Environment Deptt.
No. 539 Dt. 31/8/2020

From

District Magistrate,
Chandigarh.

To

The Adviser to the Administrator,
Chandigarh Administration.

Memo.No.
Dated, Chandigarh the

Subject: **Compliance of order dated 1.6.2020 passed in OA No.325 of 2015 in I.A. No.700 of 2019 and M.A. No.252 of 2019 in the matter of Lt. Col. Sarvadaman Singh Oberoi vs. Union of India and ors. Passed by the Hon'ble NGT, New Delhi.**

Kindly refer to the order dated 1.6.2020 passed by Hon'ble NGT, New Delhi in OA No.325 of 2015 in I.A. No.700 of 2019 and M.A. No.252 of 2019 in the matter of Lt. Col. Sarvadaman Singh Oberoi vs. Union of India and ors. which has been forwarded by Dr. Babu Ram, Technical Expert for its compliance.

On the basis of the aforesaid order dated 1.6.2020, the following water bodies have been identified in Chandigarh and the detailed action plan for restoration of the water bodies as submitted by Engineering Department, Forest Department, Chandigarh Administration and Municipal Corporation, Chandigarh is given as under :-

Sr. No.	Name of Water body	Maintained by	Detailed proposal for restoration of the water bodies
1.	Sukhna Lake	Engineering Department, Chandigarh Administration	Annexure ED-1
2.	Pond at Village Dhanas	-do-	Annexure ED-2
3.	Pond at Village Kaimbwala	-do-	Annexure ED-3
4.	Pond at Village Khuda Jassu	-do-	Annexure ED-4
5.	Pond at Village Maloya	-do-	Annexure ED-5
6.	Dhanas lake	Forest Department, Chandigarh Administration	Annexure FD-1
7.	Pond at village Khuda Ali Sher	Municipal Corporation, Chandigarh	Annexure MC-1
8.	Pond at Village Sarangpur	-do-	Annexure MC-2
9.	Pond at Village Kaimbwala	-do-	Annexure MC-3

This is the proposed action plan for restoration of the water bodies. The consolidated report is being sent herewith for your kind information and onward transmission to the Central Pollution Control Board **before 31.8.2020**, pls.

District Magistrate
Chandigarh

Endst. No.DM/MA/2020/ 16633 Dated, Chd. The 28/8/2020

A copy of the above is forwarded to the following for information :-

1. The Director Environment, Chandigarh Administratioin.
2. Dr. Babu Ram, Technical Expert, Monitoring/Executing Committee, (constituted by the Hon'ble N.G.T.), # Tower No.5, 4th floor, Forest Complex, Sector 68, SAS Nagar, Mohali.

D.A.A.

District Magistrate
Chandigarh

From

The Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh.

To

The Deputy Commissioner,
U.T., Chandigarh.

Memo.No 1122
Dated, Chandigarh the 27.07.2020

Subject: **Compliance of directions issued by Hon'ble N.G.T. in O.A. No. 606/2018 – "Compliance of Municipal Solid waste Management Rules, 2016" – Appointment of Nodal officer and preparation of action for water bodies and restoration of Sukhna Lake.**

Ref: **This office earlier Endst No. 1175 dated 24.07.2020 & Endst No.1164 dated 24.07.2020.**

Please refer to office memo no. 13985 dated 09.07.2020. Enclosed please find herewith the action plan for restoration of Sukhna Lake as prepared by the Executive Engineer, CP Div. No.2 received vide his office memo no. 2223 dated 27.07.2020 after collecting the requisite data from the Forest Department, U.T., Chandigarh and Chandigarh Pollution Control Committee etc. The report has been prepared by taking the detail/data pertaining to Sukhna Lake.

It is pertinent to mention here that the action plan for restoration of water bodies of villages shall be prepared by the Municipal Corporation, U.T., Chandigarh as these villages already stand transferred to Municipal Corporation, U.T., Chandigarh. A meeting in this regard was also held on 24.07.2020 in the office of Superintending Engineer, Construction Circle-II, U.T., Chandigarh which was attended by the Superintending Engineer, Public Health, U.T., Chandigarh, Executive Engineer, Public Health Div. no.3, U.T., Chandigarh, Executive Engineer, Public Health Div. no.7, U.T., Chandigarh, Executive Engineer, Public Health Div. no.4, Municipal Corporation, Chandigarh, wherein, it was decided that the action plan for restoration of water bodies of villages shall be supplied by Municipal Corporation, Chandigarh. The Chief Engineer, Municipal Corporation, Chandigarh has already been requested by this office memo no. 1163 dated 24.07.2020 to supply the action plan regarding restoration of water bodies of villages of U.T., Chandigarh directly to the office of Deputy Commissioner, U.T., Chandigarh.

This is for your kind information and further necessary action please.

DA/As above

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh.

