



Stakeholder's Workshop for awareness and knowledge sharing on ADB assisted 'MAHARAJA BIR BIKRAM (MBB) COLLEGE LAKE REVITALISATION PROJECT'

ENVIRONMENTAL SAFEGUARDS

Why this Project

No Project Alternative: A detail analysis of the situation was done:

- With no project scenerio it is very likely that the existing garden will deteriorate further.
- The existing problems would be aggravated.
- Maintenance of the area is not feasible in the present condition.
- Providing a better infrastructure will enhance the aesthetics.
- Potential benefits of the proposed project are substantial and far reaching.

Therefore, 'project with alternatives' scenario, with its minor adverse impacts is more acceptable

The Lake is susceptible to dumping of plastic and other wastes.....





MBB COLLEGE LAKE
Nov 03, 2022, 16:35



MBB COLLEGE LAKE
Nov 03, 2022, 16:35



MBB COLLEGE LAKE
Nov 05, 2021, 16:25



MBB COLLEGE LAKE
Nov 03, 2022, 16:29



MBB COLLEGE LAKE
Nov 03, 2022, 16:30



MBB COLLEGE LAKE
Nov 03, 2022, 16:29



MBB COLLEGE LAKE
Nov 03, 2022, 16:26



The adjoining area is also dumped with wastes and randomly littered making the area filthy





