BQL | 10 | LC - MS/ MS |
| 2. | Amoxicillin, µg/l | BQL | 10 | LC - MS/ MS |
| 3. | Ampicillin, µg/l | BQL | 10 | LC - MS/ MS |

BQL - Below Quantification Limit
Note : Remaining Parameter will be reported later.

*********

D.O.R. 18.12.2020
D.O.C. 11.02.2021

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REGD. NO. D. L.-33004/99


# भारत का राजपत्र
# The Gazette of India

सी.जी.-डी.एल.-अ.-27012020-215690
CG-DL-E-27012020-215690

असाधारण
EXTRAORDINARY
भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

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No. 41] NEW DELHI, THURSDAY, JANUARY 23, 2020/MAGHA 03, 1941

## पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

## अधिसूचना

नई दिल्ली, 23 जनवरी, 2020

**सा. का. नि. 44(अ).**—अधिसूचना, जिसे केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 6 और धारा 25 में प्रदत्त शक्तियों का प्रयोग करते हुए जारी करने का प्रस्ताव करती है, का निम्नलिखित प्रारूप पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) की अपेक्षानुसार, जनसाधारण जिनके उसके द्वारा प्रभावित होने की संभावना है, की जानकारी के लिए, एततद्वारा प्रकाशित किया जाता है; और एततद्वारा सूचना दी जाती है कि उक्त प्रारूप अधिसूचना पर उस तारीख से, जिसको भारत के राजपत्र की प्रतियां, जिसमें यह अधिसूचना अंतर्विष्ट है, जनसाधारण को उपलब्ध करा दी जाती है, साठ दिन की अवधि की समाप्ति पर या उसके पश्चात विचार किया जाएगा।

ऐसा कोई व्यक्ति, जो प्रारूप अधिसूचना में अंतर्विष्ट प्रस्तावों पर कोई आपत्ति या सुझाव देने में हितबद्ध है, इस प्रकार ऊपर विनिर्दिष्ट की गई अवधि के भीतर, केन्द्रीय सरकार द्वारा विचार किए जाने के लिए, आपत्ति या सुझाव सचिव, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोर बाग रोड, नई दिल्ली - 110003 को या ई-मेल पते अर्थात mscb.cpcb@nic.in और h.kharkwal@nic.in पर सदस्य सचिव, केन्द्रीय प्रदूषण नियंत्रण बोर्ड और मंत्रालय के वैज्ञानिक 'ई' को लिखित रूप में भेज सकेगा।

### प्रारूप अधिसूचना

केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 में और अधिक संशोधन करने के लिए एततद्वारा निम्नलिखित नियम बनाती है, अर्थात्-

1 **संक्षिप्त शीर्षक और प्रारम्भ**—(1) इन नियमों को पर्यावरण (संरक्षण) संशोधन नियम, 2019 कहा जाएगा।
(2) ये आधिकारिक राजपत्र में उनके अंतिम प्रकाशन की तारीख से लागू होंगे।

2. पर्यावरण (संरक्षण) अधिनियम, 1986 में, अनुसूची-I में क्रम संख्या 73 और उससे संबंधित प्रविष्टियों के लिए निम्नलिखित क्रम संख्या और प्रविष्टियां प्रतिस्थापित की जाएगी अर्थात:-

| क्रम सं. | उद्योग | पैरामीटर | मानक |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| "73 | थोक दवा और निर्माण )फार्मास्युटिकल( | **क. बहिस्राव मानक** | |
| | | | **ईटीपी का अंतिम आउटलेट** सांद्रण के लिए सीमित मान) पीएच और जैव परख को छोड़कर मिलीग्राम / एल में( |
| | | **i) अनिवार्य पैरामीटर** | |
| | | पीएच | 6.0 -8.5 |
| | | बीओडी) 3 दिन 27 डिग्री सेल्सियस( | 30 |
| | | सीओडी | 250 |
| | | टीएसएस | 100 |
| | | टीडीएस | 2100 |
| | | तेल और चिकनाई (ग्रीज) | 10 |
| | | जैव - परख परीक्षण** | 100% बहिस्राव में पहले 96 घंटों के बाद मछली की 90% उत्तरजीविता |
| | | **ii) अतिरिक्त पैरामीटर** | |
| | | अमोनिकल नाइट्रोजन | 50 |
| | | नाइट्रेट नाइट्रोजन | 10 |
| | | **** बेंजीन* | *0.05* |
| | | **** टाल्विन* | *0.05* |
| | | **** ज़ाइलीन* | *0.06* |
| | | ****मीथाइलीन क्लोराइड* | *0.9* |
| | | फॉस्फेट पी के रूप में | 5 |
| | | क्लोराइड | 1000 |
| | | सल्फेट $SO_4$ के रूप में | 1000 |
| | | फ्लोराइड | 2 |
| | | एस के रूप में सल्फाइड | 2 |
| | | फेनोलिक यौगिक | 1 |
| | | कुल अवशिष्ट क्लोरीन | 1 |
| | | जस्ता | 5 |
| | | लोहा | 3 |
| | | तांबा | 3 |
| | | कुल क्रोमियम | 2 |
| | | हेक्सावलेंट क्रोमियम) $Cr^{6+}$ ) | 0.1 |

| | |
|---|---|
| साइनाइड | 0.1 |
| आर्सेनिक | 0.2 |
| पारा | 0.01 |
| लेड | 0.1 |
| **** सक्रिय दवा संघटक) एपीआई( | *0.05* |

**iii) साझा बहिस्राव शोधन संयंत्र में निस्सारित कर रहे उद्योगों के अंतिम आउटलेट के लिए**

दिनांक 1 जनवरी, 2016 की अधिसूचना का के अनुसार प्रत्येक (अ) 4 .आ.साझा बहिस्राव शोधन संयंत्र) सीईटीपी) के लिए, राज्य बोर्ड साझा बहिस्राव शोधन संयंत्र) सीईटीपी) के डिजाइन और स्थानीय जरूरतों और स्थितियों के अनुसार सामान्य मापदंडों, अमोनियम नाइट्रोजन और हैवी मेटल्स के लिए इनलेट क्वालिटी स्टैंडर्ड्स निर्धारित करेगा ।

**टिप्पणी:**

**जेडएलडी=** *थोक दवा और निर्माण* उद्योग में शून्य तरल निस्सारण प्रणाली पर विचार किया जाता है, जब अनिवार्य पैरामीटरों के लिए निर्धारित की गई सीमाओं को पूरा करते है। शोधित बहिस्रावों को प्रक्रिया अथवा उपयोगिताओं के प्रयोग में लाया जाएगा। (कूलिंग टॉवरो आदि/बॉयलर) बागवानी / बागवानी में शोधित अपशिष्ट के पुन :उपयोग को थोक दवा और निर्माण उद्योगों में जेडएलडी नहीं माना जाएगा।

**** जैव परख परीक्षण** आईएस :6582-1971 के अनुसार आयोजित किया जाएगा

**"अतिरिक्त पैरामीटर "के** रूप में सूचीबद्ध **पैरामीटर** प्रक्रिया और उत्पाद के आधार पर निर्धारित किए जाएंगे।

*** ये *सीमाएं उन उद्योगों पर लागू होंगी जो बेंजीन,* टाल्विन, ज़ाइलीन, मिथाइलीन क्लोराइड, क्लोरोबेंजीन *का उपयोग कर रहे हैं*।

