Action Plan for Rejuvenation of River Nandhor /Kailash, Distt. US Nagar (Uttarakhand)

(River Stretch: Along Sitarganj)

Priority-IV

Approved by

Uttarakhand River Rejuvenation Committee

June, 2019

Action Plan: No. 8

Action Plan

for Rejuvenation of

River Nandhor / Kailash

(River Stretch: Along Sitarganj)

Sitarganj, Distt. US Nagar

(Uttarakhand)

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(Constituted in compliance of order of the Hon'ble N.G.T.)

June, 2019

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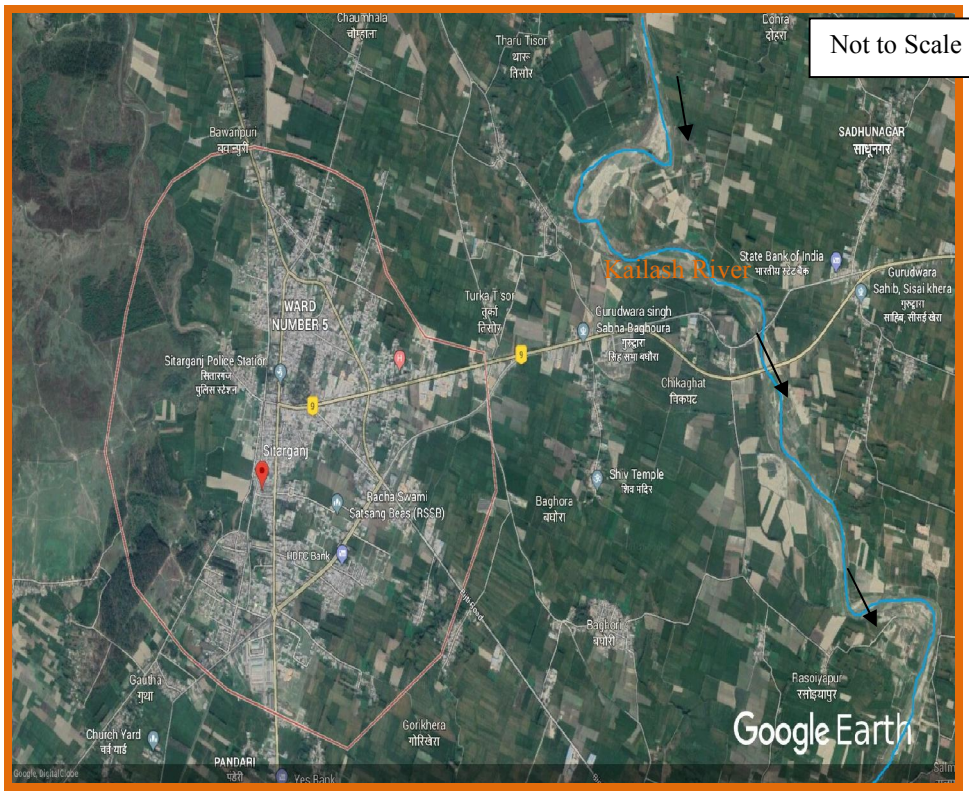
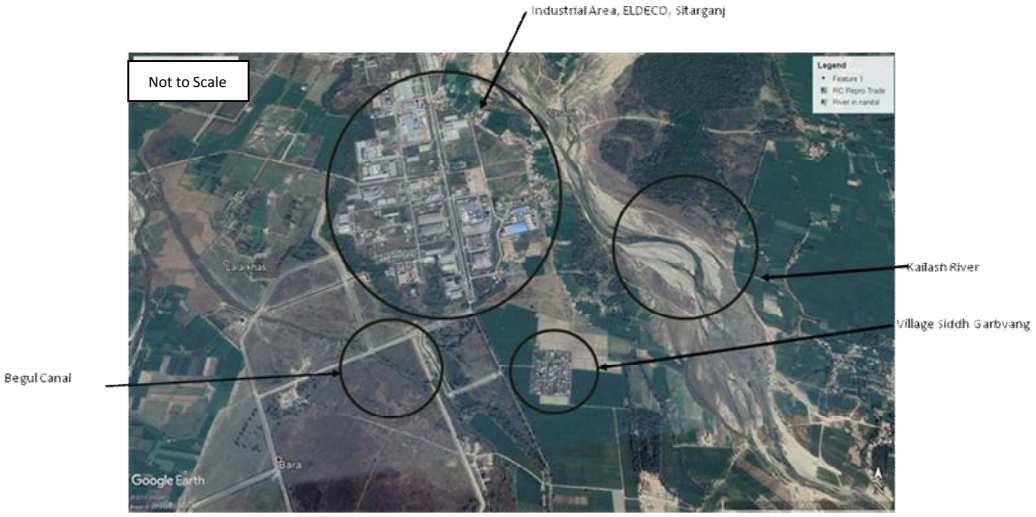
1. INTRODUCTION

