

H.P. STATE POLLUTION CONTROL BOARD

Him Parivesh, Phase-III, New Shimla (H.P.) 171009

No. PCB/NGT/OA No. 635/2017-2098

Dated: 5/12/2020

To

✓ The Registrar General,
Hon'ble National Green Tribunal,
Faridkot House, Copernicus Marg,
New Delhi-110001.

Subject: O.A. No. 635/2017 titled as Ramesh Chand V/s State of H.P & Ors, before the Hon'ble NGT Delhi: Compliance Report of HPSPCB to order dated 29.07.2019 thereof.

Sir,

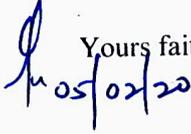
In the above-cited subject matter relating to illegal and rampant construction in Manali and Macleodganj (Dharamshala) area of H.P, Hon'ble NGT had constituted a Special Expert Committee vide order dated 19.09.2018 for carrying out capacity assessment of these two towns. The Committee filed its report which was accepted by the Hon'ble NGT and vide order dated 29.07.2019, directions were passed to State Government of H.P. to act on the basis of report.

In this connection, it is intimated that in view of the recommendations of the committee/the aforesaid order dated 29.07.2019, the compliance report has been submitted by both Regional Officers, HPSPCB, Dharamshala and Regional Officer, HPSPCB, Manali, on the points related to State Pollution Control Board.

As per the reports no fresh Consent/NOC has been issued by the State Board after passing of the said order by Hon'ble NGT in the said towns. The State Board shall maintain surveillance and also take regulatory action as and when required in accordance with law.

The detailed compliance reports of Regional Office, HPSPCB, Dharamshala and Manali are enclosed (at Annexure R-1/1 & R1/2 respectively), which may kindly be taken on record please.

(Enclosed: as above)

Yours faithfully,


Member Secretary
HPSPCB, Shimla
Tel. No. 0177-2673766



H.P. STATE POLLUTION CONTROL BOARD
 "Him Parivesh Bhawan", Regional Office Dharamshala
 Near GSSS, Dari, Tehsil Dharamshala, Distt.-Kangra (H.P.), PIN 176057
 Phone No. 01892-222628

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

e-mail: pcbroyassur@gmail.com

No: PCB/635 of 2017 File/RO (D/sala)/20- 4291

Dated: 30/01/20

To

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

Subject: Order dated 29-7-2019 passed in O.A. No. 635 of 2017 titled Ramesh Chand V/s State of H.P. & Ors. by the Hon'ble NGT: Compliance thereof in Dharmshala Mcleodganj area.

Sir,

Please refer order dated 29-7-2019 passed in O.A. No. 635 of 2017 titled Ramesh Chand V/s State of H.P. & Ors. by the Hon'ble NGT related to construction activities in Manali and Mcleodganj area conveyed to this office vide Member Secretary office letter no. PCB-NGT OA – Ramesh Chand/2017-16641-49, dated: 3/8/2019, wherein after perusal of the report of the Expert Committee following directions have been passed:

".....15. With regard to Mcleodganj, a separate report has been submitted. After examining various parameters, the Expert Committee recommended as follows: "In view of above it is recommended to enforce a complete ban on construction activities in McLeodganj except the construction of residential houses for their own uses/pur] and government buildings. The construction of other types should only be perm] unless and until adequate provisions for solid waste management is put in place.

19. We are of the view that the Expert Committee report must be accepted. We direct the State of Himachal Pradesh to act on the basis of above reports, take further preventive and remedial action and file a compliance report within three months by email at judicialngt@gov.in....."

Further as per the recommendations of the committee in the afore cited order, the compliance on the points related to State Pollution Control Board are as under:

1. As per the directions of the Hon'ble NGT it is directed to enforce a complete ban on construction activities in McLeodganj except the construction of residential houses for their own uses/pur] and government buildings. The construction of other types should only be perm] unless and until adequate provisions for solid waste management is put in place. No fresh consent has been issued by the State Pollution Control Board for the hotel/guest house in the area, after passing the said order.
2. In regard to Solid Waste Management , matter was taken up with Dharamshala Municipal Corporation who has informed about the steps being taken by them to comply the requirements of Solid Waste Management Rules, 2016 vide their office letter no. DMC/Engg/(f)2-/2019-5668, dated: 9/1/2020 (copy enclosed **Annexure-A**).

3. Regarding installation of organic waste converter in the bigger hotels, State Pollution Control Board has notified the same vide no. PCB/79th Board Meeting Consent/2019-23585-23623, dated: 4/11/2019 (Enclosed , **Annexure-B**) stating that hotels having more than 50 double bed rooms located outside the boundary of municipal bodies shall provide its own Solid Waste Management System i.e. Organic Waste Composting Machine. The study area as per this court order falls within Municipal Corporation Dharmshala. However, necessary directions in this regard have already been issued to the concerned hotels in District Kangra.
4. The regular sampling and water quality monitoring of water resources is being undertaken in Mcleodganj area. (Well at D/s MSW Dump Site at Dharamshala, Charan Khad U/s STP Dharamshala, Charan Khad D/s STP Dharamshala and STP Dharamshala, Charan Khad U/s Bhagsunag, River Gaj Water Supply Scheme Dharamshala Town, Near Dharamshala Cantt., River Bather Water Supply Scheme Dharamshala Town, Near Dal Lake). Enclosed, **Annexure-C**. The Annexure-C indicates the parameters within limits. If any violation is observed at any stage the State Pollution Control Board shall take preventive and mitigation measures.
5. With respect to the vehicular pollution, special vehicle monitoring camps were organized by State Board. The reports attached **Annexure-D**.
6. A few hotels in the area under reference, have installed standby soundproof DG sets who have been directed to have adequate stack height as per norms.
7. Two number Air Quality monitoring stations are operational in Dharamshala area i.e in Kotwali Bazar Dharamshala and in the premises of the office of the State Pollution Control Board at Dari. Results enclosed as **Annexure-E**. The contents of Annexure -E indicate quality within limit. In case any violation is observed , the State Pollution Control Board shall take all regulatory actions within its mandate.

This is submitted for favour of your kind information please.

Yours faithfully,



Dr. R.K. Nadda
Environmental Engineer

No. DMC/Engg/(F)2-/2019- 5668
Office of the commissioner
Dharamshala Municipal Corporation.
Dated:- 09-01-2020

To

1. District Tourism Development Officer
Dharamshala, Distt. Kangra
- ✓ 2. Environmental Engineer
Pollution Control Board, Dharamshala

Sub:- Meeting with officers/officials of Pollution Control Board and Tourism Department held in the office chamber of Commissioner, Dharamshala Municipal Corporation at 11:00 AM on 6th January 2020.

Please find attached herewith the minutes of the meeting held at 11:00 AM on 6th January 2020 for your perusal and taking further necessary action at your end please.