*** * एपीआई सीमाएं एंटीबायोटिक दवाओं के अलावा एपीआई बनाने वाली इकाइयों के लिए लागू होगी।

**ख प्रक्रिया .रिएक्टर वेंटस / टैंक फार्म वेंटस से उत्सर्जन मानक**

| **पैरामीटर** | **सांद्रण के लिए सीमित मान )मिलीग्राम/एनएम $^3$)** |
|---|---|
| क्लोरीन | 15 |
| हाइड्रोक्लोरिक एसिड वाष्प | 35 |
| अमोनिया | 30 |
| बेंजीन | 5 |
| टाल्विन | 100 |
| ऐसिटोनाईट्राईल | 1000 |
| डिकलोरोमीथेन | 200 |
| ज़ाइलीन | 100 |
| एसीटोन | 2000 |

**ग विलायक का कुल .नुकसान, उपभोग किए गए विलायक के 3% से अधिक नहीं होना चाहिए।**

**घ. थोक दवा और निर्माण उद्योग में शोधित बहिस्राव में एंटोबायोटिक अवशिष्ट और थोक दवा और निर्माण इकाइयों की सदस्यता सहित सीईटीपी।**

पृथक एंटीबायोटिक अवशिष्ट नीचे तालिका में दिए गए मानों के बराबर या उससे कम होंगे।

| **पैरामीटर** | **सांद्रण के लिए सीमित मान) u/g / l)** |
|---|---|
| i. एमिकासिन | 6.40 |

| | | | |
|---|---|---|---|
| | | ii. एमोक्सिसिलिन | 0.10 |
| | | iii. एम्फोटेरिसिन बी | 0.01 |
| | | iv. एम्पीसिलीन | 0.10 |
| | | v. एनीड्यूलाफंगिन | 0.01 |
| | | vi. एविलामाईसिन | 3.20 |
| | | vii. एजिथ्रोमाईसिन | 0.01 |
| | | viii. एजट्रियोनाम | 0.20 |
| | | ix. बेसिट्रेसिन | 3.20 |
| | | x. बेडाक्विलिन | 0.03 |
| | | xi. बेन्ज़ाइलपेन्सिलीन | 0.10 |
| | | xii. केप्रियोमाईसिन | 0.80 |
| | | xiii. सेफेकलोर | 0.20 |
| | | xiv. सेफाड्रोक्सिल | 0.80 |
| | | xv. सेफालोनियम | 8.40 |
| | | xvi. सेफालोरिडीन | 1.60 |
| | | xvii. सेफालोथिन | 0.80 |
| | | xviii. सेफाजोलिन | 0.40 |
| | | xix. सेफडिनिर | 0.10 |
| | | xx. सेफेपाईम | 0.20 |
| | | xxi. सेफीजाईम | 0.02 |
| | | xxii. सेफोपेराजोन | 0.20 |
| | | xxiii. सेफोटेक्सिम | 0.04 |
| | | xxiv. सेफोऐक्सिटिन | 3.20 |
| | | xxv. सेफपिरोम | 0.02 |
| | | xxvi. सेफपोडोक्सिन | 0.10 |
| | | xxvii. सेफक्विनोम | 0.64 |
| | | xxviii. सेफटेरोलिन | 0.02 |
| | | xxix. सेफटाजिडिम | 0.20 |
| | | xxx. सेफटीब्यूटेन | 0.10 |
| | | xxxi. सेफटीओफर | 0.02 |
| | | xxxii. सेफटोबिप्रोल | 0.09 |
| | | xxxiii. सेफटोलोजेन | 0.76 |
| | | xxxiv. सेफाट्रियोक्सन | 0.01 |
| | | xxxv. सेफुरोक्सिम | 0.20 |
| | | xxxvi. सेफालेक्सिन | 0.03 |
| | | xxxvii. क्लोरामफेनिकोल | 3.20 |
| | | xxxviii. सिपरोफ्लोक्सासिंन | 0.02 |
| | | xxxix. क्लेरिथ्रोमाईसिन | 0.03 |
| | | xl. क्लेब्युलेनिक एसिड | 22.40 |

| | | | |
|---|---|---|---|
| | | xli. क्लिनाफ्लोक्सासिन | 0.20 |
| | | xlii. क्लिन्डामाईसिन | 0.04 |
| | | xliii. क्लोक्सासिलीन | 0.05 |
| | | xliv. कोलिस्टिन | 0.80 |
| | | xlv. डेपटोमाईसिन | 0.40 |
| | | xlvi. डेलमानिड | 0.02 |
| | | xlvii. डोरीपेनेम | 0.04 |
| | | xlviii. डॉक्सीसाइक्लिन | 0.80 |
| | | xlix. एनरामाईसिन | 1.92 |
| | | l. एनरोफ्लोक्ससिन | 0.02 |
| | | li. एरटापेनेम | 0.05 |
| | | lii. एरिथ्रोमाईसिन | 0.20 |
| | | liii. एथामब्युटोल | 0.80 |
| | | liv. फेरोपेनेम | 0.01 |
| | | lv. फिडाएक्सोमाईसिन | 0.01 |
| | | lvi. फ्लोरफेनिकोल | 0.80 |
| | | lvii. फ्लूकोनेज़ोल | 0.10 |
| | | lviii. फ्लुमेक्विन | 0.10 |
| | | lix. फॉस्फोमाईसिन | 0.80 |
| | | lx. फ्युसीडिक एसिड | 0.20 |
| | | lxi. सेटीफ्लोक्सासिन | 0.05 |
| | | lxii. जेमीफलोक्सासिन | 0.02 |
| | | lxiii. जेंटामाईसिन | 0.08 |
| | | lxiv. इनीपेनेम | 0.05 |
| | | lxv. आइसोनियाजिड | 0.05 |
| | | lxvi. इट्राकोनेजोल | 0.004 |
| | | lxvii. कानामाईसिन | 0.44 |
| | | lxviii. लेवोफ्लोक्सासिन | 0.10 |
| | | lxix. लिंकोमाईसिन | 0.72 |
| | | lxx. लाईनज़ोलिड | 2.68 |
| | | lxxi. लोराकारबेफ | 0.80 |
| | | lxxii. मेसिलिनेम | 0.40 |
| | | lxxiii. मेरोपेनेम | 0.02 |
| | | lxxiv. मेट्रोनिडेजोल | 0.05 |
| | | lxxv. माइनोसाइक्लिन | 0.40 |
| | | lxxvi. मॉक्सीफ्लोक्सिन | 0.05 |
| | | lxxvii. म्युरीरोसिन | 0.10 |
| | | lxxviii. नेलीडिक्सिक एसिड | 6.40 |
| | | lxxix. नारासिन | 0.20 |