River Nandhor/ Kailash originate from Pangoot, Nainital Forest and flows downward along the Eldeco Sidcul Industrial Park (ESIPL) Sitarganj and further Sitarganj town of Uttarakhand. River Nandhor is known as river Kailash. Within the catchment of river, about 73 operating industries are located in the ESIPL Sitarganj, which contributes its wastewater to CETP for treatment and disposal. 22 industries are presently not in operation. CETP receives about 2.4-2.5 MLD wastewater against the installed capacity of 4.0 MLD. Though the treated wastewater is being disposed through land disposal (Karnal technology) and overflow goes to Baigul canal, however, due to proximity of river Nandhor/Kailash, possibility of illegal disposal of wastewater from industries or CETP into river Nandhor/Kailash cannot be ignored. Two drains of Sitarganj city flowing along the Maharana Pratap Chowk to Khatima road also draining towards river Nandhor/Kailash.



Google image of Sitarbganj Town along with river Nandhor/Kailash (Not to scale).



Google image of river Kailash and Eldeco Sidcukl Industrial Park, Sitarganj.

WATER QUALITYGOALS:

It is an important aspect for maintain wholesomeness of river Nandhor/Kailash in context of meeting water quality criteria for bathing. As river passes close to the ESIPL, possibility of disposal of industrial wastewater cannot be ignored; therefore close observation is needed for any deterioration in water quality. In order to meet the water quality criteria for bathing, it is imperative to keep close observation on industrial units /CETP and drain flowing towards river Nandhor/Kailash.

Water Quality Monitoring of River Nandhor/Kailash:

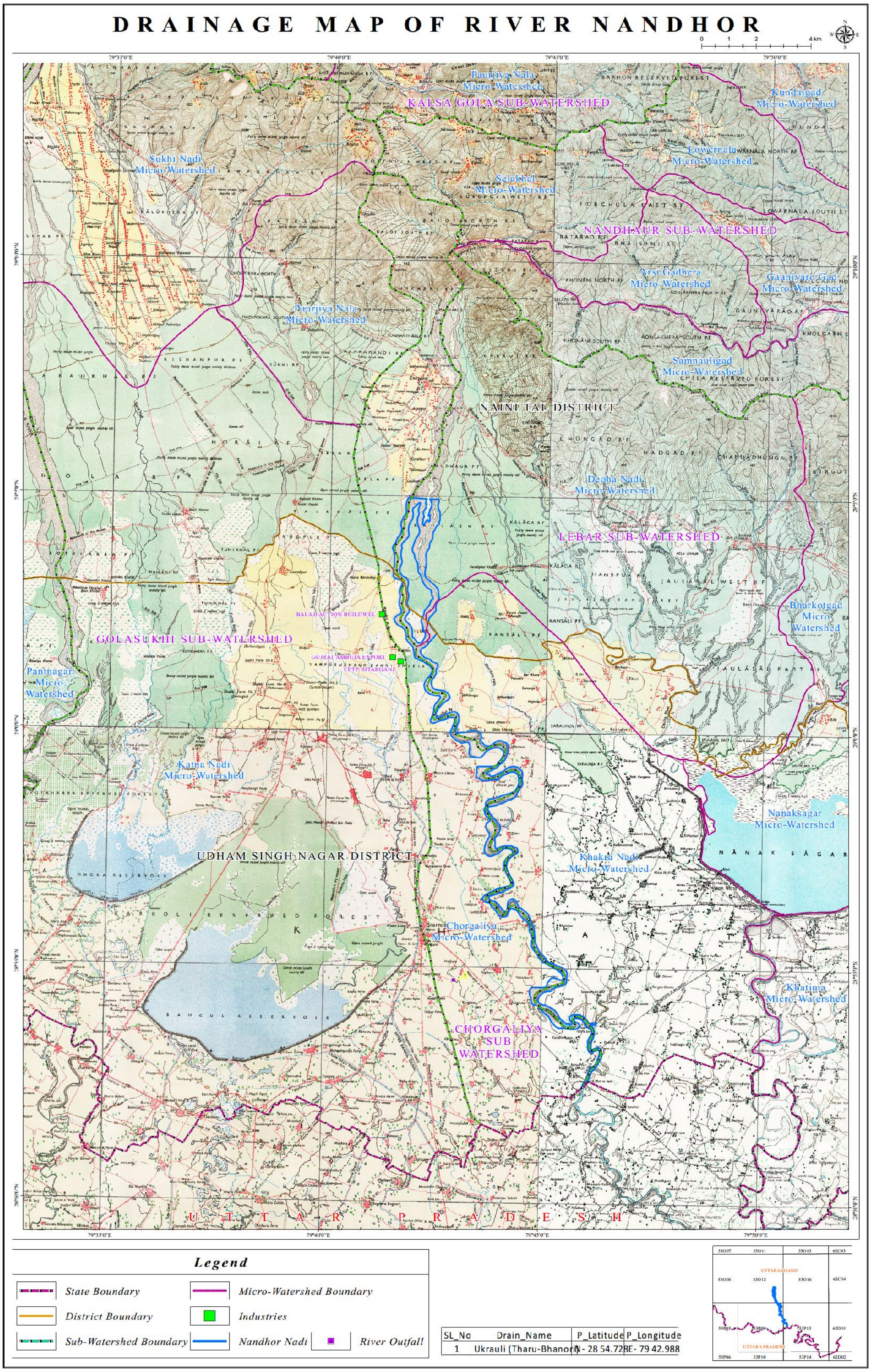
River quality monitoring is being carried out the Uttarakhand Environment Protection and Pollution Control Board at upstream of Kashipur town at upstream, of Sitarganj and downstream of Sitarganj town. Water quality characteristics data collected in the year 2018 are as given blow:

A. Water quality characteristics of river Nandhor/Kailash at upstream of ESIPL, Sitrarganj in the year 2018.

Month	pH	B.O.D. (mg/L)	C.O.D. (mg/L)	D.O. (mg/L)
Jan-18	River Dry			
Feb-18	River Dry			
Mar-18	River Dry			
Apr-18	River Dry			
May-18	River Dry			
Jun-18	River Dry			
Jul-18	7.6	4.2	21	6.4
Aug-18	7.3	2	12	7.4
Sep-18	7.4	3.2	14	7.2
Oct-18	7.2	6	14	6.8
Nov-18	7.6	4	14	6.8
Dec-18	River Dry			
Average (Range)	**7.42** (7.2-7.6)	**3.88** (2-4.2)	**15** (12-21)	**6.92** (6.4-7.4)

B. Water quality characteristics of river Nandhor/Kailash at downstream of Sitarganj Town in the year 2018.

Month	pH	B.O.D. (mg/L)	C.O.D. (mg/L)	D.O. (mg/L)
Jan-18	7.6	4	24	8
Feb-18	8.1	8	46	7.6
Mar-18	7.7	2	20	7.2
Apr-18	7.38	7	18	6
May-18	7.46	8.2	40	6.2
Jun-18	River Dry			
Jul-18	7.8	8.2	34	6
Aug-18	7.1	6	30	6.8
Sep-18	7.3	8	30	6.2
Oct-18	7.89	10	42	5.8
Nov-18	7.9	10	32	5.6
Dec-18	7.6	8	24	5.2
Average (Range)	**7.62** (7.1-7.9)	**7.21** (2-10)	**30.90** (18-46)	**6.41** (5.2-8)