FORMAT FOR SUBMISSION OF INFORMATION ON PROPOSED ACTION PLANS FOR "RESTORATION OF SUKHNA LAKE" IN COMPLIANCE TO HON'BLE NGT ORDERS DATED 10.5.2019& 25.02.2020 IN O.A. NO. 325/2015

<table>
<tr><td>S. No</td><td>Content</td><td></td><td></td></tr>
<tr><td>1</td><td>Name of the State/UT</td><td>:</td><td>Chandigarh</td></tr>
<tr><td></td><td>Contact Details (Department-wise)</td><td>:</td><td>
<table>
<tr><th>Name of the State/UT Department</th><th>Name of the Nodal Officer</th><th>Contact Tel. No</th><th>Mobile No.</th><th>E.mail</th></tr>
<tr><td>Chandigarh Engineering Department</td><td>C.B. Ojha
Superintending Engineer</td><td>0172-2740019</td><td>7508185419</td><td>secon2-chd@nic.in</td></tr>
</table>
</td></tr>
<tr><td>2</td><td>Information on water bodies such as Lakes&Ponds</td><td></td><td>
<table>
<tr><th rowspan="2">Type of Water Body</th><th rowspan="2">Total No. of Water Bodies Identified</th><th colspan="2">Ownership of Identified Water Bodies (Indicate No. of Water Bodies)</th><th colspan="3">Status On-going Restoration of Water Bodies with Financial Support from NRCD/MoJS/with own resources of the State/UT</th></tr>
<tr><th>Government</th><th>Private/ Individual</th><th>Total No. of Water Bodies Selected for Restoration</th><th>Total No. of Water Bodies restored so far</th><th>Total No. of Water Bodies presently under restoration</th></tr>
<tr><td>Lakes</td><td>01</td><td>01</td><td>-</td><td>01</td><td>0</td><td>01</td></tr>
<tr><td>Ponds</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>Whether water bodies are geo-tagged/ provided with Unique Identification Number (UIN)</td><td>:</td><td>Yes.
Latitude – 30⁰44'50.65"N
Longitude- 076⁰48'44.19"E</td></tr>
<tr><td>4</td><td>Major causes of pollution in identified water bodies</td><td>:</td><td>Improper disposal of Sewage /Industrial Effluent/Waste like Municipal Solid Waste/Hazardous Waste/Plastic waste/Construction & Demolition Waste) (Pl. put √ whichever is correct)
-------N.A.---------</td></tr>
<tr><td>5</td><td>Other Problems Associated with the Identified Water Bodies</td><td>:</td><td>Silting/Weeding/Encroachments/No Provision of inflow or outflow control measures/ Poor Embankment/Poor Watershed Management in Catchment/No Adequate Buffer Zone/Any other) (Pl. put √ whichever is correct)
(Problem of weeding only)</td></tr>
<tr><td>6</td><td>Water Quality Compliance Status of Identified lakes, and ponds in the State/UT</td><td>:</td><td>
<table>
<tr><th rowspan="2">Type of Water body</th><th rowspan="2">No. of identified water bodies</th><th rowspan="2">No. of Water Quality Monitoring Stations</th><th colspan="3">No. of Water Bodies complying to</th></tr>
<tr><th>Primary Water Quality Criteria for Bathing</th><th>Drinking Water Quality Criteria after Conventional Treatment</th><th>Water Quality Criteria for Agriculture/ Fishing/Any other criteria</th></tr>
<tr><td>Lakes</td><td>01</td><td>01</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Ponds</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>7</td><td>Proposed Water Body-wise Action Plans for restoration of prioritised water bodies with timelines and implementing agencies</td><td>:</td><td>(Water body-wise details attached as per Annexure-I (page-1 & 2))</td></tr>
<tr><td>8</td><td>Any other relevant information</td><td>:</td><td>Water Sports Activity –Rowing etc.</td></tr>
</table>

SDE R-3

EECP 2(R)
Executive Engineer,
C. P. Division No. 2(R)
Chandigarh.

SEC-II
Superintending Engineer,
Construction Circle-II,
Chandigarh

Annexure-I P1

(Pl. Provide Following Details Water Body-Sukhna Lake)

1	Location details of the Water Body (Address with GPS location)	:	Latitude – 30^{0}44'50.65"N Longitude- 076^{0}48'44.19"E
2	Details of Area and Dimensions of the Water Body	:	**Area – 493.00 acres** Length – 1.52 Kms Width - 1.49 Kms
3	Water Depth (in m) (During monsoon and non-monsoon period)	:	Monsoon – 3.2 mtrs. Non-Monsoon- 1.83 mtrs.
4	Ownership of the water body	:	Chandigarh Administration, Chandigarh
5	Allocated Unique Identification Number (UIN)	:	Latitude – 30^{0}44'50.65"N Longitude- 076^{0}48'44.19"E
6	Details on Habitat (Surrounding Areas/towns with population and no. of industries in the surrounding area /industrial estates in the catchment of pond or lake)	:	Chandigarh (Population - 10,55,450 as per census of 2011). No industrial estates surrounding Lake in Chandigarh.
7	Details on inflow/outflow, evaporation, flooding frequency, magnitude of flow into the water body	:	Inflow – Kansal and Saketri Choe Outflow – Sukhna Choe Evaporation – 5.19mm per day
8	Major Plant and Animal communities present in the water body	:	Attached as per **Annexure –II (Page-3)**
9	Designated Use of Pond or Lake(Drinking/Irrigation/Aqua Culture/Tourism/ Protected Bio-diversity	:	Tourism
10	Major Drains outfall into Water Body	:	Sukhna Choe
11	Physical condition of the water Body	:	Good
12	Water Quality of Water Body	:	pH-7.4, Temperature-26°C, Turbidity-32 NTU; BOD- 1.1 mg/l, COD- 8 mg/l, DO – 10 mg/l; Heavy Metals- Arsenic BDL(MDL 0.005) mg/l, Cadmium – BDL(MDL0.001) mg/l, Copper - BDL(MDL 0.005) mg/l, Lead - BDL(MDL 0.005) mg/l, Nickel - BDL(MDL 0.005) mg/l, Zinc – 0.005 mg/l, Mercury - BDL(MDL 0.0005) mg/l, Iron – 0.04 mg/l, Chromium- BDL(MDL 0.005) mg/l **(As per the report of CPCC for the month of April 2020)**