| | | | |
|---|---|---|---|
| | | lxxx. नियोमाईसिन | 0.01 |
| | | lxxxi. नेटीलमिसिन | 0.20 |
| | | lxxxii. निट्रोफ्यूरेनटोएन | 25.60 |
| | | lxxxiii. नॉरफ्लोक्सिन | 0.20 |
| | | lxxxiv. ऑफ्लोक्सिन | 0.20 |
| | | lxxxv. ऑक्सासिलिन | 0.40 |
| | | lxxxvi. ऑक्सीटेट्रासाइक्लिन | 0.20 |
| | | lxxxvii. पेफक्लोसिन | 3.20 |
| | | lxxxviii. फेनक्सीमेथिलपेनसिलिन | 0.02 |
| | | lxxxix. पिपेरासिलिन | 0.20 |
| | | xc. पॉलीमिक्सिन | 0.80 |
| | | xci. रेटापाम्युलिन | 0.02 |
| | | xcii. रिफाम्पसिन | 0.02 |
| | | xciii. रॉक्सीथ्रोमाईसिन | 0.40 |
| | | xciv. सेक्नीडेजोल | 0.40 |
| | | xcv. स्पाराफ्लोक्सिन | 0.02 |
| | | xcvi. स्पेक्टीनोमाईसिन | 12.80 |
| | | xcvii. स्पिरामाईसिन | 0.20 |
| | | xcviii. स्ट्रेप्टोमाइसिन | 6.40 |
| | | xcix. सल्बेक्टम | 6.40 |
| | | c. सल्फाडियाजिन | 288.00 |
| | | ci. सल्फाडिमिथियोजिन | 20.00 |
| | | cii. सल्फाडॉक्सिन | 0.24 |
| | | ciii. सल्फामेथोक्साजोल | 0.24 |
| | | civ. टेजोबेक्टम | 17.60 |
| | | cv. टेडीजोलिड | 3.92 |
| | | cvi. टेईकोप्लानिन | 0.20 |
| | | cvii. टेलीथ्रोमाईसिन | 0.02 |
| | | cviii. टेट्रासाइक्लिन | 0.40 |
| | | cix. थियाम्फेनीकोल | 0.40 |
| | | cx. टियाम्युलिन | 0.40 |
| | | cxi. टिकार्सिलिन | 3.20 |
| | | cxii. टिगेसाइक्लिन | 0.40 |
| | | cxiii. टिल्डीपीरोसिन | 0.17 |
| | | cxiv. टिल्मीकोसिन | 0.40 |
| | | cxv. टोबरामाईसिन | 0.40 |
| | | cxvi. ट्रिमेथोप्रिम | 0.20 |
| | | cxvii. ट्रोवाफ्लोक्सासिन | 0.01 |
| | | cxviii. टाइलोसिन | 0.33 |

| | | | |
|---|---|---|---|
| | | cxix. बेंकोमाईसिन | 3.20 |
| | | cxx. वियोमाईसिन | 0.80 |
| | | cxxi. विर्जिनियामाईसिन | 0.80. ". |

**टिप्पणी:** - एंटीबायोटिक अवशिष्ट युक्त गाद को जलाकर राख किया जाएगा और साझा खतरनाक अपशिष्ट भस्मक अथवा उद्योग विशिष्ट भस्मक के लिए अधिसूचित किए गए भस्मक का मानक लागू होगा।

[फा.सं.क्यू.-15017/12/2018-सीपीडब्ल्यू]

जिगमेत टक्पा, संयुक्त सचिव

**टिप्पणी:** मूल नियम भारत के राजपत्र असाधारण, भाग- II, खंड 3, उप-खंड (i) में दिनांक 19 नवम्बर, 1986 को संख्या का.आ. 844 (अ) द्वारा प्रकाशित किए गए थे और उन्हें अंतिम बार दिनांक 26 दिसम्बर, 2019 को सा.का.नि. 952 (अ) की अधिसूचना द्वारा संशोधित किया गया था।

## MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

## NOTIFICATION

New Delhi, the 23rd January, 2020

**G.S.R. 44(E).**— The following draft of the notification, which the Central Government proposes to issue in exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) is hereby published, as required under sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, for the information of the public likely to be affected thereby; and notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of sixty days from the date on which copies of the Gazette containing this notification are made available to the public.

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may forward the same in writing, for consideration of the Central Government within the period specified above to the Secretary, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003, or send it to Member Secretary, CPCB and Scientist 'E' Ministry at the e-mail address i.e. mscb.cpcb@nic.in and h.kharkwal@nic.in.

### Draft Notification

The Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

1. **Short title and commencement-** (1) These rules may be called the Environment (Protection) Amendment Rules, 2019.

   (2) They shall come into force on the date of their final publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in Schedule-I, for serial number 73 and the entries relating thereto, the following serial number and entries shall be substituted, namely:-

| Sl. No. | Industry | Parameters | Standard |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| "73 | **Bulk Drug and Formulation (Pharmaceutical)** | **A. EFFLUENT STANDARDS** | |
| | | | **For final outlet of ETP** Limiting value for concentration (in mg/l except for pH and Bio assay) |
| | | **i) Compulsory Parameters** | |
| | | pH | 6.0 -8.5 |

| | | | |
|---|---|---|---|
| | | BOD (3 days 27°C) | 30 |
| | | COD | 250 |
| | | TSS | 100 |
| | | TDS | 2100 |
| | | Oil & Grease | 10 |
| | | Bio - Assay Test** | 90% Survival of Fish after first 96 hours in 100% effluent |
| | | **ii) Additional Parameters** | |
| | | Ammonical Nitrogen | 50 |
| | | Nitrate Nitrogen | 10 |
| | | ****Benzene* | *0.05* |
| | | ****Toluene* | *0.05* |
| | | ****Xylene* | *0.06* |
| | | ****Methylene Chloride* | *0.9* |
| | | Phosphates as P | 5 |
| | | Chlorides | 1000 |
| | | Sulphates as $SO_4$ | 1000 |
| | | Fluoride | 2 |
| | | Sulphides as S | 2 |
| | | Phenolic Compounds | 1 |
| | | Total Residual Chlorine | 1 |
| | | Zinc | 5 |
| | | Iron | 3 |
| | | Copper | 3 |
| | | Total Chromium | 2 |
| | | Hexavalent Chromium ($Cr^{6+}$) | 0.1 |
| | | Cyanide | 0.1 |
| | | Arsenic | 0.2 |
| | | Mercury | 0.01 |
| | | Lead | 0.1 |
| | | ****Active Pharmaceutical Ingredient (API) | *0.05* |
| | | **iii) for final outlet of Industries discharging to CETP** | |
| | | For each Common Effluent Treatment Plant(CETP), the state Board will prescribe inlet quality Standards for general parameters, Ammonical Nitrogen and Heavy Metals as per the design of the Common Effluent Treatment Plant(CETP) and local needs and conditions. As per notification S.O. 4 (E) dated 1st January, 2016 | |
| | | **Note:**<br>**ZLD** = Zero Liquid Discharge system in *Bulk Drug and formulation* industry is considered when treated effluent meeting the limits prescribed for compulsory parameters shall be used in Process or Utilities (boiler/ Cooling tower etc.). The reuse of treated effluent in gardening/ horticulture shall not be considered as ZLD in Bulk Drug and formulation industries.<br>** **The Bio assay test** shall be conducted as per IS : 6582-1971<br>Parameters listed as **"Additional Parameters"** shall be prescribed depending upon the process and product.<br>*** *Limits shall be applicable to industries those are using Benzene,* Toluene, Xylene, Methylene Chloride, Chlorobenzene.<br>****API limits shall be applicable for units manufacturing API other than antibiotics. | |
| | | **B. EMISSION STANDARDS from Process Reactor Vents/ Tank farm Vents** | |
| | | **Parameter** | **Limiting value for concentration (mg/Nm$^3$)** |
| | | Chlorine | 15 |
| | | Hydrochloric acid vapour | 35 |
| | | Ammonia | 30 |
| | | Benzene | 5 |
| | | Toluene | 100 |
| | | Acetonitrile | 1000 |
| | | Dichloromethane | 200 |

| | |
|---|---|
| Xylene | 100 |
| Acetone | 2000 |

***C. The total losses of solvent should not be more than 3% of the solvent consumed.***

**D. Antibiotic Residues in the treated effluent of Bulk Drug and Formulation Industry and CETP with membership of *Bulk Drug and formulation* Units**