DRAINAGE MAP OF RIVER NANDHOR
0 1 2 4 km
79°35'0"E
79°40'0"E
79°45'0"E
79°50'0"E
Paurijya Nala Micro-Watershed
KALSA GOLA SUB-WATERSHED
Kundalgad Micro-Watershed
Sukhi Nadi Micro-Watershed
Selakhal Micro-Watershed
Lowerrala Micro-Watershed
NANDHAUR SUB-WATERSHED
Arsi Gadhera Micro-Watershed
Gaaniyaro Gad Micro-Watershed
Paarjiya Nala Micro-Watershed
Samnaulgad Micro-Watershed
NAINITAL DISTRICT
Deoha Nadi Micro-Watershed
LEBAR SUB-WATERSHED
GOLASUKHI SUB-WATERSHED
Pantnagar Micro-Watershed
Bharkotgad Micro-Watershed
Katna Nadi Micro-Watershed
Nanaksagar Micro-Watershed
UDHAM SINGH NAGAR DISTRICT
Khakra Nadi Micro-Watershed
Chorgaliya Micro-Watershed
Khatima Micro-Watershed
CHORGALIYA SUB WATERSHED
UTTAR PRADESH
Legend
State Boundary
District Boundary
Sub-Watershed Boundary
Micro-Watershed Boundary
Industries
Nandhor Nadi
River Outfall
SL_No Drain_Name P_Latitude P_Longitude
1 Ukrauli (Tharu-Bhanori) N - 28 54.728 E - 79 42.988
UTTARAKHAND
UTTAR PRADESH

Basis of Proposed Action Plan for rejuvenation of river Nandhor/Kailash:

River Nandhor/Kailash is a spring fed river and as such no direct source of industrial wastewater have been reported in river (before ESIPL), therefore other sources including drains from town and hamlets will be identified.

3. IDENTIFICATION OF SOURCE OF POLLUTION:

The proposed action plan for rejuvenation of river Nandhor/Kailash consisting following components:

3.1 Source Control:

Source control includes industrial pollution control and treatment and disposal of domestic sewage as detailed below:

(a) Industrial Pollution control:

i. Identification of pollution potential industries.
ii. Sector specific categorization of industries.
iii. Assessment of Water consumption and wastewater discharge and gap in treatment of industrial effluent.
iv. Provision of wastewater treatment system.

(b) Sewage Management:

i. Estimation of quantity of sewage generated and requirement of treatment capacity.
ii. Gap analysis in terms of sewage generation, existing installed treatment capacity and required treatment capacity.
iii. Identification of municipal drains & their discharge in the catchment of river Bhela.
iv. Interception and diversion of municipal drains to STP.

v. Treatment and disposal of septage and controlling open defecation.

(c) Solid Waste Management:

i. Implementation of Door-to-Door collection.
ii. Source segregation as biodegradable and non-biodegradable wastes.
iii. Identification of suitable site for setting up common waste processing and secure landfill facility.
iv. Transportation, disposal and treatment facilities of municipal solid wastes generated from town in accordance of provisions of the Solid Waste Management Rules, 2016.
v. Restriction illegal disposal of solid waste along the river bank and flood plain zones.
vi. Prohibition on burning of solid wastes.
vii. Implementation of Construction and Demolition Wastes Management Rules.

3.2 Ground Water Quality:

i. Periodic groundwater quality assessment at strategic locations.

3.3 Flood Plain Zone.

i. Flood plain zoning.

3.4 Ecological/Environmental Flow (E-Flow)

i. Maintaining E-flow.

4. RIVER KICHHA REJUVENATION PLAN:

Following are the action plan for rejuvenation of river Nandhor/Kailash as detailed below:

4.1 Industrial Effluent Management:

The UEPPCB is vigilant on operation of Common Effluent Treatment Plant and other grossly polluting industries (GPIs) and other red categories of water polluting industries. There are 73 Nos. of industries operational in the Eldeco Siidcul Industrial Estate (ESIPL), Sitragnaj, which includes 02-nos. GPIs. Details of GPIs are given as below:

SN	Industry Name	Water Consumption (KLD)	Waste Water Generation (KLD)	Status of ETP
1	Gujarat Ambuja Exports Ltd. ESIPL, Sitarganj	3613	1647	ETP and further contributing to CETP
2	Balaji Action Buildwell Ltd., Phase-III ESIPL, Sitarganj	1710	650	ETP and further contributing to CETP

It is estimated that about 5323 KLD water is consumed and about 2297KLD wastewater is generated by above listed 2-GPIs located in the river Nandhor/Kailash catchment. Wastewater so generated is contributing to CETP after treatment in order to meet CETP inlet parameters. GPIs are being monitored in every quarter apart from other surprise inspection. Online effluent monitoring systems have also been provided at effluent outlet and real time data are being transmitted to Central Pollution Control Board and UEPPCB.