DA: As attached

Endst No. _____

Copy to:

1. The Deputy Commissioner, Kangra at Dharamshala for information please.

Addl. Commissioner
Dharamshala Municipal Corporation

Dated: _____

Addl. Commissioner
Dharamshala Municipal Corporation

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Colosic

Sanjay Kumar
13/01/2020

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14/1/20

HPSPCR Dharamshala
Dy. C. 2699
Dated 15/01/20

Meeting with officers/officials of Pollution Control Board and Tourism Department held in the office chamber of Commissioner, Dharamshala Municipal Corporation at 11.00 AM on 6th January 2020.

The following officers/officials attended the meeting:

S. No	Name	Designation & Organisation
1.	Ms Sunaina Sharma	Deputy Director, Tourism, Dharamshala.
2.	Er R.K Nadda	Enviornmental Engineer, PCB, Dharamshala.
3.	Er Sanjeev Saini	Executive Engineer (Municipal Engineer), DMC
4.	Er Satnam Singh	Executive Engineer, DMC
5.	Er Varun Gupta	Asst. Enviornmental Engineer, PCB, Dharamshala.
6.	Sh Sanjay Sharma	ATDO, O/o DTDO, Dharamshala.

1. At the outset of the meeting the participants were welcomed by the worthy Commissioner, Dharamshala Municipal Corporation and the agenda for holding the meeting was appraised to the participants. The orders of the Hon'ble NGT passed on 29-7-2019 viz a viz the provisions of Solid Waste Management were discussed wherein the Hon'ble NGT on page No. 17 (point. No.15) of the order has cited that "with regard to Mcleodganj, a separate report has been submitted. After examining various parameters, the Expert Committee recommended as follows:

In view of above it is recommended to enforce a complete ban on construction activities in Mcleodganj except the construction of residential houses for their own uses/pur1 and Government buildings. The construction of other types should only be perm} unless and until adequate provisions for solid Waste management is put in place."

The concrete steps initiated to comply the requirements of Solid Waste management Rules,2016 by Dharamshala Municipal Corporation were discussed thread ware.

- i) The bye laws for door to door garbage collection and disposal have been notified in the e-Gazette of H.P. on 9th August 2019.
- ii) The segregation at source is being carried out by the workers provided by service provider of Dharamshala Municipal Corporation in all the wards. However 100% segregation has not been achieved. DMC, with the help of various NGO's, is carrying out IEC activities to educate and sensitize the households & other stakeholders for effective segregation of waste at source. Self help Groups (SHGs) have also been roped in by DMC for effective IEC and other sanitation activities. Various workshops in this regard have been held in major education Institutions and for women groups etc. One to one interaction with household is also being carried out by DMC for effective IEC.
- iii) Door to Door Collection of Municipal Solid Waste has been started by DMC in all the 17 wards. However, DMC is still striving to cover 100% households for collection of Solid Waste.
- iv) Transportation of Municipal Solid Waste is performed by using 10 No's Jeeps, 5 No's three wheelers /autos and 2 No's tipper trucks with crane mechanism from the wards upto Solid Waste treatment site of Dharamshala Municipal Corporation.

- v) 70 No's state of the art underground bins have been installed by the Dharamshala Municipal Corporation. In addition to this 70 more bins are being installed by Dharamshala Smart City Limited. These bins consist of two separate bins installed in each location. One bin, comprising of 2 cum capacity is for wet/organic waste whereas the other bin consist of two compartments of 1.5 cum each for plastic and other waste. The lifting of three bins is being carried out by using specialised trucks with Crane mechanism.
- vi) Fresh tenders for collection and transportation of Municipal Solid Waste have been invited by DMC. Technical evaluation of these tenders is in progress and efforts shall be made to award the work within the month of January 2020. These tenders have been prepared as per the guidelines contained in SWM rules 2016 and bye laws prepared by DMC in this regard.
- vii) In addition to this a proposal is being prepared by Dharamshala Smart City Limited wherein new hotels/Restaurants will be asked to adopt best available technology for wet waste treatment like composting pits or other best available technology.
- viii) Dharamshala Municipal Corporation has constructed composting pits at seven decentralised locations in the DMC area for the management/processing of wet/organic waste.
- ix) Dharamshala Municipal Corporation has setup four kiosks for the collection of plastic wastes, consequent upon the notification of the Govt. dated 02-10-2019. The scrap dealers and waste pickers have been registered and integrated for collection, processing and disposal of single use plastic.

2. The officers/officials of pollution control Board informed that they are receiving application cases for grant of consent to establish and consent to operate wherein the planning permissions/completion certificates have been issued by DMC. They seek clarification as to what process shall be adopted in dealing with such cases in view of orders of Hon'ble NGT and requirement of Solid Waste Management rules, 2016. Commissioner Dharamshala Municipal Corporation advised that separate procedure shall be adopted for planning permissions/completions issued prior to the judgement of Hon'ble NGT and those issued after the judgement. The DTO, also consented to following proposition as it conforms to all statutory requirements and facilitates the hoteliers and other entrepreneurs within the legal parameters.

a) Planning permission/completion issued before the orders of Hon'ble NGT:

It is informed that DMC followed the norms/regulations envisaged in TCP act/Development Plan while dealing the cases of planning permission/completions. Since these planning permissions / completions have been accorded by Dharamshala Municipal Corporation prior to the judgement passed by the Hon'ble NGT, it was decided that the consent to establish and consent to operate shall be accorded by Pollution Control Board. In case of consent to establish the entrepreneur may be asked to give an undertaking that he shall mandatorily establish a composting unit for wet waste and create facility to keep the dry waste within his premise and hand it over to waste collector of DMC. He shall pay monthly charges for waste collection regularly.

b) Planning/completion issued after the orders of Hon'ble NGT:

It is further decided that DMC & Pollution Control Board shall take an undertaking from the applicants that they shall construct/install composting pits/mechanical composters, waste to energy plants or other best available technologies in the field of Solid Waste Management and such provision shall be incorporated in the site/building plan too. The planning permissions/completions shall be issued to the applicant by Dharamshala Municipal Corporation thereafter. Pollution Control Board shall follow the same process for grant of consent to establish/consent to operate.

At the end, Commissioner, Dharamshala Municipal Corporation urged the officers/officials of Pollution Control Board to assist Dharamshala Municipal Corporation and suggest the best available technologies for the processing of solid waste by commercial establishments in Mcleodganj as well as other areas of the DMC which can be effectively put in place in the Corporation area. The meeting ended with thanks to the chair.


Commissioner

Dharamshala Municipal Corporation



H.P. STATE POLLUTION CONTROL BOARD
HIM PARIVESH, PHASE-III
NEW SHIMLA-171009

No. PCB/ 79th Board Meeting Consent /2019-

dated:

Notification

In pursuance to the decision taken by the State Board in its 79th Board Meeting held on 5.8.2019 vide item No.79.07 and in partial modification of the Notification No.PCB/74th Board Meeting Consent/2016-1861-1900 dated 2.5.2016, the following may be inserted after Sr. No.VI of the said notification.