Individual antibiotic residues will be equal to or less than the values given in the below table.

| Parameter | | Limiting value for concentration (µg/l) |
|---|---|---|
| i. | Amikacin | 6.40 |
| ii. | Amoxicillin | 0.10 |
| iii. | Amphotericin B | 0.01 |
| iv. | Ampicillin | 0.10 |
| v. | Anidulafungin | 0.01 |
| vi. | Avilamycin | 3.20 |
| vii. | Azithromycin | 0.01 |
| viii. | Aztreonam | 0.20 |
| ix. | Bacitracin | 3.20 |
| x. | Bedaquiline | 0.03 |
| xi. | Benzylpenicillin | 0.10 |
| xii. | Capreomycin | 0.80 |
| xiii. | Cefaclor | 0.20 |
| xiv. | Cefadroxil | 0.80 |
| xv. | Cefalonium | 8.40 |
| xvi. | Cefaloridine | 1.60 |
| xvii. | Cefalothin | 0.80 |
| xviii. | Cefazolin | 0.40 |
| xix. | Cefdinir | 0.10 |
| xx. | Cefepime | 0.20 |
| xxi. | Cefixime | 0.02 |
| xxii. | Cefoperazone | 0.20 |
| xxiii. | Cefotaxime | 0.04 |
| xxiv. | Cefoxitin | 3.20 |
| xxv. | Cefpirome | 0.02 |
| xxvi. | Cefpodoxime | 0.10 |
| xxvii. | Cefquinome | 0.64 |
| xxviii. | Ceftaroline | 0.02 |
| xxix. | Ceftazidime | 0.20 |
| xxx. | Ceftibuten | 0.10 |
| xxxi. | Ceftiofur | 0.02 |
| xxxii. | Ceftobiprole | 0.09 |
| xxxiii. | Ceftolozane | 0.76 |
| xxxiv. | Ceftriaxone | 0.01 |
| xxxv. | Cefuroxime | 0.20 |
| xxxvi. | Cephalexin | 0.03 |
| xxxvii. | Chloramphenicol | 3.20 |
| xxxviii. | Ciprofloxacin | 0.02 |
| xxxix. | Clarithromycin | 0.03 |
| xl. | Clavulanic Acid | 22.40 |
| xli. | Clinafloxacin | 0.20 |
| xlii. | Clindamycin | 0.04 |
| xliii. | Cloxacillin | 0.05 |
| xliv. | Colistin | 0.80 |
| xlv. | Daptomycin | 0.40 |
| xlvi. | Delamanid | 0.02 |
| xlvii. | Doripenem | 0.04 |
| xlviii. | Doxycycline | 0.80 |
| xlix. | Enramycin | 1.92 |
| l. | Enrofloxacin | 0.02 |

| | | | | |
|---|---|---|---|---|
| | | li. | Ertapenem | 0.05 |
| | | lii. | Erythromycin | 0.20 |
| | | liii. | Ethambutol | 0.80 |
| | | liv. | Faropenem | 0.01 |
| | | lv. | Fidaxomicin | 0.01 |
| | | lvi. | Florfenicol | 0.80 |
| | | lvii. | Fluconazole | 0.10 |
| | | lviii. | Flumequine | 0.10 |
| | | lix. | Fosfomycin | 0.80 |
| | | lx. | Fusidic acid | 0.20 |
| | | lxi. | Gatifloxacin | 0.05 |
| | | lxii. | Gemifloxacin | 0.02 |
| | | lxiii. | Gentamicin | 0.08 |
| | | lxiv. | Imipenem | 0.05 |
| | | lxv. | Isoniazid | 0.05 |
| | | lxvi. | Itraconazole | 0.004 |
| | | lxvii. | Kanamycin | 0.44 |
| | | lxviii. | Levofloxacin | 0.10 |
| | | lxix. | Lincomycin | 0.72 |
| | | lxx. | Linezolid | 2.68 |
| | | lxxi. | Loracarbef | 0.80 |
| | | lxxii. | Mecillinam | 0.40 |
| | | lxxiii. | Meropenem | 0.02 |
| | | lxxiv. | Metronidazole | 0.05 |
| | | lxxv. | Minocycline | 0.40 |
| | | lxxvi. | Moxifloxacin | 0.05 |
| | | lxxvii. | Mupirocin | 0.10 |
| | | lxxviii. | Nalidixic acid | 6.40 |
| | | lxxix. | Narasin | 0.20 |
| | | lxxx. | Neomycin | 0.01 |
| | | lxxxi. | Netilmicin | 0.20 |
| | | lxxxii. | Nitrofurantoin | 25.60 |
| | | lxxxiii. | Norfloxacin | 0.20 |
| | | lxxxiv. | Ofloxacin | 0.20 |
| | | lxxxv. | Oxacillin | 0.40 |
| | | lxxxvi. | Oxytetracycline | 0.20 |
| | | lxxxvii. | Pefloxacin | 3.20 |
| | | lxxxviii. | Phenoxymethylpenicillin | 0.02 |
| | | lxxxix. | Piperacillin | 0.20 |
| | | xc. | Polymixin | 0.80 |
| | | xci. | Retapamulin | 0.02 |
| | | xcii. | Rifampicin | 0.02 |
| | | xciii. | Roxithromycin | 0.40 |
| | | xciv. | Secnidazole | 0.40 |
| | | xcv. | Sparfloxacin | 0.02 |
| | | xcvi. | Spectinomycin | 12.80 |
| | | xcvii. | Spiramycin | 0.20 |
| | | xcviii. | Streptomycin | 6.40 |
| | | xcix. | Sulbactam | 6.40 |
| | | c. | Sulfadiazine | 288.00 |
| | | ci. | Sulfadimethoxine | 20.00 |
| | | cii. | Sulfadoxine | 0.24 |
| | | ciii. | Sulfamethoxazole | 0.24 |
| | | civ. | Tazobactam | 17.60 |
| | | cv. | Tedizolid | 3.92 |
| | | cvi. | Teicoplanin | 0.20 |
| | | cvii. | Telithromycin | 0.02 |

| | | | | |
|---|---|---|---|---|
| | | cviii. | Tetracycline | 0.40 |
| | | cix. | Thiamphenicol | 0.40 |
| | | cx. | Tiamulin | 0.40 |
| | | cxi. | Ticarcillin | 3.20 |
| | | cxii. | Tigecycline | 0.40 |
| | | cxiii. | Tildipirosin | 0.17 |
| | | cxiv. | Tilmicosin | 0.40 |
| | | cxv. | Tobramycin | 0.40 |
| | | cxvi. | Trimethoprim | 0.20 |
| | | cxvii. | Trovafloxacin | 0.01 |
| | | cxviii. | Tylosin | 0.33 |
| | | cxix. | Vancomycin | 3.20 |
| | | cxx. | Viomycin | 0.80 |
| | | cxxi. | Virginiamycin | 0.80.". |

**Note:-** The sludge containing antibiotic residues shall be incinerated and the standard of incinerator notified for common hazardous waste incinerator or industry specific incinerator shall be applicable.