4.2 Operation of CETP:

There are total of 73 Nos. of industries are in operation at ESIPL, Sitarganj, out of which 69 industries are connected with CETP while 04 units are need to connect with CETP. Presently CETP is getting 2.4 to 2.5 MLD wastewater from contributing industries for treatment and disposal.

Regular monitoring of CETP outlet is carried out in order to comply outlet discharge standards as specified under Environment (Protection) Rules, 1986 as amended (**Annexure-1)**. CETP inlet effluent quality standards have also been prescribed by the Uttarakhand Environment Protection and Pollution Control Board and every contributing industry shall maintain inlet standards all the time (**Annexure-2)**.

Environmental Surveillance Squad (ESS) also formed at Head Office level in order to make surprise inspection. Strengthening of ESS will be carried out for effective surveillance.

Industrial hazardous waste management: Recyclable hazardous wastes, mainly used oil /contaminated barrels are being recycled through registered recyclers, while landfillable waste is being disposed thorough M/S Bharat Oil and Waste Management Pvt. Ltd. located at Laksar, Distt. Haridwar with an installed capacity of 667 MT/month landfill. Incinerable hazardous waste is disposed through common incinerator of 1000MT/Month capacity at TSDF or through co-processing in cement kilns.

4.3 Sewage Management:

It is estimated that about 5.16 MLD sewerage is generated from Sitarganj town. At present there is no sewerage facility in the town and individual septic tanks have been made by households for disposal of sewage and supernatant is directly disposed of in

nearby drains which ultimately comes in two drains which meets at Tharu Bhanori village through a single drain named Ukrauli drain. This drain joins river Kailash in downstream of Sitarganj town. Detail of Ukrauli drain are:

1. Discharge and BOD concentration of identified drains:

SN	Name of drain	Discharge (MLD)	BOD (mg/L)
1.	Ukrauli drain	2.0	48

2. Proposed Interception and Diversion of drains and construction of Sewage Treatment Plant:

SN	Items	Quantity
1	Sewage treatment plant of 2 MLD Capacity (capacity of STP is taken for midyear)	1 no
2	Sewage Pumping Station.	1 no
3	Necessary provision for Transmission line, Transformer and Generator set.	Job
4	Rising main 350mm dia k-9 pipe	60 m
5	Gravity main 400 mm dia D.I. k-7 pipe	60 m
6	Nala Tapping Chamber	1 no
7	Campus Boundary wall	232 mtr
8	Approach road	200 mtr
9	Open Drain for effluent disposal	200 mtr
10	Installation of Hand pump India Mark II	1 no
11	Land acquisition	Job
12	15 Years Operation and maintenance of Works.	Job

c. Cost estimation of proposed interception, diversion and treatment of Ukrauli drain:

SN	Description	Total Cost (Rs. in Lacs)
1	Cost of STP	630.65
2	Cost of SPS	504.52
3	Transformer and Transmission line	84.05
4	Cost of Rising Main	3.17
5	Cost of Gravity main	3.99
6	Cost of Nala tapping chamber	2.28
7	Cost of Boundry wall & Gate	10.56
8	Cost of C C Road	20.48
9	Cost of Drain/Channel	4.11
10	Cost for Installation of Hand Pump	0.74
11	Land acquisition charges	216.36
	Sub Total	**1,480.92**
11	Operation and maintenance of works for 15 years	**600.00**
	Sub Total	**2080.92**
	Project preparation and supervision 8% as per norms	**94.40**
	Total Cost	**2175.32**
	Say Rs.	**2175.00**

Total estimated cost of above proposed activities is: **Rs. 2175.00 Lacs.**

Time line: Proposal has been submitted to the State Government for allocation of funds. Proposed activities will be completed within two years from sanction and release of funds.