11	Proposed Action Plans with action-wise implementing agency, estimated cost and timelines for completion						
	Proposed Action Plan	**Implementing Agency**	**Estimated Cost**	**Timeline for completion**			
	Removal of Lotus, being repetitive process.	**Chandigarh Engineering Department**	**Approximately Rs. 8 lacs to 10 lacs per year**	**09 months**			
12	Status of Sewage Management in the Catchment area	:	Total sewage inflow into the water body (in MLD)	Existing Sewage Treatment Capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Sewage Treatment Capacity (in MLD)	Implementing Agency, Estimated Cost and Time lines for completion
			---------N.A.---------					

13	Status of Industrial Effluent Management in the Catchment area	:	Total Industrial Effluent Inflow into the waterbody (in MLD)	Existing Industrial Effluent Treatment Capacity (both captive and CETPs) (in MLD)	Gap in Industrial Effluent Treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Treatment Capacity (in MLD)	Implementing Agency, Estimated Cost and Time lines for completion
					--------N.A.---------			
14	Waste Management in the Catchment area of water body	:	Type of waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal Facilities and Capacity in the catchment area (in TPD)	Gap in Treatment and Disposal of Wastein the catchment area (in TPD)	Proposed No. of Facilities and their (in TPD)	Implementing Agency, Estimated Cost and Time lines for completion
			MSW					
			HW					
			BMW					
			C & D					
			Plastic					
			--------N.A.---------					
15	Additional Measures (Pl. indicate action-wise implementing agency, estimated cost and the timelines for completion)		I & D of Sewage/Industrial effluent from drains to the nearby treatment or upcoming facilities; Restoration of natural drains: Silt control measures in natural drains contributing to inflow; Inflow and outflow flood control provisions (with sluice gates as well as constructed wetlands on u/s): Strengthening of Earthen embankment surrounding the pond or lake with stone revetment or pitching); In-situ measures (like desilting, de-weeding, surface aeration, floating adoption of biological treatment options); Buffer Zone and Development of Bio-diversity Park; Recreational Provision, Training and Awareness Programme; Public Participation for Cleaning of surroundings, any other actions ----------N.A.----------					

SDE R-3

EECP-2(R)
Executive Engineer,
C. P. Division No. 2(R)
Chandigarh.

SEC-II
Superintending Engineer,
Construction Circle-II,
Chandigarh

MAJOR ANIMAL COMMUNITES & PLANT SPICES

(A) The man-made lake is located on the foothills of the Shivalik mountain range and thousand of migratory birds such as Bar-headed Geese, Northern Pintail, Ruddy Shelduck, Northern Shoveller, Mallard, Tufted Duck & Common Pochard etc. come here for wintering every year.

(B) Sukhna Wetland is having :-

i) Plant species such as vegetation type which includes free floating macrophytes like *Ipomoea aquatica, Eichhorniacrassipes*and emergent like *Justicia adhatoda, Saccharum bengalense, Saccharumspontaneum, Phragmites sps, Cyperusniveus,Cyperusrotundis, Typha species*etc. Other flora includes *Cynadondactylon, Dendrocalamusstrictus.*

ii) The faunal diversity in the natural marshes of community reserve include mammals like *Rusa unicolor, Sus scrofa, Herpestesedwardsi,Pteropusmedius etc.*, migratory waterbirds like *Aythyafarina, Tadornaferruginea, Aythyanyroca, Anas acuta, Anas querquedula, Platalealeucorodia, Dendrocygnajavanica, Sarkidiornismelanotos, Anas penelope, Anas platyrhynchos, Aegypiusmonachus, Gyps himalayensis, Aquila nipalensisetc.*, resident birds like *Priniacinereocapilla, Gallinulachloropus, Porphyriopoliocephalus, Hydrophasianuschirurgus, Dupetorflavicollis, Ixobrychuscinnamomeus, Anas poecilorhyncha, Neophron percnopterusamphibians and reptiles like Euphlyctiscyanophlyctis, Hoplobatrachustigerinus, Bufomelanostictus, Varanus bengalensis, Python molrus, Bungarus caeruleus, Daboia russelii, Najanaja, Xenochrophis piscator and fishes like Gadusiachapra, Labeorohita,Catlacatla, Cyprinus carpio, Cirrhinus cirrhosis, Labeorohita*and *Hypophthalmichthys molitrix etc.*

iii) Species of conservation like *Rusa unicolor, Aythyafarina, Anhinga melanogaster, Aythyanyroca, Priniacinereocapilla,* Aegypiusmonachus, *Neophron percnopterus, Gyps himalayensis, Aquila nipalensisPython molrusand Cirrhinus cirrhosis.* [Near Threatened – 5, Vulnerable - 4, Endangered - 2 and Critically Endangered - 0].

iv) Plant invasive alien species such as *Eichhorniacrassipes, Cannabis sativa sativa, Parthenium hysterophorus.*

v) Major animal invasive aliens species such as *Cyprinus carpio*and *Hypophthalmichthys molitrix.*

From

The Executive Engineer,
Project P.H. Division No.3,
Chandigarh

To

The Commissioner,
Municipal Corporation,
Sector-17, Chandigarh.