Sr. No. VII: The residential colonies located outside the boundary of Municipal bodies having more than 25 apartments and hotels having more than 50 double bed rooms located outside the boundary of municipal bodies shall provide its own Solid Waste Management System i.e. Organic Waste Composting Machine.

(Aditya Negi)
Member Secretary

dated: 4-11-2019

No. PCB/ 79th Board Meeting Consent /2019- 23585-23623
Copy forwarded to the following for information and necessary action:-

1. The Additional Chief Secretary (Env. Sc., & Tech.) to the Govt. of H.P.
2. The Additional Chief Secretary (Industries) to the Govt. of H.P. Shimla.
3. The Pr. Secretary (MPP & Power) to the Govt. of H.P.
4. The Secretary (UD) to the Govt. of H.P. Shimla.
5. The Secretary (IPH) to the Govt. of H.P. Shimla.
6. The Director, Department of Environment, S&T Govt. of H.P.
7. The Director, Department of Industries, Udyog Bhawan Shimla.
8. The Managing Director, (HRTC) Shimla.
9. The Chief Executive Officer, Him Urja Bhawan Kasumpti Shimla.
10. The Managing Director, H.P. Tourism Development Corporation, HP Shimla.
11. The Controller of Printing & Stationary, Govt. of H.P. Shimla with a request to publish the notification in the official gazette.
12. All the Regional Office, HPSPCB. (R.O. Dharmshala)
13. The PSO/SSO/SO, HPSPCB.
14. All General Managers, Distt. Industries Centers in H.P.
15. The System Manager (IT) HP PCB Shimla to host the State Board website.
16. Guard file/Consent Branch.

(Aditya Negi)
Member Secretary

Handwritten notes:
Abe
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@2019

Handwritten notes:
Grew
11/11/19

Handwritten notes:
Member
12/11/19
Noted,
14/11/19

Handwritten notes:
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13/11/2019

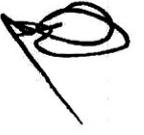
Water Quality Monitoring Results

Annexure-C

Sampling Location : Final Outlet of STP Dharamshala after treatment

Sr. No.	Parameters	Result for the Month of												Limits	Remarks
		July	August	September	October	November	December	July	August	September	October	November	December		
1	pH	7.28	7.50	7.61	7.24	7.42	Awaited	5.5 to 9.0	Within Limit						
2	TSS	17.0	19.0	15.0	25.0	74.0	Awaited	600 mg/l	Within Limit						
3	COD	52.0	36.0	40.0	56.0	104.0	Awaited	250 mg/l	Within Limit						
4	BOD	9.0	6.5	4.5	4.5	18.0	Awaited	350 mg/l	Within Limit						
5	Oil & Grease	0.4	0.16	Nil	0.12	0.84	Awaited	20 mg/l	Within Limit						

Sr. No.	Parameters	Sampling Location : Charan Khad Up Stream STP Dharamshala		Sampling Location : Charan Khad Down Stream STP Dharamshala		Limits	Remarks
		July	October	July	October		
1	pH	7.46	7.67	7.42	7.97	5.5 to 9.0	Within Limit
2	Cond. (us)	271	268	279	242		
3	DO (mg/l)	7.8	7.6	7.3	7.8		
4	COD (mg/l)	2	3	3	2	250 mg/l	Within Limit
5	BOD (mg/l)	0.1	0.1	0.1	0.1	30 mg/l	Within Limit
6	F.C.(MPN/100ml)	2	-	6	-		
7	T.C. (MPN/100ml)	70	-	94	-		



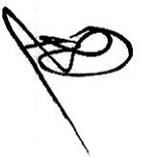

8	NO ₃ -N (mg/l)	0.2	0.09	0.37	0.17	45	Within Limit
9	NH ₄ -N (mg/l)	Nil	Nil	Nil	Nil	50	Within Limit
10	TDS (mg/l)	174	171	175	159	500	Within Limit
11	Total Hardness(mg/l)	110	118	112	70	300	Within Limit
12	CaCO ₃	94	84	90	42		
13	MgCO ₃	16	34	22	36		
14	F (mg/l)	0.17	0.04	0.14	0.05	2	Within Limit
15	Boron(mg/l)	ND	ND	ND	0.01	1	Within Limit
16	Cl (mg/l)	36.92	17.04	26.98	5.68	250	Within Limit
17	SO ₄ (mg/l)	12.55	9.74	13.62	12.28	200	Within Limit
18	T- alkalinity	145	145	160	170	200	Within Limit
19	P-alkalinity	Nil	Nil	Nil	Nil		
20	PO ₄ (mg/l)	ND	0.05	0.04	0.03		
21	Na ⁺ (mg/l)	5.14	3.22	6.2	4.18		
22	K ⁺ (mg/l)	0.78	0.32	0.86	0.38		
23	Ca ²⁺ (mg/l)	37.69	33.68	36.09	16.84	75	Within Limit
24	Mg ²⁺ (mg/l)	3.9	8.3	5.37	0.78		
25	TSS	15	2	19	4		
26	Turbidity (NTU)	5	Nil	8	Nil		
27	Na%	-	5.55	-	10.3		
28	SAR	-	0.13	-	0.2		
29	T.Cr (mg/l)	-	ND	-	ND	2	Within Limit
30	Cd (mg/l)	-	ND	-	ND	2	Within Limit
31	Pb (mg/l)	-	ND	-	ND	0.1	Within Limit
32	Cu (mg/l)	-	ND	-	ND	3	Within Limit
33	Zn (mg/l)	-	0.003	-	0.003	5	Within Limit
34	Ni (mg/l)	-	ND	-	ND	3	Within Limit
35	Fe (mg/l)	-	ND	-	0.259	3	Within Limit

Sl. No.	Parameters	Sampling Location : Well at Down Stream MSW dumping site Dharamshala		limits	Remarks
		April	October		
1	pH	7.61	6.82	6.5-8.5	Within limit
2	Cond. (uS)	182.25	344		
3	DO (mg/l)	-	-		
4	COD (mg/l)	3	1		
5	BOD (mg/l)	0.3	0.1		
6	F.C.(MPN/100ml)	2	-		
7	T.C. (MPN/100ml)	94	-		
8	NO ₃ -N (mg/l)	0.73	0.06	45	Within limit
9	NH ₄ -N (mg/l)	Nil	Nil		
10	TDS (mg/l)	126.0	225	500	Within limit
11	Total Hardness(mg/l)	102.0	138	200	Within limit
12	CaCO ₃	78	104		
13	MgCO ₃	24	34		
14	F ⁻ (mg/l)	0.21	0.08	1	Within limit
15	Boron(mg/l)	0.23	0.02		
16	Cl ⁻ (mg/l)	38.34	12.78	250	Within limit
17	SO ₄ (mg/l)	48.3	19.62	200	Within limit
18	T-alkalinity	70	120	200	Within limit
19	P-alkalinity	Nil	Nil		
20	PO ₄ (mg/l)	ND	ND		
21	TKN(mg/l)	Nil	-		
22	TFS(mg/l)	83	-		
23	Ca ²⁺ (mg/l)	-	41.7		
24	Mg ²⁺ (mg/l)	-	8.3		
25	TSS	-	1		
26	Turbidity (NTU)	-	Nil	5	Within limit