4.4 Solid Waste Treatment:

Nagar Palika Parisad, Sitarganj is statuary body responsible for management of solid wastes as per provisions of Solid Waste Management Rules, 2016 as amended. The population of Sitarganjr town is 31185 as per census of 2011. Nagar Palika Parisad is divided into 13 wards. Door to door collection is being undertaken in all 20 wards. Nagar Palika Parisad has approved Bye Laws for user charges and implemented. Land has been identified for solid waste processing and disposal facility. DPR has been prepared and under process of approval.

Nagar Palika Parisad, Sitarganj:	
Total Population	31185 (as per 2011 census)
No. of municipal wards	13 Wards
Total waste generation	5.99 MTPD
Door to Door collection	13 wards
Bye Laws for user charges	Approved and being implemented.
Realization of user charges	~ Rs. 0.23Laks per month.
Identification of land for waste processing and disposal facility	Land has been identified and DPR of Rs. 3.74 Crore is prepared. DPR is under process of approval.

Time Line: Proposal for solid waste processing and disposal facility will be submitted to the State Government for allocation of funds. Two year time would be required after sanction of funds.

No case Construction and Demolition waste shall be disposed in river bed or road side. Necessary directions have already been issued to concerned local body for identification of site.

4.5 Ground Water Quality:

So far contamination of groundwater is not reported in the area, however groundwater quality monitoring shall be carried out at least twice in the year (winter: December-January and summer: May-June) at strategic locations to ascertain quality of groundwater.

4.6 Flood Plan Zone (FPZ):

River Nandhor/Kailash is non-perennial water body and flash floods are occurring only during monsoon months, therefore flood plain zoning is not required for river Nandhor/Kailash.

4.7 Environmental Flow (E-Flow):

River Nandhor.Kailash carrying no natural water during non-monsoon period. Therefore, it is not feasible to maintain E- flow in the river Kichha.

4.7 Monitoring of Action Plan:

The proposed Action Plan will be monitored by the River Rejuvenation Committee (RRC) constituted by Government of Uttarakhand vide Office order dated 05.12.2018, under the overall supervision and co-ordination of Principal Secretary, Forest & Environment, Govt. of Uttarakhand.

5. ACTION PLAN:

Identified activities and concerned authorities for initiating actions and the time limits and budgetary requirements:

SN	Action plan for rejuvenation of river Nandhor/Kailash	Organisation/ Agency Responsible for Execution of the Action Plan	Time Target	Budgetary Requirement (Rs. In Lacs)	Remarks
1. Industrial Effluent Management:					
a)	Routine /surprise inspection GPIs and Red category of industries for ensuring compliance of effluent discharge standards as prescribed under E (P) Rules, 1986, as amended.	Special Environmental Surveillance Task Force / UEPPCB	One month	Nil	Continuous activity.
b)	Strengthening of Environment Surveillance Squad (ESS) of UEPPCB	UEPPCB	Three month	Nil	Continuous activity.
c)	Monitoring of drains carrying industrial wastewater and CETP outlet.	UEPPCB	Two month.	Nil	Continuous activity.
2. Sewage Management:					
a)	Interception and diversion of Ukrauli drain.	Uttarakhand Peyjal Jal Nigam	Two year from sanction of funds.	**2175.00**	Proposed activities will be completed in two years from sanction and release of funds.
b)	Installation of 1- STPc of 2 MLD capacity.	Uttarakhand Peyjal Jal Nigam			
c)	Operation and Maintenance of of STP of 2MLD capacity for 15 years; Operation and Maintenance of drain.	Uttarakhand Peyjal Jal Nigam			

	I&D Works for 15 years; Land acquisition etc. expenses.				
3. Solid Waste Management:					
a)	Door to door collection of solid waste in all 40 wards of town.	Nagar Palika Parisad, Sitarganj.	October, 2019	**374.00**	--
b)	Source segregation of wastes in all 40 wards of town.	Nagar Palika Parisad, Sitarganj.	April, 2020		
c)	Setting up solid waste processing facilities.	Nagar Palika Parisad, Sitarganj.	Two years after sanctioned of funds.		
4.Groundwater Quality:					
a)	Groundwater quality monitoring at during summer (May-June) and winter (December-January).	UEPPCB	Two months.	-	-
5. Flood Plain Zone:					
a)	River Nandhor/Kailash is spring fed water body and floods are occurring only during monsoon months, therefore flood plain zoning is not required for river Nandhor/Kailash.				
6. Environmental Flow:					
a)	River Nandhor/Kailash is non-perennial water body and apart from monsoon months there is almost no natural water flow into the river. Therefore, it is not possible to maintain e-flow in the river Nandhor/Kailash.				