Memo No. 7843 Dated 28/8/2020

Subject : Compliance of the order dated 01.06.2020 in O.A. no.325 of 2015 in I.A. No.700 of 2019 and M.A. no.252 of 2019 in the matter of Lt. Col. Sarvadaman Singh Oberoi Vs Union of India and O.R.S. passed by Hon'ble National Green Tribunal, New Delhi. (Preparation and submission of action plan for restoration of water bodies).

Ref : Your Office Memo No. 6258 dated 04-08-2020 addressed to Chief Engineer –Cum- Special Secretary Chandigarh Administration, U.T. Chandigarh.

****

In this regard, it is submitted that the action plan for restoration of 04 nos. water bodies which falls outside red line in various villages is enclosed herewith on prescribed performa i.e. Village Dhanas, Khuda Jassu, Kaimbwala & Maloya for taking further necessary action please.

DA/As above

Executive Engineer,
Project P.H.Divn.No.3, Chandigarh

Endst No. ..... Dated .....

A copy is forwarded to the Superintending Engineer, Project P.H. Circle, Chandigarh for information w.r.t. his endst no. 7241-44 dt 20-08-2020.

DA/As above

Executive Engineer,
Project P.H.Divn.No.3, Chandigarh

Endst No. ..... Dated .....

A copy is forwarded to the Superintending Engineer, Construction Circle-II, Chandigarh for information.

DA/As above

Executive Engineer,
Project P.H.Divn.No.3, Chandigarh

Endst No. ..... Dated .....

A copy is forwarded to the Superintending Engineer, Municipal Corporation, P.H Circle, Chandigarh for information.

DA/As above

Executive Engineer,
Project P.H.Divn.No.3, Chandigarh

Endst No. ..... Dated .....

A copy is forwarded to the SDE W/S Sub Division No.6(Mtc), Chandigarh for information w.r.t. his Memo No.602 dated 27-08-2020.

DA/As above

Executive Engineer,
Project P.H.Divn.No.3, Chandigarh

Endst.No. Dated:

A copy is forwarded to the Chief Engineer-cum-Special Secy. (Engg.), Union Territory, for his kind information and necessary action please.

DA/As above

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh.

Endst.No. Dated:

A copy is forwarded to the Chief Engineer, Muncipal Corporation Chandigarh for his kind information and necessary action please. This is w.r.t to this office earlier memo no. 1163 dated 24.07.2020

DA/Nil

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh

Endst.No. Dated:

A copy is forwarded to the Superintending Engineer, Public Health, U.T., Chandigarh for information and necessary action.

DA/Nil

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh

Endst.No. Dated:

A copy is forwarded to the Superintending Engineer, Public Health, Municipal Corporation, Chandigarh for information and similar necessary action.

DA/Nil

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh

Endst.No. Dated:

A copy is forwarded to the Executive Engineer, C.P. Div. No.2, Chandigarh for information and necessary action. This is w.r.t. this office memo no. 2223 dated 27.07.2020

DA/Nil

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh

PROPOSED ACTION PLANS FOR RESTORATION OF PLLUTED WATER BODIES (LAKES AND PONDS) IN COMPLIANCE TO HON'BLE NGT ORDERS DATED 10.05.2019 & 25.02.2020 IN o. No. 325/2015

Sr.	Content									
1	Name of the State/ UT	:	Union Territory (U.T.) Chandigarh							
	Contact Details (Department Wise)	:	Name of the state/ UT Department	Name of the Nodal Officer	Contact Tel. No.	Mobile No.	E-mail			
			Chandigarh/ Engineering Department (Public Health Circle)	Sh. Sanjay Kumar Sahani	7508185448	7508185448	eeph3-chd@nic.in			
2	Information on water bodies such as lakes & ponds	:	Type of water body	Total no. of water bodies idenified	Ownership of identified water bodies		States On-Going Restroration water bodies with Financial Sup. From NRCD-MeJS/With resources of the State/ UT			
					Govt.	Private/ Industrial	Total No. of Water Bodies Sleceted for Restoration	Total No. Of Water Bodies Restored so far	Total No. Water Bodies presently under Restoratic	
			Lake	-	-	-	-	-	-	
			Ponds	4	Govt.	-	4	Nil	4	
3	Whether Water Bodies are Geo tagged / provided with Unique identification Number (UIN)	:	Yes / No							
4	Major Causes of Pollution in identified water bodies	:	Nil							
5	Other Problems Associated with the Identified Water Bodies	:	Weeding/ No Provision of inflow or out of control measures/ poor embankment.							
6	Water Quality Conpliance status of identified lakes, and ponds in the state/ UT.	:	Type of water body	No. of Identi	No. of Water Quality Monitoring Stations	No. of Water Bodies Complying to				
						Primary Water Quality Criteria for Bathing	Drinking Water Quality Criteria after conventional Treatment	Water Quality Criteria for Agriculture/ Fishing / and other criteria		
			Lakes	-	-	-	-	-		
			Ponds	4	Nil	-	-	yes		
7	Proposed Water Body-wise Action Plans restoration or prioritsed water bodies with time lines and implementing agencies.	:	Village Dhanas for 12 months. Village Maloya, Khuda Jassu, Kaimbwala for 6 months. Chandigarh Administration Chandigarh							
8	Any other relevant information	:								