27	Na% SAR	-	9.74				
29	T.Cr ⁺ (mg/l)	-	ND		0.05	Within limit	
30	Cd ⁺ (mg/l)	-	ND		0.003	Within limit	
31	Pb ⁻ (mg/l)	-	ND		0.01	Within limit	
32	Cu ⁻ (mg/l)	-	ND		0.05	Within limit	
33	Zn ⁻ (mg/l)	-	0.007		5	Within limit	
34	Na ⁺ (mg/l)	-	6.92			Within limit	
35	Fe ⁻ (mg/l)	-	0.298		0.3	Within limit	
36	K ⁺ (mg/l)	-	0.44			Within limit	

Sample for the month of January 2020

Sr.No	Location	pH (5.5-9)	D.O.	C.O.D. (250 mg/l)	B.O.D (30 mg/l)	TC	FC	Remarks
1	River Gaj water supply Scheme D/shala town near D/shala Cantt	8.14	7.8	1	0.1	33	2	Within limit
2	River Bather water supply scheme D/shala town near Dal Lake	8.09	7.6	2	0.1	31	2	Within limit
3	Charan Khad U/S Bhagsunag	8.07	7.8	1	0.1	32	2	Within limit
4	Charan Khad U/S Dharamshala	7.98	7.9	1	0.1	46	2	Within limit
5	Charan Khad D/S Dharamshala	8.06	7.7	2	0.1	48	2	Within limit




Vehicle Monitoring

1. Vehicle monitoring camp was conducted at Sakoh, Tehsil Dharamshala, Distt. Kangra, H.P. on dated 23-10-2019 in which more than 100 vehicles were checked along with the traffic police and were made aware about the PUC's, pressure horns, littering, etc.
2. A special campaign for the checking of the vehicles (light weight and heavy weight) was conducted on dated: 24/07/2019 at 11:00 AM. near Hotel Gopal & Restaurant, Vill. Chambi, PO Rait, Tehsil Shahpur, Kangra H.P. along with the Department of Transport, Department of Food & Civil Supply, Department of Police & manager of petrol pump, Hindustan Petroleum Banoi. During the course of checking, 84 number of light weight and heavy weight vehicles were checked. Two numbers of fuel samples, one for petrol & one for diesel were drawn randomly on the spot from the vehicles and were checked for any kind of adulteration and no such case was observed.
3. A special campaign for the checking of the vehicles (light weight and heavy weight) was conducted on dated: 29/08/2019 at 11:00 AM near Daulatpur (Takipur), Tehsil & Distt Kangra H.P. along with the Department of Transport, Department of Food & Civil Supply, Department of Police & members of nearby two petrol pumps from Ranital. During the course of checking, 102 number of light weight and heavy weight vehicles were checked. Ten numbers of fuel samples, four for petrol & six for diesel were drawn randomly on the spot from the vehicles and were checked for any kind of fuel adulteration and no such case was observed.



Dr. R.K. Nadda,
Environmental Engineer,
HPSPCB, Dharamshala

Ambient Air Monitoring Results (Kotwali Bazar Dharamshala)

	SO ₂	NO _x	NH ₃	O ₃	RSPM	SPM
July 2019	0.4	1.4	0.4	1.0	9.0	12.0
August 2019	2.0	6.9	0.2	2.0	30.4	38.7
September 2019	2.0	6.6	0.0	2.0	41.0	52.0
October 2019	2.0	7.3	0.4	2.0	37.0	51.0
November 2019	2.0	6.5	0.4	2.0	26.0	37.0
December 2019	2.0	6.8	0.4	2.0	41.0	52.0

Ambient Air Monitoring Results (Dari)

	SO ₂	NO _x	NH ₃	O ₃	RSPM	SPM
July 2019	1.2	4.1	0.4	1.0	32.0	36.0
August 2019	2.0	5.0	0.2	1.5	28.4	37.8
September 2019	2.0	5.5	0.0	1.0	38.0	49.0
October 2019	2.0	6.2	0.4	2.0	30.0	41.0
November 2019	2.0	6.1	0.4	2.0	39.0	50.0
December 2019	2.0	3.2	0.4	2.0	45.0	43.0

Note: All the parameters are found within prescribed limits





H.P. STATE POLLUTION CONTROL BOARD
Regional Office: HIMUDA Shopping Complex, Hall No-5, Beasa Moar Kullu,
Tehsil & Distt-Kullu-175101(HP), Phone: 01902-223149
Website: <http://hpspcb.nic.in> e-mail: pcbrokullu@gmail.com

No.HPSPCB /RO Kullu/1650/NGT file/Vol-VIII/2020- 3530

Dated- 31-1-2020

To

✓ The Member Secretary,
 H.P. State Pollution Control Board,
 Shimla-171009 HP.

Subject: - Compliance of Hon'ble Tribunal orders dated 29.07.2019 in O.A. no. 635/2017 titled as Ramesh Chand V/s State of H.P and Ors.

Sir,

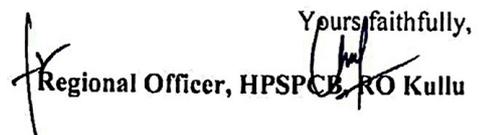
This is in reference to the order dated 29.07.2019 passed by Hon'ble National Green Tribunal in O.A. No. 635/2017. In this regard, the compliance is submitted as under:-