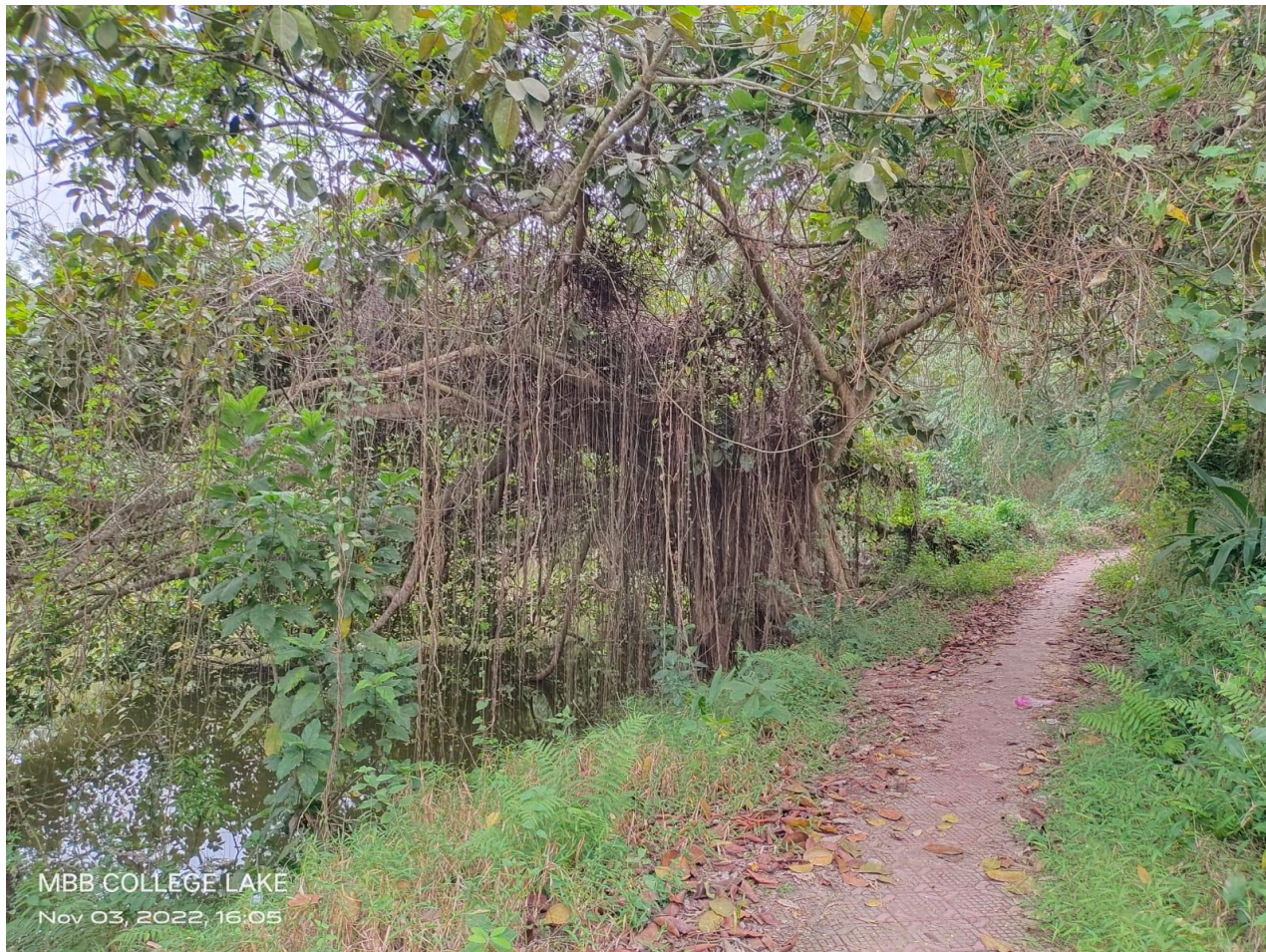
MBB COLLEGE LAKE
Nov 03, 2022, 15:09



MBB COLLEGE LAKE
Nov 03, 2022, 15:09



Inaccessible and unsafe surroundings specially for women and Children





MBB COLLEGE LAKE
Nov 03, 2022, 15:03



MBB COLLEGE LAKE
Nov 03, 2022, 15:58



MBB COLLEGE LAKE
Nov 03, 2022, 16:00



MBB COLLEGE LAKE
Nov 03, 2022, 16:00



Dilapidated Structures





MBB COLLEGE LAKE
Nov 03, 2022, 16:14



MBB COLLEGE LAKE
Nov 03, 2022, 16:13



MBB COLLEGE LAKE
Nov 03, 2022, 16:34



MBB COLLEGE LAKE
Nov 03, 2022, 16:48

Uncontrolled fishing is deleterious for aquatic life





MBB COLLEGE LAKE
Nov 03, 2022, 15:57



MBB COLLEGE LAKE
Nov 03, 2022, 16:39

The area is specially unsafe during night time.





MBB COLLEGE LAKE
Nov 03, 2022, 19:34



MBB COLLEGE LAKE
Nov 03, 2022, 19:35

How this project is conceptualised

Screening and Categorization with that of ADB SPS,2009.

ADB uses a classification system to reflect the significance of a project's potential environmental impacts.

Category A

Category B

Category C

Categorisation Process

- An environmental assessment using ADB's Rapid Environmental Assessment Checklist was conducted.
- Results of the assessment show that the this project is unlikely to cause significant adverse impacts.
- Thus, Initial Environment Examination (IEE) Report has been prepared in accordance with ADB SPS's requirements for environment categoryB projects.

Environmental Assessment Checklist

- Adjacent to or within any environmentally sensitive areas or Protected Area?
- Impacts on the sustainability of associated sanitation and solid waste disposal systems and their interactions with other urban services?
- Deterioration of surrounding environmental conditions due to rapid urban population growth, commercial and industrial activity, and increased waste generation to the point that both manmade and natural systems are overloaded and the capacities to manage these systems are overwhelmed?
- Degradation of land and ecosystems?

AND THE ANSWER TO ALL VITAL QUESTIONS WAS **NO**



Consent from Line Departments

- Forest Department.
- Tripura State Pollution Control Board.

No.F.17(54)/For-Dev/WAT/2022/ 22704-708
Government of Tripura
Office of the Principal Chief Conservator of Forests
Tripura: Agartala.