Executive Engineer,
Project P.H. Divn No.-3,
Chandigarh

Superintending Engineer,
Public Health Circle,
U.T. Chandigarh

ED-2

1	Location Details of the water body (Adress with GPS Location)	Dhanas 30.7710,76.7536					
2	Details of Area and Dimension of the Water Body	2.18 Acre					
3	Water Depth (in m) (during monsoon and non- monsoos period)	During Monsoon 2.5 mtr and Non Monsoon 0 mtr.					
4	Ownership of the water body	Chandigarh Administration Chandigarh					
5	Allocated Unique identification number (UiN)	CHD/DH/WB/1					
6	Detail on Habitat (Surrounding Area/ Towns with Polulation and no. of Industries in the surrounding area/ industrial estates in the catchment of pond or late)	Residential Area with Population					
7	Details of inflow/ outflow, evaporation, flooding frequency, magnitude of flow into the water body.	Presently there is very little inflow of rain water. Out Flow is nil. Evaporate Yes, Flooding Frequency Nil, Magnitude of flow of into water body neglected.					
8	Major Plant and Animal Communities present in the water body.	Nil					
9	Designated use of pond or lake (Drinking / Irrigation/ Aqua culture / Tourism / protected Bio- diversity	Ground Water Recharge					
10	Major Drains outfall into water body.	Rain Water from surrounding area.					
11	Physical Condition of the water body	Not good, Need repair for restoration.					
12	Water Quality of water body (w.r.t. pH, Temperature, Turbidity, DOC, COD, DO, Salinity, Dissolved Gases: Dissolved on suspended Nutrients: Dissolved Organic Carbon Conductivity, Heavy Metals and Faecal Coliform)	The sample shall be got tested after restoration.					
13	Proposed Action Plans with Action - Wise Inplementing agency, estimated cost and timelines for completion.	Restoration time 12 months. The approximate expenditure involved to restoration abandoned water body is Rs. 10 Lacs.					
14	Status of sewage Management in the Catchment area	Total Sewage inflow into the water body (in MLD)	Existing sewage treatment capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed sewage Treatment capacity (in MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		NIL	In this village Nil as sewage of village already go to sewage treatment plant in Chandigarh.	Nil	Nil	Nil	Nil
15	Status of Industrial Effluent management in the catchment area.	Total Industrial Effluent inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (Both Captive and CETPs) (In MLD)	Gap In Industrial Effluent Treatment (In MLD)	Proposed No. of Treatment Facilities	Proposed Treatment capacity (In MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		Nil	Nil	Nil	Nil	Nil	Nil
16	Water Management in the catchment area of water body	Type of waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal facilities and capacity in the catchment area (in TPD)	Gap in treatment and disposal of wastein the catchment area (in TPD)	Proposed no. of facilities and their (in TPD)	Implementing agency, estimated cost and time line for completion.
		Municipal solid waste	Negligible	NIL	NIL	NIL	NIL

		Hazardous waste	NIL	NIL	NIL	NIL	NIL
		Biomedical waste	Nil	NIL	NIL	NIL	NIL
		Construction and demolition waste	Negligible	NIL	NIL	NIL	NIL
		Plastic	Negligible	NIL	NIL	NIL	NIL
17	Additional measures (Pl. indicate action wise inplementing agnecy, estimated cost and the timelines for completion) I&D of sewage / industrial effluent from drains to the nearby treatment or upcoming facilities: Restoration of natural drains: slit control measures in natural drains contributing to inflow, inflow and outflow flood control provision (with sluice gates as well as constructed wetlands on u/s) Strengthening of Earthen emankment surround the pond or lake with stone revetment or pitching): In-situ measures (like deailting, de weeding, surface, aeration, floating adoption of biological treatment options): Buffer Zone and Development of Bio- diversity park: Recreational Provision, Training and awareness programme, public participation for cleaning of surroundings, and other actions.	De-Weeding, desilting of abandoned pond, repairing / strengthening embankment surrouding, connections of storm water drains to accumulate rain water in pond. Implementing Agency --- Chandigarh/ Engineering Department Approximate Expenditure - Rs. 10 Lacs					