[F.No. Q-15017/12/2018-CPW]

JIGMET TAKPA, Jt. Secy.

**Note:** The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3,Sub-section (i) vide number S.O. 844 (E), dated the 19th November, 1986 and last amended vide notification number G.S.R. 952(E), dated the 26th December, 2019.

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The members of the AMR Industry Alliance have developed a unified approach to establishing discharge targets for antibiotic manufacturing, based on Predicted No-Effect Concentrations (PNECs) for use in environmental risk assessments of antibiotics. The discharge target can be derived using these PNECs and site-specific parameters. The publication of the PNEC table fulfills the commitment of the AMR Industry Alliance to publish science-driven, risk-based targets for discharge concentrations of antibiotics. For the first time, the pharmaceutical industry, as member companies of the Alliance, have collated, shared, analyzed, and published existing antibiotic data with respect to antimicrobial resistance and eco-toxicity.

The PNEC table contains two values. PNEC-Environment (PNEC-ENV) values are based on eco-toxicology data generated by Alliance member companies and relevant peer reviewed literature. These values are intended to be protective of ecological species and incorporate assessment factors consistent with standard environmental risk methodologies (Brandt et al., 2015[1]; Le Page et al., 2017[2]). The PNEC-Minimum Inhibitory Concentration (PNEC-MIC) values are based on the approach published in Bengtsson-Palme and Larsson (2016)[3] and are intended to be protective of resistance promotion. This table will be updated periodically as new reliable and robust data become available.

The release of this table is an important step in the journey of evaluating antibiotic discharge concentrations using science-driven, risk-based targets, allowing Alliance member companies to work toward achieving these target values at the receiving water body. The AMR Industry Alliance recommendation is that companies target the lower of these two values (when available) for assessing manufacturing site discharges under a risk-based framework.

The AMR Industry Alliance believes working toward achieving these antibiotic discharge concentration targets will be both protective of ecological resources and also lower the potential for the evolution and selection of AMR in the environment. It is important to note that these values are recommended based on currently available information, thus, may change as new reliable and relevant information generated to recognized protocols comes to light.

[1] Brandt, et al., 2015. Ecotoxicological assessment of antibiotics: A call for improved consideration of microorganisms. Environment International, 85: 189-205.
[2] Le Page, et al., 2017. Integrating human and environmental health in antibiotic risk assessment: A critical analysis of protection goals, species sensitivity and antimicrobial resistance. Environment International, 109: 155-169.
[3] Bengtsson-Palme & Larsson, 2016. Concentrations of antibiotics predicted to select for resistant bacteria: Proposed limits for environmental regulation, Environment International 86: 140–149.

# AMR Alliance Science-Based PNEC Targets for Risk Assessments

| Active Pharmaceutical Ingredient | $PNEC_{ENV}$ (µg/L) | $PNEC_{MIC}$ (µg/L) | Lowest Value (µg/L) |
|---|---|---|---|
| Amikacin | N/A | 16.00 | 16.00 |
| Amoxicillin | 0.57 | 0.25 | 0.25 |
| Amphotericin B | N/A | 0.02 | 0.02 |
| Ampicillin | 0.60 | 0.25 | 0.25 |
| Anidulafungin | N/A | 0.02 | 0.02 |
| Avilamycin | 125.00 | 8.00 | 8.00 |
| Azithromycin | 0.03 | 0.25 | 0.03 |
| Aztreonam | N/A | 0.50 | 0.50 |
| Bacitracin | 114.59 | 8.00 | 8.00 |
| Bedaquiline | 0.08 | N/A | 0.08 |
| Capreomycin | N/A | 2.00 | 2.00 |
| Cefaclor | N/A | 0.50 | 0.50 |
| Cefadroxil | 0.14 | 2.00 | 0.14 |
| Cefalonium | 21.10 | N/A | 21.10 |
| Cefaloridine | N/A | 4.00 | 4.00 |
| Cefalothin | N/A | 2.00 | 2.00 |
| Cefazolin | N/A | 1.00 | 1.00 |
| Cefdinir | N/A | 0.25 | 0.25 |
| Cefepime | N/A | 0.50 | 0.50 |
| Cefixime | 0.60 | 0.06 | 0.06 |
| Cefoperazone | N/A | 0.50 | 0.50 |
| Cefotaxime | 0.12 | 0.13 | 0.12 |
| Cefoxitin | N/A | 8.00 | 8.00 |
| Cefpirome | N/A | 0.06 | 0.06 |
| Cefpodoxime proxetil | 1.76 | 0.25 | 0.25 |
| Cefquinome | 1.60 | N/A | 1.60 |
| Ceftaroline | 0.12 | 0.06 | 0.06 |
| Ceftazidime | 1.30 | 0.50 | 0.50 |
| Ceftibuten | N/A | 0.25 | 0.25 |
| Ceftiofur | N/A | 0.06 | 0.06 |
| Ceftobiprole | 0.23 | 0.25 | 0.23 |
| Ceftolozane | 1.90 | N/A | 1.90 |
| Ceftriaxone | 29.40 | 0.03 | 0.03 |
| Cefuroxime | 1.70 | 0.50 | 0.50 |
| Cephalexin | 0.21 | 4.00 | 0.21 |

| Active Pharmaceutical Ingredient | $PNEC_{ENV}$ (µg/L) | $PNEC_{MIC}$ (µg/L) | Lowest Value (µg/L) |
|---|---|---|---|
| Cephradine | 0.19 | N/A | 0.19 |
| Chloramphenicol | N/A | 8.00 | 8.00 |
| Chlortetracycline | 5.00 | N/A | 5.00 |
| Ciprofloxacin | 0.45 | 0.06 | 0.06 |
| Clarithromycin | 0.26 | 0.25 | 0.25 |
| Clinafloxacin | N/A | 0.50 | 0.50 |
| Clindamycin | 0.10 | 1.00 | 0.10 |
| Cloxacillin | 20.00 | 0.13 | 0.13 |
| Colistin (Polymyxin E) | 9.00 | 2.00 | 2.00 |
| Daptomycin | 510.00 | 1.00 | 1.00 |
| Delamanid | 0.03 | N/A | 0.03 |
| Doripenem | 0.46 | 0.13 | 0.13 |
| Doxycycline | 25.10 | 2.00 | 2.00 |
| Enramycin | 4.80 | N/A | 4.80 |
| Enrofloxacin | 1.91 | 0.06 | 0.06 |
| Ertapenem | 14.00 | 0.13 | 0.13 |
| Erythromycin | 0.50 | 1.00 | 0.50 |
| Ethambutol | N/A | 2.00 | 2.00 |
| Faropenem | N/A | 0.02 | 0.02 |
| Fidaxomicin | 891.00 | 0.02 | 0.02 |
| Florfenicol | 38.00 | 2.00 | 2.00 |
| Flucloxacillin | 26.80 | N/A | 26.80 |
| Fluconazole | N/A | 0.25 | 0.25 |
| Flumequine | N/A | 0.25 | 0.25 |
| Fosfomycin | N/A | 2.00 | 2.00 |
| Fusidic acid | N/A | 0.50 | 0.50 |
| Framycetine | Testing on-going | 0.06 | 0.06 |
| Gatifloxacin | N/A | 0.13 | 0.13 |
| Gemifloxacin | N/A | 0.06 | 0.06 |
| Gentamicin | 0.15 | 1.00 | 0.15 |
| Imipenem | 0.41 | 0.13 | 0.13 |
| Isoniazid | N/A | 0.13 | 0.13 |
| Kanamycin | 1.05 | 2.00 | 1.05 |
| Levofloxacin | 0.52 | 0.25 | 0.25 |
| Lincomycin | 0.81 | 2.00 | 0.81 |
| Linezolid | 3.50 | 8.00 | 3.50 |