1. There is no Consent to Establish-fresh has been granted by this office within the jurisdiction of MC Manali area after 29.7.2019.
2. The D.G. sets are allowed to install only with Acoustic enclosure with exhausted mufflers and stack. It is also submitted that all the D.G. sets are installed as standby purpose only.
3. The Vehicles monitoring is conducted on in collaboration with the Indian Oil authorities/RTOs/Police authorities and other concerned authorities and challan are issued by police authorities in case any violation is observed.
4. The River monitoring around and within the M.C. Manali area is regularly conducted. As per the latest results of river monitoring received for the month of November, 2019 the results of the points in and around the MC, Manali are observed in Class-B. *(copy of latest sample results is enclosed as Annexure-I).*
5. The Air Monitoring of Manali town is regularly conducted through NAMP station Manali. The latest results of monitoring for the month of December, 2019 are observed meeting to the norms for SO₂, NO_x, NH₃, RSPM & PM_{2.5}. *(copy of latest sample results is enclosed as Annexure-II).*
6. The Noise Monitoring of Manali town is also conducted by this office. Results of noise monitoring are being regularly sent to District Administration and Police authorities for necessary action. *(Copy of latest sample results is enclosed as Annexure-III).*
7. The ULBs are being regularly monitored in compliance of MSW Rules, 2016. It is also submitted that the installation of Waste to Energy plant at Manali is under process and the same is completed and operational upto the generation of RDF.
8. There is one no. common Sewage Treatment Plant of I&PH for handling & dispose off sewage within MC Manali area, is also being regularly monitored by HPSPCB. The latest sample of STP was collected on 23-12-2019 and results were found within limit except BOD for which notice has been issued to the EE,I&PH Division-I, Kullu H.P vide no. PCB/RO Kullu (476) I&PH/Vol-II/2010-3125 dated 15-01-2020. *(Copy of latest sample results is enclosed as Annexure-IV).*

This office is ensuring all surveillance & regulatory action in case of violation to the standard for pollution control is observed.

This is submitted for favor of kind information, please.

Encl: As Above

Yours faithfully,

 Regional Officer, HPSPCB, RO Kullu

MINIARS WATER QUALITY MONITORING DATA FOR THE MONTH OF NOVEMBER, 2019

Name of location with code No.	Classification	DOC	TOC	Temp. °C	pH	Cond. µS	D.O. mg/l	COD mg/l	BOD mg/l	F.C. MPN /100ml	T.C. MPN /100ml	NO ₂ -N mg/l	NO ₃ -N mg/l	NH ₄ -N mg/l
1 U/s Slapper, Satluj River (1014)	B	06.11.19	12.15	20.0	8.05	148.0	8.4	1.2	0.1	13	110	Nil	Nil	Nil
2 D/s Slapper, Satluj River after conf. of Beas River (1015)	B	06.11.19	11.45	18.0	8.17	153.0	9.1	1.6	0.1	23	130	Nil	Nil	0.28
3 Exit of Dehar Power House, Beas River (1005)	B	06.11.19	12.00	19.0	8.13	148.0	8.9	0.8	0.1	33	130	Nil	Nil	Nil
4 D/s Bilaspur at Govindsagar (1291)	B	06.11.19	9.00	21.0	8.36	186.0	9.4	2.4	0.2	49	350	Nil	0.103	0.56
5 U/s Mandi, Beas River (1550)	B	04.11.19	14.33	18.0	8.14	145.0	9.9	2.4	0.2	26	140	Nil	Nil	Nil
6 D/s Mandi, Beas River (1006)	C	04.11.19	12.40	22.0	8.59	174.0	10.2	3.2	0.4	140	540	Nil	0.098	0.28
7 Rewalsar Lake (2649)	C	04.11.19	11.12	19.0	7.08	178.0	8.7	80.0	6.0	110	920	Nil	0.164	0.84
8 D/s Mandi, Suketi Khudd (2607)	B	04.11.19	13.20	18.0	8.31	302.0	9.3	2.8	0.2	33	280	Nil	0.103	0.28
9 R. Beas, U/s Pandoh Dam (1010)	B	04.11.19	16.30	19.0	7.98	118.0	8.9	2.4	0.2	40	280	Nil	0.036	Nil
10 R. Beas, D/s Pandoh Dam (2603)	B	04.11.19	15.17	20.0	7.95	98.0	9.3	3.2	0.3	70	280	Nil	0.046	Nil
11 R. Beas, D/s Aut (1003)	B	06.11.19	12.10	11.0	7.74	100.0	8.8	1.2	0.1	31	150	Nil	0.026	Nil
12 R. Sainj, D/s Largi (1090)	B	06.11.19	13.25	13.0	8.12	107.0	8.6	1.6	0.1	33	170	Nil	0.031	Nil
13 River Parvati, U/s Manikaran (2605)	B	14.11.19	14.20	7.0	8.18	147.0	8.7	0.8	0.1	17	94	Nil	Nil	Nil
14 River Parvati, D/s Manikaran (2606)	B	14.11.19	14.05	7.0	7.58	74.0	8.7	0.8	0.1	33	170	Nil	Nil	Nil
15 River Beas, U/s Manali (1001)	B	05.11.19	12.05	9.0	7.84	109.0	9.6	1.2	0.1	21	120	Nil	0.031	Nil
16 River Beas, D/s Manali (2601)	B	05.11.19	14.30	10.0	7.32	102.0	9.3	2.8	0.3	70	350	Nil	0.031	0.28
17 River Beas, U/s Kullu (2602)	B	21.11.19	17.10	8.0	7.56	92.0	7.6	0.8	0.1	33	220	Nil	0.046	Nil
18 River Beas, D/s Kullu (1002)	B	21.11.19	15.30	9.0	7.71	125.0	7.8	2.0	0.2	49	350	Nil	0.113	0.28
19 Parvati River, before conf. to R. Beas at Bhunter (1290)	B	14.11.19	10.50	8.0	7.54	90.0	8.4	0.8	0.1	33	110	Nil	Nil	Nil
20 Manalsu Nalla before conf. to R. Beas (3866)	B	05.11.19	11.30	7.0	7.56	59.0	9.5	0.8	0.1	23	94	Nil	Nil	Nil
21 Sarvati Nalla before conf. to R. Beas (3867)	B	14.11.19	17.20	8.0	8.13	180.0	8.1	0.8	0.1	49	130	Nil	Nil	Nil
22 Baragram Nalla before conf. to R. Beas (3868)	B	05.11.19	16.10	12.0	7.48	87.0	9.5	3.2	0.3	49	240	Nil	Nil	Nil
23 U/s Khairan Solid Waste Dumping Site Bilaspur (4032)	B	06.11.19	9.15	22.0	8.37	188.0	9.2	2.0	0.2	33	170	Nil	0.087	Nil
24 D/s Khairan Solid Waste Dumping Site Bilaspur (4033)	B	06.11.19	9.35	21.0	8.33	189.0	8.9	2.8	0.2	49	240	Nil	0.103	0.56
25 R. Beas D/s Manalsu Nalla (4037)	B	05.11.19	12.25	10.0	7.77	85.0	9.3	0.8	0.1	31	120	Nil	0.046	Nil
26 R. Tirthan before confluence to River Sainj (4038)	B	06.11.19	13.10	13.0	8.16	106.0	9.4	0.8	0.1	23	150	Nil	0.051	Nil
27 R. Beas at Raison (4443)	B	05.11.19	16.35	12.0	7.65	98.0	9.4	3.2	0.3	70	280	Nil	0.154	0.28
28 R. Beas D/s of WPF Manali (4444)	B	05.11.19	13.45	10.4	7.61	92.0	9.2	4.8	0.6	49	280	Nil	0.175	0.56
29 R. Beas D/s of WPF Kullu (4445)	B	14.11.19	15.15	9.0	7.63	122.0	7.8	4.0	0.5	79	350	Nil	0.175	0.56
30 Alhi River-Nog(Near WSS intake) Tributary of R.	B	06.11.19	10.55	20.0	8.45	152.0	7.9	1.2	0.1	49	220	Nil	Nil	Nil
31 Harabag (intake from BBMB source-BBMB Adit	B	06.11.19	12.45	21.0	7.32	437.0	7.3	0.8	0.1	13	70	Nil	Nil	Nil
32 Manalsu Nalla (WSS from Manali Town) U/s of old	B	05.11.19	11.15	6.0	7.52	58.0	9.7	0.8	0.1	49	140	Nil	Nil	Nil
33 Kthalada Nalla WSS Kullu Town (4477)	B	14.11.19	16.30	11.0	7.47	189.0	8.2	0.8	0.1	13	70	Nil	Nil	Nil