Dated, The 01 / 10 / 2022

To
The Member Secretary,
TSPCB, Agartala

Ref.: Request for information on MBB Lake wetland status-developed under Agartala Smart City Limited.

Sir,

I am directed to refer to the above and to enclose herewith the letter vide No.F.4(98)/ASCL/2021/2780-81 dated 01.09.2022 of Chief Executive Office, Agartala Smart City Limited wherein he has sought information whether any clearance or permission is required from the Forest Department or Wetland Authority to proceed further with the work of development of MBB Lake.

Notification No.F.11(35)/DSTE/CC/Part-1/3813-24 dated 25.05.2017 of Department of Science, Technology and Environment contains guide lines for protection and preservation of Lakes, Ponds and Water Bodies in the State of Tripura. As per para 4 of above notification apart from others, Member Secretary of TSPCB is authorized to initiate legal action for violation of the above guide line.

In view of this I am directed to request you dispose of the above application of CEO, Agartala Smart City Limited with suitable direction.

Yours faithfully,

Encl: As stated above

(K.G. Roy)
01/10/22

Dy. Conservator of Forests (HQ)

Copy to:

1. PPS to the PCCF & HoFF, Tripura for kind information.



TRIPURA STATE POLLUTION CONTROL BOARD

(A Statutory Organisation Under Government of Tripura)
Department of Science Technology & Environment

No.F.19(74)/TSPCB/MS/ 8354-58

October 27, 2022

To
The Chief Executive Officer
Agartala Smart City Limited

Sub: Request for information on MBB College Lake Wetland status-developed under Agartala Smart City Limited-reg.

Sir,

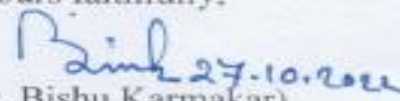
A letter has been received from the office of the Principal Chief Conservator of Forests, Government of Tripura alongwith a letter of Agartala Smart City Limited dated 01.09.2022 regarding the information on MBB College Lake Wetland status-developed under Agartala Smart City Limited.

2. I would like to inform that a Statutory Guidelines has been notified vide Notification No.F.11(35)/DSTE/CC/Part-I/3813-24 dated 25.05.2017 for protection and preservation of lakes, ponds and water bodies in the State of Tripura by the Department of Science, Technology & Environment, Government of Tripura. A Copy of the said guideline is attached herewith.

3. The protection, rejuvenation and beautification activities of the MBB College Lake may be carried out following the Statutory Guidelines for Protection and Preservation of lakes, ponds and water bodies.

This is for your information.

Yours faithfully,


(Dr. Bishu Karmakar)
Member Secretary

Copy to.



The Guideline regarding water bodies

No.F.11(35)/DSTE/CC/Pt-II 3813-24
GOVERNMENT OF TRIPURA
DEPARTMENT OF SCIENCE, TECHNOLOGY & ENVIRONMENT

Dated, Agartala, the 24/05/2017

NOTIFICATION

Sub:- Statutory Guidelines for Protection and Preservation of lakes, ponds and water bodies in the State of Tripura.

In pursuance of the Judgment & Order dated 16.08.2016 of the Hon'ble High Court of Tripura in WP(C)(PIL) No.2 of 2014 in the matter of Shri Bibash Ch.Saha Vs. State of Tripura & Ors., the Government had constituted a committee under the Chairmanship of the Principal Chief Conservator of Forests, Govt. of Tripura in October, 2016, for framing the guidelines taking into account the suggestions/recommendations of the experts in the field to protect and preserve the ecosystem and environmental balance of all the water bodies in the State. A copy of the Memorandum dated 20th October, 2016 vide which the above Committee was constituted is at **Annexure I**. The Committee submitted a report before the State Government on 27th April, 2016.