| Active Pharmaceutical Ingredient | $PNEC_{ENV}$ (µg/L) | $PNEC_{MIC}$ (µg/L) | Lowest Value (µg/L) |
|---|---|---|---|
| Loracarbef | N/A | 2.00 | 2.00 |
| Mecillinam | N/A | 1.00 | 1.00 |
| Meropenem | 1.50 | 0.06 | 0.06 |
| Metronidazole | N/A | 0.13 | 0.13 |
| Minocycline | Testing on-going | 1.00 | 1.00 |
| Moxifloxacin | N/A | 0.13 | 0.13 |
| Mupirocin | N/A | 0.25 | 0.25 |
| Nalidixic acid | N/A | 16.00 | 16.00 |
| Narasin | N/A | 0.50 | 0.50 |
| Natamycin | Testing on-going | N/A | N/A |
| Neomycin | 0.03 | 2.00 | 0.03 |
| Netilmicin | N/A | 0.50 | 0.50 |
| Nitrofurantoin | N/A | 64.00 | 64.00 |
| Norfloxacin | 120.00 | 0.50 | 0.50 |
| Ofloxacin | 10.00 | 0.50 | 0.50 |
| Oxacillin | N/A | 1.00 | 1.00 |
| Oxytetracycline | 47.00 | 0.50 | 0.50 |
| Pefloxacin | N/A | 8.00 | 8.00 |
| Penicillin G Procaine | 16.00 | 0.25 | 0.25 |
| Phenoxymethylpenicillin | N/A | 0.06 | 0.06 |
| Piperacillin | 4.30 | 0.50 | 0.50 |
| Polymixin B | 0.06 | N/A | 0.06 |
| Pristinamycin | Testing on-going | N/A | N/A |
| Puromycin | 31.00 | N/A | 31.00 |
| Retapamulin | N/A | 0.06 | 0.06 |
| Rifampicin | Testing on-going | 0.06 | 0.06 |
| Rifamycin | N/A | N/A | N/A |
| Rifaximin | N/A | N/A | N/A |
| Roxithromycin | 6.80 | 1.00 | 1.00 |
| Secnidazole | N/A | 1.00 | 1.00 |
| Sparfloxacin | N/A | 0.06 | 0.06 |
| Spectinomycin | N/A | 32.00 | 32.00 |
| Spiramycin | 1.09 | 0.50 | 0.50 |
| Streptomycin | N/A | 16.00 | 16.00 |
| Sulbactam | N/A | 16.00 | 16.00 |
| Sulfadiazine | 11.21 | 13.00 | 11.21 |
| Sulfamethoxazole | 0.60 | 16.00 | 0.60 |

| Active Pharmaceutical Ingredient | $PNEC_{ENV}$ (µg/L) | $PNEC_{MIC}$ (µg/L) | Lowest Value (µg/L) |
|---|---|---|---|
| Tedizolid | 3.20 | N/A | 3.20 |
| Teicoplanin | 12.90 | 0.50 | 0.50 |
| Telithromycin | Testing on-going | 0.06 | 0.06 |
| Tetracycline | 3.20 | 1.00 | 1.00 |
| Thiamphenicol | N/A | 1.00 | 1.00 |
| Tiamulin | N/A | 1.00 | 1.00 |
| Ticarcillin | N/A | 8.00 | 8.00 |
| Tigecycline | Testing on-going | 1.00 | 1.00 |
| Tildipirosin | 0.42 | N/A | 0.42 |
| Tilmicosin | 0.80 | 1.00 | 0.80 |
| Tobramycin | 4.30 | 1.00 | 1.00 |
| Trimethoprim | 312.45 | 0.50 | 0.50 |
| Trovafloxacin | N/A | 0.03 | 0.03 |
| Tulathromycin | Testing on-going | N/A | N/A |
| Tylosin | 0.98 | 4.00 | 0.98 |
| Vancomycin | N/A | 8.00 | 8.00 |
| Viomycin | N/A | 2.00 | 2.00 |
| Virginiamycin | N/A | 2.00 | 2.00 |

Annexure R-1/2

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99

# भारत का राजपत्र
# The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)

PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित

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## पर्यावरण एवं वन मंत्रालय

## अधिसूचना

नई दिल्ली, 9 जुलाई, 2009

**सा.का.नि. 512(अ).**—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण (संरक्षण) नियम, 1986 में और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :—

1. (1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) तीसरा संशोधन नियम, 2009 है ।

(2) ये राजपत्र में उनके प्रकाशन की तारीख को प्रवृत्त होंगे ।

2. पर्यावरण (संरक्षण) नियम, 1986 की अनुसूची-I में,—

(क) क्रम संख्या 39 और इसमें विद्यमान प्रविष्टियों का लोप किया जाएगा; और

(ख) क्रम संख्या 73 और इसमें विद्यमान प्रविष्टियों में,—

(i) विद्यमान शीर्षक के स्थान पर निम्न शीर्षक रखा जाएगा :—
"भेषज (विनिर्माण और विनिर्मिति) उद्योग"।

(ii) स्तम्भ संख्या 3 और 4 के अधीन, क्रम संख्या (i) तथा (ii) और संबंधित प्रविष्टियों के स्थान पर निम्नलिखित प्रविष्टियों को क्रमशः रखा जाएगा, अर्थात् :—

| क्र. सं. | उद्योग | पेरामीटर | मानक |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| | | | "बहिस्राव मानक |
| | | | 1. अनिवार्य पेरामीटर |
| | | | सान्द्रण सीमा मि.ग्रा./लीटर, pH को छोड़कर |
| | | pH | 6.0–8.5 |
| | | तेल एवं ग्रीस | 10 |
| | | BOD (3 दिन 27° सेंटीग्रेड) | 100* |

| 3 | 4 |
|---|---|
| कुल निलम्बित कण | 100 |
| बायोएस्से परीक्षण | 100% बहिस्राव में 96 घंटे के बाद 90% मछलियां जीवित** |
| **2. अतिरिक्त पेरामीटर** | |
| पारद् | 0.01 |
| आर्सेनिक | 0.20 |
| क्रोमियम ($Cr^{6+}$) | 0.10 |
| लेड | 0.10 |
| साइनाइड | 0.10 |
| फिनोलिक्स ($C_6H_5OH$) | 1.0 |
| सल्फाइड | 2.0 |
| फॉसफेट | 5.0 |