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Annexure-1

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 1st January, 2016

S.O. 4(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) Rules, 1986, namely:—

1. **Short title and Commencement.**—(1)These rules may be called the Environment (Protection) Amendment Rules, 2015.

(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) the serial number 41 and the entries relating thereto, shall be omitted;

(b) for serial number 55 and the entries relating thereto, the following serial number and entries shall be substituted, namely:—

S. No.	Industry	Parameter	Standards		
(1)	(2)	(3)	(4)		
"55.	**Common Effluent Treatment Plants(CETP)**				
	A. Inlet Quality Standards	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 design of the Common Effluent Treatment Plant (CETP) and local needs & conditions.			
	B: Treated Effluent Quality Standards		Max. permissible values (in milligram/litre except for pH and Temperature)		
			Into inland surface water	On land for irrigation	Into sea
		General Parameters			
		pH	6 - 9	6 - 9	6 - 9
		Biological Oxygen Demand, BOD_3, 27 °C	30	100	100
		Chemical Oxygen Demand (COD)	250	250	250*
		Total Suspended Solids (TSS)	100	100	100
		Fixed Dissolved Solids (FDS)	2100✡	2100✡	NS*

Specific parameters			
Temperature, °C	Shall not exceed more than 5°C above ambient water temperature	Shall not exceed more than 5°C above ambient water temperature	Shall not exceed more than 5°C above ambient water temperature
Oil & Grease	10	10	10
Ammonical –Nitrogen	50	NS*	50
Total Kjeldahl Nitrogen (TKN)	50	NS*	50
Nitrate- Nitrogen	10	NS*	50
Phosphates, as P	5	NS*	NS*
Chlorides	1000	1000	NS*
Sulphates, as SO_4	1000	1000	NS*
Flouride	2	2	15
Sulphides, as S	2	2	5
Phenolic compounds (as C_6H_5OH)	1	1	5
Total Res. Chlorine	1	1	1
Zinc	5	15	15
Iron	3	3	3
Copper	3	3	3
Trivalent Chromium	2	2	2
Manganese	2	NS*	2
Nickel	3	NS*	3
Arsenic	0.2	NS*	0.2
Cyanide, as CN	0.2	NS*	0.2
Vanedium	0.2	NS*	0.2
Lead	0.1	NS*	0.1
Hexavalent Chromium	0.1	NS*	0.1
Selenium	0.05	NS*	0.05
Cadmium	0.05	NS*	0.05
Mercury	0.01	NS*	0.01
Bio-assay test	As per industry-specific standards	As per industry-specific standards	As per industry-specific standards

*NS-Not specified

Notes:

1. *Discharge of treated effluent into sea shall be through proper marine outfall. The existing shore discharges shall be converted to marine outfalls. In cases where the marine outfall provides a minimum initial dilution of 150 times at the point of discharge and a minimum dilution of 1500 times at a point 100 m away from discharge point, then, the State Board may relax the Chemical Oxygen Demand (COD) limit:

Provided that the maximum permissible value for Chemical Oxygen Demand (COD) in treated effluent shall be 500 milligram/litre.

2. Maximum permissible Fixed Dissolved Solids (FDS) contribution by constituent units of a Common Effluent Treatment Plant (CETP) shall be 1000 milligram/litre. In cases where Fixed Dissolved Solids (FDS) concentration in raw water used by the constituent units is already high (i.e. it is more than 1100 milligram/litre) then the maximum permissible value for Fixed Dissolved Solids (FDS) in treated effluent shall be accordingly modified by the State Board.

3. In case of discharge of treated effluent on land for irrigation, the impact on soil and groundwater quality shall be monitored twice a year (pre- and post-monsoon) by Common Effluent Treatment Plants (CETP) management. For combined discharge of treated effluent and sewage on land for irrigation, the mixing ratio with sewage shall be prescribed by State Board.