2. After careful consideration of the recommendations of the Committee and in exercise of the powers conferred under section 24 of the Water (Prevention & Control of Pollution) Act, 1974, and Section 5 of the Environment (Protection) Act, 1986, it is hereby decided that all Local Bodies [like - Municipal Corporations, Municipal Councils, Nagar Panchayat, Panchayat Samities, Block Advisory Committees, Zilla Parishad etc.], PWD (R&B), PWD(Water Resource), PWD(Minor Irrigation), Forest Department, Fishery Department, District/Sub-Division/Block level Administrations, Wetland Management Authority of Tripura, Committees of Religious Organization like Matarbari Temple/Kasba Kalibari Temple/Chaturdas Devata Bari Temple etc. and industrial unit or any individual, being owner of a pond, should observe the following guidelines for 'determination of the embankments of water bodies' regarding protection and preservation of ecosystem and environmental balance of water bodies:-

- i. For the existing water bodies which have permanent structures (permanent structure means brick wall, RCC structures, concrete wall etc.), proper provision for free movement of the aquatic life and water and the natural slope may be made by using eco-friendly materials/interventions like earth mounding geo-textiles, bamboo, grass etc., wherever feasible and applicable. However, adequate care may be taken to ensure that nearby habitation/structures are also protected from erosion.

cm

- ii. Disposal of any waste materials (includes solid wastes, bio-medical waste, e-waste, hazardous waste, construction and demolition waste and sewage and effluent as defined under concerned rules) in the water bodies should be strictly prohibited.
- iii. Illumination by using powerful lights (like flood lights, street lights, search lights) should be avoided. Pedestal lights or duly covered tube lights may be installed for illumination of foot-paths, walking tracks etc. It should be ensured that nearby trees are not illuminated. These are to be completed within next 6 months.
- iv. For monitoring of the water bodies, a committee consisting of representatives of the concerned department (owner of the water bodies), Forest Department, Fishery Department, Tripura State Pollution Control Board (TSPCB) and experts from Fishery College should be formed. The committees should periodically check the water quality with the help of TSPCB and take necessary action for maintaining the ecosystem of the water body. The Committee to be constituted within next 1 month.
- v. A committee at State level with concerned stakeholders for monitoring and implementation of these guidelines should be formed. The Committee to be constituted within next 1 month.
- vi. The TSPCB, with the help of concerned stakeholders should take up large scale awareness programmes about various acts and rules about the pollution control and ecological well-being of water bodies in the State. This should be an ongoing activity of the board.

Note :- Where Bamboos, Sal, eucalyptus or other eco-friendly items for piling is undertaken it should be kept into consideration that no cut-drum sheets or tin plates are fitted with the bullahs as these tin-sheets separate the land and water. This separation of land and water is very unhygienic for the water body and the surrounding areas according to scientists.

3. Authorities of all Local Bodies [like - Municipal Corporations, Municipal Councils, Nagar Panchayat, Panchayat Samities, Block Advisory Committees, Zilla Parishad etc.] PWD (R&B), PWD(Water Resource), PWD(Minor Irrigation), Forest Department, Fishery Department, Wetland Management Authority of Tripura, Committee of Religious Organization like Matarbari Temple/Kasba Kalibari Temple/Chaturdas Devata Bari Temple etc, President of different Chamber of Commerce and Industries, are requested to circulate the aforementioned statutory guidelines through their officials for wide compliance.

4. In case of violation of the aforementioned guidelines, the District Magistrate and Collector or the Chairman or the Member Secretary of the Tripura State Pollution Control Board or any other officer authorized in this behalf by it, shall in accordance with the procedure and powers conferred under Section 19 of the

Environment (Protection) Act, 1986 and/or Section 49 of the Water (Prevention and Control of Pollution) Act, 1974, as the case may be, shall initiate legal action.