**टिप्पण :**

* यदि शोधित बहिस्राव सीधे स्वच्छ जल निकायों जैसे नदी, नहर या झील में सीधे विसर्जित कर दिया जाता है तो BOD और COD की सीमाएं क्रमश: 30 मि.ग्रा./लीटर और 250 मि.ग्रा./लीटर होंगी ।

** बायोएस्से परीक्षण IS : 6582-1971 के अनुसार आयोजित किया जाए ।

(i) 'अतिरिक्त पेरामीटरों' के अंतर्गत सूचीबद्ध पेरामीटरों को प्रक्रिया और उत्पाद के अनुसार निर्धारित किया जाए ।

(ii) बहिस्राव में कुल घुलित कणों के लिए सीमाएं संबंधित राज्य प्रदूषण नियंत्रण बोर्ड/प्रदूषण नियंत्रण समिति द्वारा प्रापक जल निकाय के अनुसार विहित किया जाए ।"।

[फा. सं. क्यू-15017/34/2006-सी.पी.डब्ल्यू.]

रजनीश दुबे, संयुक्त सचिव

**टिप्पण :** मूल नियम, भारत के राजपत्र में सं. का.आ. 844(अ) तारीख 19 नवम्बर, 1986 के द्वारा प्रकाशित किए गए थे और पश्चात्वर्ती संशोधन सं. का.आ. 433(अ) तारीख 18 अप्रैल, 1987, सं. का.आ. 64(अ) तारीख 18 जनवरी, 1988, सं. का.आ. 3(अ) तारीख 3 जनवरी, 1989, सं. का.आ. 190(अ) तारीख 15 मार्च, 1989, सं. का.आ. 913(अ) तारीख 24 अक्तूबर, 1989, सं. का.आ. 12(अ) तारीख 8 जनवरी, 1990, सं. का.आ. 742(अ) तारीख 30 अगस्त, 1990, सं. का.आ. 23(अ) तारीख 16 जनवरी, 1991, सं. का.आ. 93(अ) तारीख 21 फरवरी, 1991, सं. का.आ. 95(अ) तारीख 12 फरवरी, 1992, सं. का.आ. 797(अ) तारीख 1 अक्तूबर, 1992, सं. का.आ. 386(अ) तारीख 28 अप्रैल, 1993, सं. का.आ. 422(अ) तारीख 19 मई, 1993, सं. का.आ. 801(अ) तारीख 31 दिसम्बर, 1993, सं. का.आ. 176(अ) तारीख 3 अप्रैल, 1996, सं. का.आ. 631(अ) तारीख 31 अक्तूबर, 1997, सं. का.आ. 504(अ) तारीख 20 अगस्त, 1998, सं. का.आ. 7(अ) तारीख 2 जनवरी, 1999, सं. का.आ. 682(अ) तारीख 6 अक्तूबर, 1999, सं. का.आ. 742(अ) तारीख 25 सितम्बर, 2000, सं. का.आ. 72(अ) तारीख 6 फरवरी, 2001, सं. का.आ. 54(अ) तारीख 22 जनवरी, 2002, सं. का.आ. 371(अ) तारीख 17 मई, 2002, सं. का.आ. 489(अ) तारीख 9 जुलाई, 2002, सं. का.आ. 1088(अ) तारीख 11 अक्तूबर, 2002, सं. का.आ. 849(अ) तारीख 30 दिसम्बर, 2002, सं. का.आ. 520(अ) तारीख 1 जुलाई, 2003, सं. का.आ. 92(अ) तारीख 29 जनवरी, 2004, सं. का.आ. 448(अ) तारीख 12 जुलाई, 2004, शुद्धिपत्र सं. का.आ. 520(अ) तारीख 12 अगस्त, 2004, सं. का.आ. 272(अ) तारीख 5 मई, 2005, सं. का.आ. 315(अ) तारीख 16 मई, 2005, सं. का.आ. 546(अ) तारीख 30 अगस्त, 2005, सं. का.आ. 46(अ) तारीख 3 फरवरी, 2006, सं. का.आ. 464(अ) तारीख 7 अगस्त, 2006, सं. का.आ. 640(अ) तारीख 16 अक्तूबर, 2006, सं. का.आ. 566(अ) तारीख 29 अगस्त, 2007, सं. का.आ. 704(अ) तारीख 12 नवम्बर, 2007, सं. का.आ. 186(अ) तारीख 18 मार्च, 2008, सं. का.आ. 280(अ) तारीख 11 अप्रैल, 2008, सं. का.आ 344(अ) तारीख 7 मई, 2008, सं. का.आ. 414(अ) तारीख 30 मई, 2008, सं. का.आ. 481(अ) तारीख 26 जून, 2008, सं. का.आ. 579(अ) तारीख 6 अगस्त, 2008, सं. का.आ. 600(अ) तारीख 18 अगस्त, 2008, सं. का.आ. 752(अ) तारीख 24 अक्तूबर, 2008, सं. का.आ. 844(अ) तारीख 18 फरवरी, 2009, और सं. का.आ. 149(अ) तारीख 4 मार्च, 2009 ।

**MINISTRY OF ENVIRONMENT AND FORESTS**

**NOTIFICATION**

New Delhi, 9th July, 2009

**G.S.R. 512(E).**—In exercise of the powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Act, 1986, namely :—

1. (1) These rules may be called the Environment (Protection) Third Amendment Rules, 2009.

   (2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in schedule I,—

   (a) serial number 39 and the entries relating thereto, shall be omitted; and

   (b) in serial number 73 and the entries relating thereto,—

      (i) for the existing heading, the following heading shall be substituted, namely :—

      "Pharmaceutical (Manufacturing and Formulation) Industry."

      (ii) for serial numbers (i) and (ii) and the entries relating thereto under columns 3 and 4, the following entries shall respectively be substituted, namely :—

| S.No. | Industry | Parameter | Standards |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| | | "Effluent Standards | |
| | | **i. Compulsory Parameters** | |
| | | | Limiting concentration in mg/l, expect for pH |
| | | pH | 6.0-8.5 |
| | | Oil & grease | 10 |
| | | BOD (3 days 27 ° C) | 100* |
| | | Total suspended solids | 100 |
| | | Bioassay Test | 90% survival of fish after first 96 hours in 100% effluent** |
| | | **ii. Additional Parameters** | |
| | | Mercury | 0.01 |
| | | Arsenic | 0.20 |
| | | Chromium ($Cr^{6+}$) | 0.10 |
| | | Lead | 0.10 |
| | | Cyanide | 0.10 |
| | | Phenolics ($C_6H_5OH$) | 1.0 |
| | | Sulphides (as S) | 2.0 |
| | | Phosphate (as P) | 5.0 |
| | | **Note :** | |
| | | * The BOD and COD limits shall be 30 mg/l and 250 mg/l respectively, if treated effluent is discharged directly into a fresh water body i.e., steam, canal, river or lake. | |
| | | ** The Bioassay Test shall be conducted as per IS : 6582-1971. | |

(i) Parameters listed as 'Additional Parameters' shall be prescribed depending upon the process and product.