4. Specific parameters for some important sectors, selected from sector-specific standards

Sector	Specific Parameters
Textile	Bio-assay test, Total Chromium, Sulphide, Phenolic compounds
Electroplating Industries	Oil & Grease, Ammonia-Nitrogen, Nickel, Hexavalent Chromium, Total Chromium, Copper, Zinc, Lead, Iron, Cadmium, Cyanide, Fluorides, Sulphides, Phosphates, Sulphates,
Tanneries	Sulphides, Total Chromium, Oil & Grease, Chlorides
Dye & Dye Intermediate	Oil & Grease, Phenolic compounds, Cadmium, Copper, Manganese, Lead, Mercury, Nickel, Zinc, Hexavalent Chromium, Total Chromium, Bio-assay test, Chlorides, Sulphates,
Organic chemicals manufacturing industry	Oil & Grease, Bio-assay test, Nitrates, Arsenic, Hexavalent Chromium, Total Chromium, Lead, Cyanide, Zinc, Mercury, Copper, Nickel, Phenolic compounds, Sulphides
Pharmaceutical industry	Oil & Grease, Bio-assay test, Mercury, Arsenic, Hexavalent Chromium, Lead, Cyanide, Phenolic compounds, Sulphides, Phosphates."

Annexure-2

HEAD OFFICE

Uttarakhand Environment Protection and Pollution Control Board
29/20, Nemi Road, Dalanwala, Dehradun (Uttarakhand)

उत्तराखण्ड पर्यावरण संरक्षण एवं प्रदूषण नियंत्रण बोर्ड
29/20, नेमी रोड, डालनवाला, देहरादून (उत्तराखण्ड)

Phone: (0135) 2658889, Fax: (0135) 2718082, E-mail: mailpcb@yahoo.com, Web: www.ueppcb.uk.gov.in

OFFICE ORDER

In pursuance to notification of the Ministry of Environment, Forests and Climate Change, Govt. of India vide S.O.- 4(E) of 1st January, 2016, the Uttarakhand Environment Protection and Pollution Control Board (UEPPCB), Dehradun hereby prescribe following inlet quality standards for **Common Effluent Treatment Plant (CETP)** located at the Eldeco Sidcul Industrial Park, Sitarganj, Distt. US Nagar, Uttarakhand, based on the design parameters submitted by CETP operator to UEPPCB:

1. Inlet effluent quality standards for CETP, ESIP, Sitarganj, Distt. US Nagar shall be as given below:

S.N.	Parameters	Concentration (Maximum)
1.	pH	5.5 – 9.0
2.	BOD	550 mg/L
3.	COD	1100 mg/L
4.	Total Dissolved Solids (TDS)	2100 mg/L
5.	Total Suspended Solids (TSS)	1500 mg/L
6.	Oil & Grease	20 mg/L
7.	Phenolic Compounds (as C_6H_5OH)	5.0 mg/L
8.	Ammonical Nitrogen (as N)	50.0 mg/L
9.	Cynide (as CN)	2.0 mg/L
10.	Hexavalent Chromium (as Cr^{+6})	2.0 mg/L
11.	Total Chromium (as Cr)	2.0 mg/L
12.	Copper (as Cu)	3.0 mg/L
13.	Lead (as Pb)	1.0 mg/L
14.	Nickel (as Ni)	3.0 mg/L
15.	Zinc (as Zn)	15.0 mg/L
16.	Arsenic (as As)	0.2 mg/L
17.	Mercury (as Hg)	0.01 mg/L
18.	Cadmium (as Cd)	1.0 mg/L
19.	Selenium (as Se)	0.05 mg/L
20.	Fluoride (as F)	15.0 mg/L
21	Boron (as B)	2.0 mg/L
	Radio Active Materials	
22.	Alpha Emitters, micro curie/mL	10^{-7}
23.	Beta Emitters, micro curie/mL	10^{-8}

2. To achieve above limit, individual contributing units are required to pre-treat their wastewater/effluent before discharging to common conveyance system. All contributing industries shall ensure compliance of above limits with immediate effect.
3. The operator of CETP, Sitarganj shall conduct the study in consultation with technical organization for upper limit of inlet Ammonical Nitrogen (above 50 mg/L).
4. CETP outlet quality standards shall be as per treated effluent quality standards notified under the Environment (Protection) Rules, 1986 as amended 01.01.2016.

This issues with approval of Competent Authority of the Board.

(S.P. Subudhi)
Member Secretary

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