5. This order shall take immediate effect.

By the order of the Governor,

Chalare 19/5/17
(C Murti)

Special Secretary
to the Government of Tripura

Copy to :-

1. The Principal Secretary to the Governor, Tripura, Agartala.
2. The Principal Secretary to the Chief Minister, Tripura.
3. The P.S/P.A to all the Ministers, Tripura, Agartala.
4. The Chairman, Tripura State Pollution Control Board, Agartala.
5. All Municipal Corporations, Municipal Councils, Nagar Panchayat, Panchayet Samities, Block Advisory Committees, Zilla Parishad, Tripura.
-
6. The Principal Secretaries/Commissioners/Secretaries/Special Secretaries to the Govt. of Tripura, Agartala.
7. The Member Secretary, Tripura State Pollution Control Board, Agt.
8. All Heads of Department/PSU/Organization/Board/Agency, Tripura.
-
9. All DM & Collectors / SDMs / BDOs, Tripura.....
10. The Sabiet of Matabari Tample/ Kasba Kalibari Tample/ Chaturdash Devatabari Tample, Tripura.
11. The Manager, Government Press for publication of this notification in the next issue of official gazette.
12. Sri S. Banik, Scientific Officer, DSTE, Agartala for information & requests to publish the same in Official Website of this Department.



Chalare 19/5/17
(C Murti)
Special Secretary
to the Government of Tripura



Highlights of the Guideline

- For existing water bodies which have permanent structures , proper provision for free movement of the aquatic life and water and the natural slope may be made by using eco-friendly material.
- Disposal of any waste materials in the water bodies should be strictly prohibited.
- Illuminating using powerful lights should be avoided. Pedestal lights or duly covered tube lights may be installed for illumination of footpaths, walking tracks etc. It should be ensured that nearby trees are not illuminated.

Environmental Safeguards

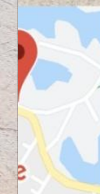


- **Baseline Environmental Monitoring done:**
 1. Air Quality Monitoring



GPS Map Camera

Agartala, Tripura, India
College Tilla Lake, Dhaleswar, Agartala, Tripura 799004, India
Lat 23.827529°
Long 91.294685°
12/04/22 04:18 PM



GPS Map Camera

Agartala, Tripura, India
BBMC Admin Block, Dhaleswar, Agartala, Tripura 799004, India
Lat 23.824796°
Long 91.294005°
13/04/22 12:22 PM

Environmental Safeguards



2. Ground Water Quality



3. Sound Quality



Environmental Safeguards



4. Surface Water Quality:



Environmental Safeguards



• Baseline Environmental Monitoring reports

Surface Water Monitoring of MBB lake water was conducted through NABL Certified Lab on 09.01.2022. According to the Baseline Monitoring reports, the Total Dissolved Solids, BOD, Heavy metals and Total Coliform was found higher than the acceptable standards.

SURFACE WATER ANALYSIS				
Project Site	MBB College Lake		Monitoring Measures	Pre-Construction
	Agartala, Tripura - 799 008		Periodic Visit	1
Report No.	01/EC/MGL-MBB/SW/22-23		Reporting Date	10.02.2022
Monitored by :	Assigned by :			
ENVIROCHECK	Megale Pneumatics Pvt. Ltd.			
63/B, RASTRAGURU AVENUE	Corporate Office : N-05, MIDC			
KOLKATA-700028	Hingna Road, Nagpur 440018, India			
SW1	Bathing Ghat	Lat : 23.828028	Long : 91.293648	
SW2	MBB main entrance Pond 1 st	Lat : 23.828029	Long : 91.293650	
SW3	PWD and NCC College in between Entrance Lake	Lat : 23.825333	Long : 91.294698	
		Sampling Date	09.01.2022	
No.	Parameters	SW1	SW2	SW3
1	Temperature(°C)	20.5	20.0	21.0
2	pH	6.68	6.51	6.91
3	Conductivity (µmhos/cm)	1193	348	150
4	Turbidity(NTU)	2.21	2.1	2.4
5	Total Dissolved Solid(mg/l)	759	221	96.0
6	Total Suspended Solid(mg/l)	21.8	22.0	15.4
7	Total Hardness(mg/l)	249.48	75.54	27.72
8	Dissolved Oxygen(mg/l)	7.5	7.5	7.5
9	BOD(mg/l)	23.0	9.0	8.0
10	COD(mg/l)	138.2	45.4	36.32
11	Oil & Grease(mg/l)	<1.0	<1.0	<1.0
12	Total Kjeldahl Nitrogen(mg/l)	6.38	3.5	3.2
13	Chloride(mg/l)	151.16	23.98	22.12
14	Sulphate(mg/l)	22.8	12.2	8.0
15	Nitrate(mg/l)	9.89	3.83	3.2
16	Alkalinity(mg/l)	106.4	84.6	19.0
17	Bi-Carbonate(mg/l)	129.81	78.81	23.18
18	Phosphate(mg/l)	2.2	0.89	0.75
19	Calcium(mg/l)	52.38	15.87	6.35
20	Magnesium(mg/l)	28.51	8.55	2.85
21	Sodium(mg/l)	58.0	21.0	12.8
22	Manganese(mg/l)	<0.1	<0.1	<0.1
23	Zinc(mg/l)	0.09	0.08	0.08