(ii) Limits for total dissolved solids in effluent shall be prescribed by the concerned pollution control board/pollution control committee depending upon the recipient water body.".

[F.No. Q-15017/34/2006-CPW]

RAJNEESH DUBE, Jt. Secy.

Note :— The principal rules were published in the Gazette of India *vide* number S.O. 844(E) dated 19th November 1986 and subsequently amended *vide* S.O. 433(E) dated 18th April, 1987; S.O. 64(E) dated 18th January, 1988; S.O. 3(E) dated 3rd January, 1989; S.O. 190(E) dated 15th March, 1989; G.S.R. 913(E) dated the 24th October, 1989; S.O. 12(E) dated the 8th January, 1990; G.S.R. 742(E) dated the 30th August, 1990; S.O. 23(E) dated the 16th January, 1991; G.S.R. 93(E) dated the 21st February, 1991; G.S.R. 95(E) dated the 12th February, 1992; G.S.R. 329(E) dated the 13th March, 1992; G.S.R. 475(E) dated the 5th May, 1992; G.S.R. 797(E) dated the 1st October, 1992; G.S.R. 386(E) dated the 28th April, 1993; G.S.R. 422(E) dated the 19th May, 1993; G.S.R. 801(E) dated the 31st December, 1993; G.S.R. 176(E) dated the 3rd April, 1996; G.S.R. 631(E) dated the 31st October, 1997; G.S.R. 504(E) dated the 20th August, 1998; G.S.R. 7(E) dated the 2nd January, 1999; G.S.R. 682(E) dated the 6th October, 1999; G.S.R. 742(E) dated the 25th September, 2000; G.S.R. 72(E) dated the 6th February, 2001; G.S.R. 54(E) dated the 22nd January, 2002; G.S.R. 371(E) dated the 17th May, 2002; G.S.R. 489(E) dated the 9th July, 2002; S.O. 1088(E) dated the 11th October, 2002; G.S.R. 849(E) dated the 30th December, 2002; G.S.R. 520(E) dated the 1st July, 2003; G.S.R. 92(E) dated the 29th January, 2004; G.S.R. 448(E) dated the 12th July, 2004; Corrigenda G.S.R. 520(E) dated the 12th August, 2004; G.S.R. 272(E) dated the 5th May, 2005; G.S.R. 315(E) dated the 16th May, 2005; G.S.R. 546(E) dated the 30th August, 2005; G.S.R. 46(E) dated the 3rd February, 2006; G.S.R. 464(E) dated the 7th August, 2006; G.S.R. 640(E) dated the 16th October, 2006; G.S.R. 566(E) dated the 29th August, 2007; G.S.R. 704(E) dated the 12th November, 2007; G.S.R. 186(E) dated the 18th March, 2008; G.S.R. 280(E) dated the 11th April, 2008; G.S.R. 344(E) dated the 7th May, 2008; G.S.R. 414(E) dated the 30th May, 2008; G.S.R. 481(E) dated the 26th June, 2008; G.S.R. 579(E) dated the 6th August, 2008; G.S.R. 600(E) dated the 18th August, 2008; G.S.R. 752(E) dated the 24th October, 2008; G.S.R. 97(E) dated the 18th February, 2009 and G.S.R. 149(E) dated the 4th March, 2009.

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97 ANNEXURE-R-1/3

**Government of Himachal Pradesh**
**Department of Env., Sc. &Technology**

**No. STE-F(2)-1/2017** **Dated : Shimla-2, 17-3-2018**

## NOTIFICATION

The Governor, Himachal Pradesh is pleased to notify the following parameters for inlet quality standards for Common Effluent Treatment Plants (CETPs) in the State of Himachal Pradesh as per recommendation/prescription of the Himachal Pradesh State Pollution Control Board vide their letter No. HPSPCB-CETP (lonseat branch) 2017-10347 dated 14.08.2017 as per provisions contained in the notification No: S.O. 4 (E) dated 01.01.2016 issued by the Ministry of Environment, Forest & Climate Change, Government of India:-

| Sr. No | Name of the Parameter | Prescribed inlet value |
|---|---|---|
| 1 | TSS | Up to 250 mg/1 as per actual design |
| 2. | Oil and grease | Upto 30 mg/1 as per actual design |
| 3. | PH | 6.0-9.0 as per actual design |

SFE-T
DA (Consent Misc) Q
SDF 19/3

17131
19.3.18

By Order,

Manisha Nanda
Addl. Chief Secretary (Env., S&T) to the
Government of Himachal Pradesh

Endsts. No. : As above. Dated: Shimla-2, 17-3-2018

Copy forwarded for information and necessary action to:
1. Addl. Chief Secy. (U.D.) to the Government of Himachal Pradesh
2. Pr. Secy. (Ind.) to the Government of Himachal Pradesh
3. The Member Secretary, HPPCB, Shimla-9
4. The Director, Environment, S & T, HP, Shimla-1

17/3/18

(D.C. Rana)
Spl. Secy. (Env., Sc. & Tech.) to the
Government of Himachal Pradesh
(Ph. No.0177-2626212)

ANNEXURE -R-1/4



**Government of Himachal Pradesh**
**Department of Env., Sc. &Technology**

**No. STE-F(2)-1/2017** **Dated : Shimla-2,** 26 .12.2019

## NOTIFICATION

In partial modification of this department Notification of even number dated 17.03.2018, the Governor, Himachal Pradesh is pleased to notify the following additional parameters for Inlet Quality Standards in respect of Common Effluent Treatment Plant (CETP) at Baddi in the State of Himachal Pradesh in accordance with the provisions contained in the Ministry of Environment, Forest & Climate Change, Government of India Notification No: S.O. 4 (E) dated 01.01.2016:-

| S.No. | Name of the Parameter | Standards (in mg/l) |
|---|---|---|
| 1. | TSS | 250 mg/l |
| 2. | COD | 1000 mg/l |
| 3. | BOD | 350 mg/l |
| 4. | O&G | 15 mg/l |
| 5. | Sulphide | 5 mg/l |
| 6. | Ammonical Nitrogen | 50 mg/l |
| 7. | Total Phosphate | 5 mg/l |
| 8. | Chromium Hexavalent | 2 mg/l |
| 9. | Lead | 1 mg/l |
| 10. | Phenolic Compound | 5 mg/l |
| 11. | FDS | 2100 mg/l |

By Order,

(R.D Dhiman)
Addl. Chief Secretary (Env., S&T) to the
Government of Himachal Pradesh

Endsts. No. As above. Dated: Shimla-2, 26 .12.2019.

Copy forwarded for information and necessary action to:

1. The Addl. Chief Secy. (Ind.) to the Government of Himachal Pradesh.
2. The Secretary (Urban Dev.) to the Government of Himachal Pradesh.
3. The Member Secretary, HPPCB, Shimla-9
4. The Director, Environment, S & T, HP, Shimla-1.

(Satpal Dhiman) 26-12-2019
Joint Secretary (Env., S&T) to the
Government of Himachal Pradesh
Phone No. 0177-2621874