MINARS WATER QUALITY MONITORING DATA FOR THE MONTH OF NOVEMBER, 2019

	F ⁻ mg/l	Boron mg/l	Cl ⁻ mg/l	SO ₄ ⁻² mg/l	CO ₃ ⁻² mg/l	HCO ₃ ⁻ mg/l	TPO ₄ mg/l	Na ⁺ mg/l	K ⁺ mg/l	Ca ⁺⁺ mg/l	Mg ⁺⁺ mg/l	Na% %	SAR	Turbidity NTU	Field Observations Except DO & Temp.	Bio-Monitoring Saprobity Index	Diversity Index
87.0	Nil	0.015	9.0	13.56	Nil	35.0	0.006	8.34	2.16	28.02	7.77			6.9		-	-
88.0	Nil	0.043	8.0	19.76	Nil	70.0	0.021	7.68	2.04	29.62	17.49			2.6		-	-
90.0	Nil	0.046	16.0	21.53	Nil	50.0	0.031	7.65	2.04	26.42	10.69			3.1		-	-
112.0	0.089	0.074	9.0	36.57	5.0	65.0	0.028	8.18	2.17	32.83	13.60			6.6		-	-
92.0	Nil	Nil	14.0	8.26	Nil	50.0	Nil	8.41	2.97	23.22	12.15			1.6		-	-
108.0	0.044	Nil	16.0	6.49	5.0	65.0	Nil	7.56	2.50	28.82	13.60			1.5		7.00	0.52
114.0	0.059	Nil	14.0	13.56	Nil	35.0	0.037	8.97	2.66	43.23	16.52			64.8		-	-
190.0	0.069	Nil	26.0	7.67	10.0	95.0	0.168	7.09	2.87	46.44	17.49			7.4		-	-
67.0	Nil	Nil	9.0	2.95	Nil	45.0	Nil	8.62	2.97	24.82	6.80			0.5		-	-
58.0	0.035	Nil	9.0	6.78	Nil	35.0	0.070	8.41	2.16	17.61	6.32			1.6		-	-
62.0	0.025	Nil	10.0	11.99	Nil	35.0	Nil	5.61	2.50	20.82	6.32			9.0		-	-
64.0	0.069	Nil	7.0	16.51	Nil	40.0	Nil	4.38	2.04	20.82	8.75			2.0		-	-
84.0	Nil	Nil	7.0	5.11	Nil	65.0	Nil	5.92	2.16	29.62	12.15			6.9		-	-
40.0	Nil	Nil	5.0	7.47	Nil	30.0	Nil	4.42	2.43	16.01	2.91			4.6		-	-
64.0	Nil	Nil	4.0	6.78	Nil	45.0	Nil	5.46	2.97	24.02	6.32			16.5		-	-
60.0	0.059	Nil	7.0	17.89	Nil	45.0	0.015	4.64	2.66	21.62	7.29			5.8		-	-
59.0	0.054	Nil	10.0	14.55	Nil	55.0	0.025	8.62	2.87	19.21	3.89			28.3		-	-
71.0	0.084	Nil	11.0	18.58	Nil	55.0	0.200	6.49	2.50	44.83	22.35			8.1		-	-
52.0	Nil	Nil	8.0	6.29	Nil	40.0	Nil	2.98	2.04	20.02	7.29			8.7		-	-
36.0	Nil	Nil	6.0	5.70	Nil	30.0	Nil	2.74	2.50	17.61	2.43			1.8		-	-
107.0	Nil	Nil	8.0	6.19	Nil	60.0	Nil	7.30	2.66	36.83	11.66			0.9		-	-
50.0	Nil	Nil	10.0	3.73	Nil	25.0	Nil	7.61	2.50	14.41	1.46			3.6		-	-
115.0	0.040	0.052	7.0	8.26	5.0	60.0	Nil	7.68	2.85	28.82	16.52			4.0		-	-
117.0	0.094	0.092	14.0	9.63	5.0	65.0	Nil	7.65	2.87	31.22	12.15			5.7		-	-
50.0	Nil	Nil	3.0	7.47	Nil	35.0	0.037	4.98	2.17	11.66	5.83			9.5		-	-
61.0	0.079	Nil	7.0	2.55	Nil	40.0	Nil	4.27	2.66	24.82	3.40			1.4		-	-
60.0	0.099	Nil	12.0	7.66	Nil	40.0	Nil	7.30	2.50	21.62	4.86			4.6		-	-
53.0	Nil	Nil	4.0	7.27	Nil	45.0	Nil	4.26	2.66	20.02	3.40			6.9		-	-
76.0	Nil	Nil	10.0	5.01	Nil	55.0	Nil	7.61	2.59	22.42	4.37			6.7		-	-
94.0	Nil	Nil	13.0	2.55	10.0	115.0	Nil	8.22	2.43	28.91	6.80			0.3		-	-
279.0	Nil	Nil	7.0	1.87	Nil	160.0	Nil	6.03	2.59	73.66	30.13			2.3		-	-
32.0	Nil	Nil	6.0	1.57	Nil	40.0	Nil	3.09	2.17	16.81	2.43			5.1		-	-
119.0	Nil	Nil	11.0	1.77	Nil	40.0	Nil	5.28	2.85	41.63	7.77			0.7		-	-

✓

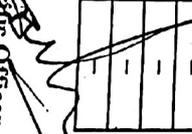
Sr. Scientific Officer

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Table C :- National Air Quality Data for SO₂, NO_x, RSPM and SPM Monitored by H.P State Pollution Control Board Kullu.