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 | 033-25792891/25497490, Fax : 033-25299141
 Laboratory : 189,190&192 Rastraguru Avenue, Kolkata - 700028 | 033-25792889
 Email : info@envirocheck.in/envirocheck50@gmail.com | Website : www.envirocheck.in
 Branch Office : • Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi
 Overseas : • UAE • Qatar • Netherlands

No.	Parameters	SW1	SW2	SW3
24	Iron(mg/l)	2.21	1.69	1.12
25	Cadmium (mg/l)	<0.001	<0.001	<0.001
26	Copper (mg/l)	<0.04	<0.04	<0.04
27	Nickel (mg/l)	<0.1	<0.1	<0.1
28	Lead (mg/l)	<0.05	<0.05	<0.05
29	Mercury (mg/l)	<0.001	<0.001	<0.001
30	Total Chromium(mg/l)	<0.02	<0.02	<0.02
31	Arsenic (mg/l)	<0.01	<0.01	<0.01
32	Silica (mg/l)	9.2	5.54	2.2
33	Hexavalent Chromium(mg/l)	<0.05	<0.05	<0.05
34	Total Coliform(CFU/100ml)	1.9 x 10 ⁵	1.7 x 10 ⁵	1.1 x 10 ⁵
35	Fecal Coliform (CFU/100ml)	1.3 x 10 ⁵	1.1 x 10 ⁵	9.0 x 10 ⁴

continued Sheet 2 of 2

Compiled by : (Signature) Date & Seal : 10.02.2022 Certified by : (Signature)


Name : Dr. Ajoy Paul Dr. Sumit Baran Chowdhury

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 | 033-25792891/25497490, Fax : 033-25299141
 Laboratory : 189,190&192 Rastraguru Avenue, Kolkata - 700028 | 033-25792889
 Email : info@envirocheck.in/envirocheck50@gmail.com | Website : www.envirocheck.in
 Branch Office : • Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi
 Overseas : • UAE • Qatar • Netherlands


Environmental Safeguards



• Baseline Environmental Monitoring reports



Recognized by MoEF&CC, WSPCB & JSPCB
Accredited by NABL (ISO/IEC 17025:2017)
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001 : 2018



etiaci etiaci IAS

SURFACE WATER ANALYSIS


Project Site	MBB College Lake	Monitoring Measures	Pre-Construction
	Agartala, Tripura – 799 008	Periodic Visit	1
Report No.	01/EC/MGL-MBB/SW/22-23	Reporting Date	10.02.2022

Monitored by :	Assigned by :
ENVIROCHECK	Mecgale Pneumatics Pvt. Ltd.
83/B, RASTRAGURU AVENUE	Corporate Office : N-85, MIDC
KOLKATA-700028	Hingna Road, Nagpur 440018, India


SW4	Law College back side lake	Lat : 23.823355	Long : 91.296728
SW5	Haora River	Lat : 23.823067	Long : 91.297474
		Sampling Date :	11.01.2022