Executive Engineer,
Project P.H. Divn No.-3,
Chandigarh

Superintending Engineer,
Public Health Circle,
U.T. Chandigarh

ED-3

1.	Location Details of the water body (Adress with GPS Location)	Kaimbwala 30.757,76.822
2	Details of Area and Dimension of the Water Body	1.29 Acre
3	Water Depth (in m) (during monsoon and non- monsoos period)	During Monsoon 2.5 mtr and Non Monsoon 0 mtr.
4	Ownership of the water body	Chandigarh Administration Chandigarh
5	Allocated Unique identification number (UIN)	CHD/KB/WB/1
6	Detail on Habitat (Surrounding Area/ Towns with Polulation and no. of Industries in the surrounding area/ industrial estates in the catchment of pond or late)	Residential Area with Population
7	Details of inflow/ outflow, evaporation, flooding frequency, magnitude of flow into the water body.	Presently there is very little inflow of rain water. Out Flow is nil. Evaporate Yes, Flooding Frequency Nil, Magnitude of flow of into water body neglected.
8	Major Plant and Animal Communities present in the water body.	Nil
9	Designated use of pond or lake (Drinking / Irrigation/ Aqua culture / Tourism / protected Bio- diversity.	Ground Water Recharge
10	Major Drains outfall into water body.	Rain Water from surrounding area.
11	Physical Condition of the water body	Good, Need some minor repair for restoration.
12	Water Quality of water body (w.r.t. pH, Temperature, Turbidity, DOC, COD, DO, Salinity, Dissolved Gases: Dissolved on suspended Nutrients: Dissolved Organic Carbon Conductivity, Heavy Metals and Faecal Coliform)	The sample shall be got tested after restoration.
13	Proposed Action Plans with Action -Wise Inplementing agency, estimated cost and timelines for completion.	Restoration time 06 months. The approximate expenditure involved to restoration abandoned water body is Rs. 2 Lacs.

14	Status of sewage Management in the Catchment area	Total Sewage inflow into the water body (in MLD)	Existing sewage treatment capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed sewage Treatment capacity (in MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		NiL	In this village Nil as sewage of village already go to sewage treatment please in Chandigarh.	Nil	Nil	Nil	Nil

15	Status of Industrial Effluent management in the catchment area.	Total Industrial Effluent inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (Both Captive and CETPs) (In MLD)	Gap In Industrial Effluent Treatment (In MLD)	Proposed No. of Treatment Facilities	Proposed Treatment capacity (In MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		Nil	Nil	Nil	Nil	Nil	Nil

16	Water Management in the catchment area of water body	Type of waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal facilities and capacity in the catchment area (in TPD)	Gap in treatment and disposal of wastein the catchment area (in TPD)	Proposed no. of facilities and their (in TPD)	Implementing agency, estimated cost and time line for completion.
		Municipal solid waste	Negligible	NIL	NIL	NIL	NIL
		Hazardous waste	NIL	NIL	NIL	NIL	NIL
		Biomedical waste	Nil	NIL	NIL	NIL	NIL
		Construction and demolition waste	Negligible	NIL	NIL	NIL	NIL
		Plastic	Negligible	NIL	NIL	NIL	NIL
17	Additional measures (Pl. indicate action wise inplementing agnecy, estimated cost and the timelines for completion) I&D of sewage / industrial effluent from drains to the nearby treatment or upcoming facilities: Restoration of natural drains: slit control measures in natural drains contributing to inflow, inflow and outflow flood control provision (with sluice gates as well as constructed wetlands on u/s) Strengthening of Earthen emankment surround the pond or lake with stone revetment or pitching): In-situ measures (like deailting, de weeding, surface, aeration, floating adoption of biological treatment options): Buffer Zone and Development of Bio-diversity park: Recreational Provision, Training and awareness programme, public participation for cleaning of surroundings, and other actions.	De-Weeding, desilting of abandoned pond, repairing / strengthening embankment surrouding, connections of storm water drains to accumulate rain water in pond. Implementing Agency --- Chandigarh/ Engineering Department Approximate Expenditure - Rs. 2 Lacs					

Executive Engineer,
Project P.H. Divn No.3,
Chandigarh

Superintending Engineer,
Public Health Circle,
U.T. Chandigarh

ED-4

1	Location Details of the water body (Adress with GPS Location)	Khuda Jassu 30.774,76.772
2	Details of Area and Dimension of the Water Body	0.5 Acre
3	Water Depth (in m) (during monsoon and non- monsoos period)	During Monsoon 2.5 mtr and Non Monsoon 1 mtr.
4	Ownership of the water body	Chandigarh Administration Chandigarh
5	Allocated Unique identification number (UIN)	CHD/KJ/WB/1
6	Detail on Habitat (Surrounding Area/ Towns with Polulation and no. of Industries in the surrounding area/ industrial estates in the catchment of pond or late)	Residential Area with Population
7	Details of inflow/ outflow, evaporation, flooding frequency, magnitude of flow into the water body.	Presently there is very little inflow of rain water. Out Flow is nil. Evaporate Yes, Flooding Frequency Nil, Magnitude of flow of into water body neglected.
8	Major Plant and Animal Communities present in the water body.	Nil
9	Designated use of pond or lake (Drinking / Irrigation/ Aqua culture / Tourism / protected Bio- diversity.	Ground Water Recharge
10	Major Drains outfall into water body.	Rain Water from surrounding area.
11	Physical Condition of the water body	Good, Need to be minor repair for restoration.
12	Water Quality of water body (w.r.t. pH, Temperature, Turbidity, DOC, COD, DO, Salinity, Dissolved Gases: Dissolved on suspended Nutrients: Dissolved Organic Carbon Conductivity, Heavy Metals and Faecal Coliform)	The sample shall be got tested after restoration.
13	Proposed Action Plans with Action -Wise Inplementing agency, estimated cost and timelines for completion.	Restoration time 6 months. The approximate expenditure involved to restoration abandoned water body is Rs. 2 Lacs.