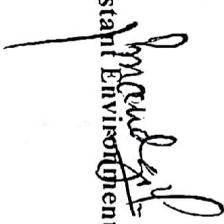
City:- Manali.
State:- Himachal Pradesh

Sr. No.	LOCATION	Stn. Type	Stn. Code	Month & Year	SO ₂			NO _x			RSPM			SPM								
					N	AM	SD	N	AM	SD	N	AM	SD	N	AM	SD	MAX	GM				
1	Station No.-I, Nehru Park, Manali	C	670	Dec 2019	51	2.28	0.72	4.22	51	10.4	4.22	19.20	26	63.32	24.68	97.56	57.31	26	140.67	63.21	248.30	123.61
2	Station No.-II, Hadimba Road, Manali	R	671	Dec 2019	59	2.07	0.38	4.11	59	4.85	1.61	14.35	30	51.92	24.62	88.64	44.33	30	98.23	51.39	197.13	82.94

Kindly fill in -R, if station fall in Residential area, I, if station fall in Industrial Area, S, if station fall in sensitive area.
Note:-
N = Number of observations (in days)
A.M. = Arithmetic mean in µg/m³
S.D = Standard Deviation

MAX. = Maximum value (24 hours average in µg/m³)
G.M = Geometric Mean in µg/m³


Jr. Environmental Engineer


Assistant Environmental Engineer

Ambient Air Quality Data for the month of Dec-2019

Code	Date	Name of the monitoring station	Area Class	City	State	8 hourly Data Value of NH3 6AM - 2PM	8 hourly Data Value of NH3 2PM - 10PM	8 hourly Data Value of NH3 10PM - 6AM	24 hourly Data Value of PM 2.5 6AM - 6AM
670	02.12.2019	Station No.-1, Nehru Park, Manali	Commercial	Manali	H.P.	4.99	5.34	-----	33.87
	04.12.2019					4.29	4.55	1.76	16.82
	06.12.2019					2.37	2.20	2.07	20.80
	09.12.2019					-----	3.45	3.16	26.08
	11.12.2019					-----	3.68	3.33	25.43
	16.12.2019					6.84	5.11	2.98	15.64
	18.12.2019					4.90	4.34	3.33	25.12
	23.12.2019					4.46	4.90	3.51	28.69
	27.12.2019					4.55	4.39	3.51	30.75
	30.12.2019					5.10	3.96	-----	20.55

Code	Date	Name of the monitoring station	Area Class	City	State	8 hourly Data Value of NH3 6AM - 2PM	8 hourly Data Value of NH3 2PM - 10PM	8 hourly Data Value of NH3 10PM - 6AM	24 hourly Data Value of PM 2.5 6AM - 6AM
671	03.12.2019	Station No.-II, Hadimba Road, Manali	Residential	Manali	H.P.	3.00	2.98	0.80	12.60
	05.12.2019					4.64	4.11	3.16	12.85
	07.12.2019					2.63	2.37	1.76	16.80
	10.12.2019					4.39	3.35	-----	29.38
	17.12.2019					3.94	3.36	2.46	15.33
	19.12.2019					5.60	4.51	2.90	24.33
	21.12.2019					4.06	3.42	1.94	15.10
	24.12.2019					4.46	3.98	3.24	16.85
	26.12.2019					3.77	4.74	-----	19.44
	28.12.2019					3.46	2.55	2.02	21.65
	31.12.2019					5.05	3.77	-----	31.05


Jr. Environmental Engineer


Asstt. Environmental Engineer

Table C :- National Air Quality Data for NH₃ Monitored by H.P State Pollution Control Board Kullu.

City:- Manali.
State:- Himachal Pradesh

Sr. No.	LOCATION	Stn. Type	Stn. Code	Month & Year	NH ₃					PM 2.5				
					N	AM	SD	MAX	N	AM	SD	MAX	GM	
1	Station No.-I, Nehru Park, Manali	C	670	Nov.-2019	26	3.96	1.17	6.84	10	24.38	5.91	33.87	23.70	
2	Station No.-II, Hadimba Road, Manali	R	671	Nov.-2019	30	3.41	1.07	5.60	11	19.58	6.34	31.05	18.72	

Kindly fill in -R, if station fall in Residential area, I, if station fall in Industrial Area, S, if station fall in sensitive area.

Note:-

N = Number of observations (in days)

A.M. = Arithmetic mean in $\mu\text{g}/\text{m}^3$

S.D = Standard Deviation

MAX. = Maximum value (24 hours average in $\mu\text{g}/\text{m}^3$)


Sr. Environmental Engineer


Asstt. Environmental Engineer

AIR QUALITY INDEX (AQI) OF NAMP STATIONS, MANALI

STATION NO. - I, NEHRU PARK, MANALI

MONTH -Dec, 2019

Date	SO ₂ (24 Hrs. Avg.)	NOx (24 Hrs. Avg.)	NH ₃ (24 Hrs. Avg.)	RSPM (24 Hrs. Avg.)	PM 2.5 (24 Hrs. Avg.)	AQI
02.12.2019	3.06	10.83	5.16	65.39	33.87	65
04.12.2019	2.14	9.92	3.53	65.72	16.82	66
06.12.2019	2.81	11.59	2.21	56.50	20.80	57
09.12.2019	2.72	9.79	3.30	66.11	26.08	66
11.12.2019	2.86	9.10	3.51	59.66	25.43	60
16.12.2019	1.85	11.64	4.97	39.86	15.64	40
18.12.2019	1.89	10.89	4.19	64.02	25.12	64
23.12.2019	2.94	13.49	4.29	65.28	28.69	65
27.12.2019	2.97	11.36	4.15	74.00	30.75	74
30.12.2019	2.50	12.72	4.53	83.88	20.55	84

STATION NO. -II, HADIMBA ROAD, MANALI

MONTH -Dec, 2019

Date	SO ₂ (24 Hrs. Avg.)	NOx (24 Hrs. Avg.)	NH ₃ (24 Hrs. Avg.)	RSPM (24 Hrs. Avg.)	PM 2.5 (24 Hrs. Avg.)	AQI
03.12.2019	2.02	4.97	2.26	41.59	12.60	42
05.12.2019	1.60	5.52	3.97	43.35	12.85	43
07.12.2019	1.77	5.36	2.26	46.27	16.80	46
10.12.2019	2.86	5.66	3.87	69.06	29.38	69
17.12.2019	1.78	5.62	3.25	30.99	15.33	31
19.12.2019	1.77	6.98	4.33	63.33	24.33	63
21.12.2019	1.87	7.77	3.14	35.54	15.10	36
24.12.2019	2.44	5.49	3.90	48.39	16.85	48
26.12.2019	3.51	7.09	4.25	86.18	19.44	86
28.12.2019	2.08	5.43	2.68	54.62	21.65	55
31.12.2019	2.08	5.89	4.41	77.34	31.05	77

Good (0-50)	Minimal Impact	Poor (201-300)	Breathing discomfort to people on prolonged exposure
Satisfactory (51-100)	Minor breathing discomfort to sensitive people		Respiratory illness to the people on prolonged exposure
Moderate (101-200)	Breathing discomfort to the people with lung, heart		Respiratory effects even on healthy people

Note :- * :- Monitoring conducted below 16 Hrs.