No.	Parameters	SW4	SW5
1	Temperature(°C)	21.0	20.0
2	pH	6.93	7.11
3	Conductivity (µmhos/cm)	149	887
4	Turbidity(NTU)	2.2	7.53
5	Total Dissolved Solid(mg/l)	97.0	549
6	Total Suspended Solid(mg/l)	12.4	24.6
7	Total Hardness(mg/l)	22.78	162.18
8	Dissolved Oxygen(mg/l)	4.5	4.5
9	BOD(mg/l)	4.0	6.0
10	COD(mg/l)	18.16	27.24
11	Oil & Grease(mg/l)	<1.0	<1.0
12	Total Kjeldahl Nitrogen(mg/l)	2.21	2.50
13	Chloride(mg/l)	20.28	90.33
14	Sulphate(mg/l)	11.0	26.6
15	Nitrate(mg/l)	2.0	2.49
16	Alkalinity(mg/l)	22.8	133.0
17	Bi-Carbonate(mg/l)	27.82	162.28
18	Phosphate(mg/l)	0.43	1.15
19	Calcium(mg/l)	4.76	36.50
20	Magnesium(mg/l)	2.85	21.86
21	Sodium(mg/l)	12.41	35.6
22	Manganese(mg/l)	<0.1	<0.1
23	Zinc(mg/l)	0.11	0.12

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 | 033-25792891/25497490, Fax : 033-25299141
 Laboratory : 189,190&192 Rastraguru Avenue, Kolkata - 700028 | 033-25792889
 Email : info@envirocheck.in/envirocheck50@gmail.com / Website : www.envirocheck.in
 Branch Office : • Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi
 Overseas : • UAE • Qatar • Netherlands



Recognized by MoEF&CC, WSPCB & JSPCB
Accredited by NABL (ISO/IEC 17025:2017)
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001 : 2018



etiaci etiaci IAS

Continued Sheet 2 of 2

No.	Parameters	SW4	SW5
24	Iron(mg/l)	1.38	1.45
25	Cadmium (mg/l)	<0.001	<0.001
26	Copper (mg/l)	<0.04	<0.04
27	Nickel (mg/l)	<0.1	<0.1
28	Lead (mg/l)	<0.05	<0.05
29	Mercury (mg/l)	<0.001	<0.001
30	Total Chromium(mg/l)	<0.02	<0.02
31	Arsenic (mg/l)	<0.01	<0.01
32	Silica (mg/l)	1.5	9.2
33	Hexavalent Chromium(mg/l)	<0.1	<0.1
34	Total Coliform(CFU/100ml)	1.1 x 10 ⁴	1.6 x 10 ⁴
35	Fecal Coliform (CFU/100ml)	9.3 x 10 ⁴	9.2 x 10 ⁴

Compiled by : (Signature) Date & Seal : 10.02.2022 Certified by : (Signature)

Name : Dr. Ajoy Paul Dr. Sumit Baran Chowdhury

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 | 033-25792891/25497490, Fax : 033-25299141
 Laboratory : 189,190&192 Rastraguru Avenue, Kolkata - 700028 | 033-25792889
 Email : info@envirocheck.in/envirocheck50@gmail.com / Website : www.envirocheck.in
 Branch Office : • Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi
 Overseas : • UAE • Qatar • Netherlands

Other Environmental benefits



1. The proposed MBB College Lake Revitalization project involves extensive landscaping with variety of native and exotic plants to add to the natural beauty of the place, which includes plantation of 365 large trees, 450 palm trees and small, medium and large shrubs covering an area of 16600 sq.m. This planned landscaping will improve the bio-diversity of the area.