14	Status of sewage Management in the Catchment area	Total Sewage inflow into the water body (in MLD)	Existing sewage treatment capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed sewage Treatment capacity (in MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		NIL	In this village Nil as sewage of village already go to sewage treatment please in Chandigarh.	Nil	Nil	Nil	Nil

15	Status of Industrial Effluent management in the catchment area.	Total Industrial Effluent inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (Both Captive and CETPs) (In MLD)	Gap In Industrial Effluent Treatment (In MLD)	Proposed No. of Treatment Facilities	Proposed Treatment capacity (In MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		Nil	Nil	Nil	Nil	Nil	Nil

16	Water Management in the catchment area of water body	Type of waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal facilities and capacity in the catchment area (in TPD)	Gap in treatment and disposal of wastein the catchment area (in TPD)	Proposed no. of facilities and their (in TPD)	Implementing agency, estimated cost and time line for completion.
		Municipal solid waste	Negligible	NIL	NIL	NIL	NIL
		Hazardous waste	NIL	NIL	NIL	NIL	NIL
		Biomedical waste	Nil	NIL	NIL	NIL	NIL
		Construction and demolition waste	Negligible	NIL	NIL	NIL	NIL
		Plastic	Negligible	NIL	NIL	NIL	NIL
17	Additional measures (Pl. indicate action wise inplementing agnecy, estimated cost and the timelines for completion) I&D of sewage / industrial effluent from drains to the nearby treatment or upcoming facilities: Restoration of natural drains: slit control measures in natural drains contributing to inflow, inflow and outflow flood control provision (with sluice gates as well as constructed wetlands on u/s) Strengthening of Earthen emankment surround the pond or lake with stone revetment or pitching): In-situ measures (like deailting, de weeding, surface, aeration, floating adoption of biological treatment options): Buffer Zone and Development of Bio-diversity park: Recreational Provision, Training and awareness programme, public participation for cleaning of surroundings, and other actions.	De-Weeding, desilting of abandoned pond, repairing / strengthening embankment surrouding, connections of storm water drains to accumulate rain water in pond. Implementing Agency --- Chandigarh/ Engineering Department Approximate Expenditure - Rs. 2 Lacs					

Executive Engineer,
Project P.H. Diwn No.-3,
Chandigarh

Superintending Engineer,
Public Health Circle,
U.T. Chandigarh

ED-5

1	Location Details of the water body (Adress with GPS Location)	Maloya 30.751,76.718
2	Details of Area and Dimension of the Water Body	0.61 Acre
3	Water Depth (in m) (during monsoon and non- monsoos period)	During Monsoon 2.5 mtr and Non Monsoon 0.5 mtr (App).
4	Ownership of the water body	Chandigarh Administration Chandigarh
5	Allocated Unique identification number (UIN)	CHD/ML/WB/1
6	Detail on Habitat (Surrounding Area/ Towns with Poluiation and no. of Industries in the surrounding area/ industrial estates in the catchment of pond or late)	Residential Area with Population
7	Details of inflow/ outflow, evaporation, flooding frequency, magnitude of flow into the water body.	Presently there is very little inflow of rain water. Out Flow is nil. Evaporate Yes, Flooding Frequency Nil, Magnitude of flow of into water body neglected.
8	Major Plant and Animal Communities present in the water body.	Nil
9	Designated use of pond or lake (Drinking / irrigation/ Aqua culture / Tourism / protected Bio- diversity.	Ground Water Recharge
10	Major Drains outfall into water body.	Rain Water from surrounding area.
11	Physical Condition of the water body	Good, Need some minor repair for restoration.
12	Water Quality of water body (w.r.t. pH, Temperature, Turbidity, DOC, COD, DO, Salinity, Dissolved Gases: Dissolved on suspended Nutrients: Dissolved Organic Carbon Conductivity, Heavy Metals and Faecal Coliform)	The sample shall be got tested after restoration.
13	Proposed Action Plans with Action -Wise inplementing agency, estimated cost and timelines for completion.	Restoration time 06 months. The approximate expenditure involved to restoration abandoned water body is Rs. 2 Lacs.