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Certificate for Ambient Air Quality Data Under National Air Monitoring Programme (NAMP)

1. Name of Monitoring Agency : HPSPCB Kullu
2. Bill for Period : Month : December Year : 2019
City : Manali State : H.P.
3. Details of Amount to be released:- Rs. 48000.00 as Salary + Rs. 26667.00 as sampling and analysis charges for both the stations.
- Total Amount to be released:- Rs. 74667.00 per month (Rupees Seventy Four Thousand Six Hundred and Sixty Seven Only)

S. No.	Monitoring Station	Parameters Monitored	No. of days	Remarks
1.	Station No.-I, Nehru Park, Manali (670)	SO ₂	10	
		NO _x	10	
		NH ₃	10	
		RSPM	10	
		PM _{2.5}	10	
		SPM	10	
2.	Station No.-II, Hadimba Road, Manali (671)	SO ₂	11	
		NO _x	11	
		NH ₃	11	
		RSPM	11	
		PM _{2.5}	11	
		SPM	11	

This is to certify that data as per details mentioned above has been sent through email to CPCB and payment for operation and maintenance cost under NAMP may be released.

Note:-

- 1) No. of days with monitoring carried out for 16 or more hours a day
- 2) Bill is to be submitted on a monthly basis separately for each city.


JEE


AEE

Member Secretary



1386

Detail of Noise Monitoring Program

Name of Regional Office: Kullu
 Month and Year: December-2019

Date	Location	Detail of Sampling		Area/Zone			
				Silence	Residential	Commercial	Industrial
				Lady Wellington Hospital	PCB, Office Building	The Mall, Manali	Near Hotel IBEX
07.12.2019	Manali	Day Time	Noise Level in dB(A)	54.2	54.8	65.5	65.8
			Limit in dB(A)	50.0	55.0	65.0	75.0
			Remarks	Above Limit	Within Limit	Above Limit	Within Limit
		Night Time	Noise Level in dB(A)	39.4	44.3	49.7	52.1
			Limit in dB(A)	40.0	45.0	55.0	70.0
			Remarks	Within Limit	Within Limit	Within limit	Within Limit
14.12.2019	Manali	Day Time	Noise Level in dB(A)	49.2	55.6	62.3	66.8
			Limit in dB(A)	50.0	55.0	65.0	75.0
			Remarks	Within Limit	Above Limit	Within Limit	Within Limit
		Night Time	Noise Level in dB(A)	41.1	42.2	47.3	52.1
			Limit in dB(A)	40.0	45.0	55.0	70.0
			Remarks	Above Limit	Within Limit	Within Limit	Within Limit
19.12.2019	Manali	Day Time	Noise Level in dB(A)	51.6	53.4	61.8	62.4
			Limit in dB(A)	50.0	55.0	65.0	75.0
			Remarks	Above Limit	Within Limit	Within Limit	Within Limit
		Night Time	Noise Level in dB(A)	39.7	41.6	45.3	48.1
			Limit in dB(A)	40.0	45.0	55.0	70.0
			Remarks	Within Limit	Within Limit	Within Limit	Within Limit
23.12.2019	Manali	Day Time	Noise Level in dB(A)	53.4	54.4	60.4	63.4
			Limit in dB(A)	50.0	55.0	65.0	75.0
			Remarks	Above Limit	Within Limit	Within Limit	Within Limit
		Night Time	Noise Level in dB(A)	42.3	42.7	48.3	50.2
			Limit in dB(A)	40.0	45.0	55.0	70.0
			Remarks	Above Limit	Within Limit	Within Limit	Within Limit

Junior Environmental Engineer

Signature of Regional Officer

Form - X
REPORT BY THE STATE BOARD ANALYST
(See Rule 26)

Report No. 570.

Dated: 13.01.2020.

I hereby certify that I, Prakash Sharma State Board Analyst duly appointed under sub-section (3) of section 53 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) received on the 24th day of December, 2019 from Er. Sunil Sharma, Jr. Environmental Engineer, HPSPCB, Kullu a grab sample of Final outlet of STP Manali of Executive Engineer, I&PH Manali for analysis. The sample was in a condition fit for analysis reported below:-

I further certify that I have analyzed the aforementioned sample on 24.12.2019 to 04.01.2020. The results of the analysis reported below:-

Method of Analysis

IS-2488 (I-V), IS- 3025 (Part 44): 1933, "Standard Method for the Examination of Water & Waste Water," 22nd edition prepared & published jointly by:- 1. American Public Health Association, 2. American Water Works Association, 3. Water Environment Federation.

Sr. No.	Parameter	Results	Unit	Sr. No.	Parameter	Results	Unit
1.	pH	6.34		22.	Manganese (Mn)	-	mg/l
2.	Conductivity	-	µmho/cm-l	23.	TKN	-	mg/l
3.	TDS	-	mg/l	24.	Mercury (Hg)	-	mg/l
4.	TSS	53.0	mg/l	25.	Ammonia NH ₄ -N	-	mg/l
5.	COD	160.0	mg/l	26.	Arsenic (AS)	-	mg/l
6.	BOD	34.0	mg/l	27.	T. Alkalinity	-	mg/l
7.	Sulphate (SO ₄)	-	mg/l	28.	P. Alkalinity	-	mg/l
8.	NO ₃ -N	-	mg/l	29.	Fluoride (F)	-	mg/l
9.	Chloride (Cl)	-	mg/l	30.	DO	-	mg/l
10.	Temperature	-	°C	31.	Potassium (K)	-	mg/l
11.	Total Iron (Fe)	-	mg/l	32.	Sodium (Na)	-	mg/l
12.	Total Hardness	-	mg/l	33.	Boron	-	mg/l
13.	Chromium (Cr+6)	-	mg/l	34.	TFS	-	mg/l
14.	Zinc (Zn)	-	mg/l	35.	Total Chromium	-	mg/l
15.	Copper (Cu)	-	mg/l	36.	Phenols	-	mg/l
16.	Total Cyanide	-	mg/l	37.	Turbidity	-	NTU
17.	Nickel (Ni)	-	mg/l	38.	Ca ⁺⁺	-	mg/l
18.	Lead (Pb)	-	mg/l	39.	Mg ⁺⁺	-	mg/l
19.	Cadmium (Cd)	-	mg/l				
20.	Oil & Grease	1.2	mg/l				
21.	Total Phosphate	-	mg/l				

The condition of the seals, fastening and container on receipt was as:-
Sealed as PCB. Signed on this 13th day of January, 2020

To
Executive Engineer
I&PH, Manali, Distt- Kullu H.P.

(Signature)
STATE BOARD ANALYST