Name of Tree	Number	Name of Tree	Number
<i>Alstonia scholaris</i>	15	<i>Mesua ferra</i>	10
<i>Bauhinia blakeana</i>	10	<i>Marus alba</i>	10
<i>Bombax ceiba</i>	10	<i>Nyctanthes arbor-tristis</i>	5
<i>Ceiba pentandra</i>	10	<i>Peltophorum inerme</i>	10
<i>Delonix regia</i>	10	<i>Phyllanthus emblica</i>	10
<i>Dillenia indica</i>	10	<i>Plumeria alba</i>	10
<i>Erythrina stricta</i>	10	<i>Plumeria rubra</i>	10
<i>Gardenia resinifera</i>	5	<i>Pterospermum acerifolium</i>	10
<i>Gmelina arborea</i>	10	<i>Samanea saman</i>	10
<i>Holarrhena pubescens</i>	5	<i>Saraca indica</i>	20
<i>Lagerstroemia parviflora</i>	10	<i>Schima wallichii</i>	15
<i>Lannea coromandefica</i>	10	<i>Syzygium cumini</i>	10
<i>Litchi chinensis</i>	10	<i>Eugenia jambolana</i>	10
<i>Madhuca longifolia</i>	20	<i>Tamarindus indica</i>	10
<i>Magnolia grandiflora</i>	10	<i>Tectona grandis</i>	10
<i>Ma/lotus philippensis</i>	5	<i>Terminalia arjuna</i>	5
<i>Mangifera indica</i>	10	<i>Terminalia Chebula</i>	5
<i>Michelia champaca</i>	25	<i>Thespesia populnea</i>	10
		<i>Phoenix sylvestris</i> Roxb.	450



Other Environmental benefits



2. Total 36 Nos of 30 W LED Street light with Solar panel, DC battery sufficient to provide 12 hours of back-up to be used for the MBB College Lake Revitalization project.



Mitigation Measures of Environmental Impacts



Mitigation measures for piling:

- During the concreting work, full care would be taken to avoid concrete spilling into water body.
- The spoil produced after drilling work is stored properly away from the lake body
- After the piling work and other construction work is done, it would be ensured that no debris or waste is left.

Mitigation Measures of Environmental Impacts



Mitigation measures for construction work:

- Noise Impact: All the piling works near the MBB College Lake will be strictly conducted in a way to avoid any disturbance to the MBB College lake ecosystem.
- Noise will be reduced from construction equipment.
- Ensure that all Vehicles/ Machineries in good condition
- Ensure PUC of all vehicles and its proper maintenance.
- Maintaining maximum sound levels not exceeding 80 decibels (dBA)
- Illumination by using powerful lights (like flood lights, search lights) would be avoided.

Mitigation Measures of Environmental Impacts



Mitigation measures for construction work:

- Environmental Monitoring (Air Quality, Water Quality, Noise levels) shall be done on quarterly basis
- The area around MBB College lake shall not be disturbed or damaged during transportation of vehicle
- No labour camp setup near water body.
- Proper information board and barricading shall be provided
- Zero construction waste discharge into the lake. Disposal of any waste in the water bodies shall be strictly prohibited.

Mitigation Measures of Environmental Impacts



Following to be ensure during construction work:

- Water sprinkling will be carried out continuously to control dust.
- Construction workers and other staff during construction phase will be monitored strictly so that they maintain proper behaviour appropriate in areas around educational institutions.
- Ensure environment Management Plan (EMP) compliances and other regulatory compliances which are suggested by concern Government Department. (Forest, fishery, Science and Technology, Pollution Control Board etc.) are followed strictly.

Constant Stakeholders Consultation

Principal, MBB College



Principal, BBMC College



Regional Director, IGNOU

SDFO, Forest Dept



Grievance Redressal Mechanism

- A three tier grievance redressal structure is formed to address any of the project related issues.
- Any grievance would addressed with maximum priority and disposed within 7 days at site level.
- People can inform about their grievance at the work site.
- They can also send their grievance through whatsapp or can call at **6909370797**.
- Grievance can also be sent to our email ID- **agartalasmartcitygrievance@gmail.com**

THANK YOU.....