14	Status of sewage Management in the Catchment area	Total Sewage inflow into the water body (in MLD)	Existing sewage treatment capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed sewage Treatment capacity (in MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		NIL	In this village Nil as sewage of village already go to sewage treatment please in Chandigarh.	Nil	Nil	Nil	Nil

15	Status of Industrial Effluent management in the catchment area.	Total Industrial Effluent inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (Both Captive and CETPs) (In MLD)	Gap In Industrial Effluent Treatment (In MLD)	Proposed No. of Treatment Facilities	Proposed Treatment capacity (In MLD)	Implementing Agency, Estimated Cost and time lines for completion.
		Nil	Nil	Nil	Nil	Nil	Nil

16	Water Management in the catchment area of water body	Type of waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal facilities and capacity in the catchment area (in TPD)	Gap in treatment and disposal of wastein the catchment area (in TPD)	Proposed no. of facilities and their (in TPD)	Implementing agency, estimated cost and time line for completion.
		Municipal solid waste	Negligible	NIL	NIL	NIL	NIL
		Hazardous waste	NIL	NIL	NIL	NIL	NIL
		Biomedical waste	Nil	NIL	NIL	NIL	NIL
		Construction and demolition waste	Negligible	NIL	NIL	NIL	NIL
		Plastic	Negligible	NIL	NIL	NIL	NIL
17	Additional measures (Pl. indicate action wise implementing agnecy, estimated cost and the timelines for completion) I&D of sewage / industrial effluent from drains to the nearby treatment or upcoming facilities: Restoration of natural drains: slit control measures in natural drains contributing to inflow, inflow and outflow flood control provision (with sluice gates as well as constructed wetlands on u/s) Strengthening of Earthen emankment surround the pond or lake with stone revetment or pitching): In-situ measures (like deailting, de weeding, surface, aeration, floating adoption of biological treatment options): Buffer Zone and Development of Bio-diversity park: Recreational Provision, Training and awareness programme, public participation for cleaning of surroundings, and other actions.	De-Weeding, desilting of abandoned pond, repairing / strengthening embankment surrouding, connections of storm water drains to accumulate rain water in pond. Implementing Agency --- Chandigarh/ Engineering Department Approximate Expenditure - Rs. 2 Lacs					

Executive Engineer,
Project P.H. Divn No.3,
Chandigarh

Superintending Engineer,
Public Health Circle,
U.T. Chandigarh

From

The Superintending Engineer,
Construction Circle-II, U.T.,
Chandigarh.

To

The Deputy Commissioner,
U.T., Chandigarh.

Memo No.A1/2020/ 12431
Dated, Chandigarh the, 18/08/20

Subject:- Preparation and submission of action plan for restoration of water bodies – Dhanas Lake, U.T., Chandigarh.

Enclosed please find herewith a copy of letter No.1348-49 dated 07.08.2020 received from the Deputy Conservator of Forests, Chandigarh Administration, Chandigarh addressed to the Chief Engineer-cum-S.S. (Engg.) U.T., Chandigarh with a copy to this office.

In this connection, it is intimated that the requisite data/details as per performa is attached at Annexure-A and Annexure1, 2, & 3 in respect of Department of Forest & Wildlife U.T., Chandigarh for Dhanas Lake situated in Patiala-ki-Rao Reserve Forest Area, for your kind information and necessary action please.

DA/As above.

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh

Endst. No.A1/2020/ Dated.

Copy of the above is forwarded to the followings for information :-

1. The Chief Engineer-cum-S.S. (Engg.) U.T., Chandigarh.
2. The Deputy Conservator of Forests, Chandigarh Administration w.r.t. his letter endst.No.FOR/2020/1349 dated 07.08.2020.

DA/Nil.

Superintending Engineer,
Construction Circle-II,
U.T., Chandigarh

DEPARTMENT OF FORESTS & WILDLIFE
CHANDIGARH ADMINISTRATION

Off: Paryavaran Bhawan Building [2nd Floor], Sector-19B, Madhya Marg, Chandigarh-160019
E-mail Address: forestchandigarh@gmail.com Tel 0172-2700284

No. Dated:

To

1. The Chief Engineer-cum-Special Secy. (Engg), UT, Chandigarh.
2. The Chief Engineer, Municipal Corporation, UT, Chandigarh.

6/20
13/8/20
AI

Subject: **Preparation and submission of action plan for restoration of water bodies- Dhanas Lake, UT Chandigarh.**

Sir,

In reference to this office Memo no. 1166 & 1169 dated 24.07.2020 received from the Superintendent Engineer, Construction Circle-II, UT, Chandigarh, on the subject cited above.

In this connection, it is intimated that the requisite data/details as per performa is attached at **Annexure-A** and **Annexure-1, 2 & 3** in respect of Department of Forests & Wildlife, UT Chandigarh for **Dhanas Lake** situated in Patiala-ki-Rao Reserve Forest Area, for your kind information & necessary action please.

Yours faithfully,

Sd/-
(Dr. Abdul Qayum), IFS
Deputy Conservator of Forests
Chandigarh Administration

Encls:/ **Annexure-A, 1, 2 & 3**

Endst No. FCR/2020/1599 **Dated:** 07-8-2020

A copy is forwarded to the Superintending Engineer, Construction Circle-II, UT Chandigarh, for your information please.

Dr.

Dr. Abdul Qayum), IFS
Deputy Conservator of Forests
Chandigarh Administration

Encls: A/a

Annexure-A

Format for Submission of Information on Proposed Action Plans for "Restoration of Dhanas Lake"

<table>
<tr><th>S. No.</th><th>Content</th><th></th></tr>
<tr><td>1.</td><td>Name of the State/UT</td><td>Chandigarh</td></tr>
<tr><td></td><td>Contact Details (Department-wise)</td><td>
<table>
<tr><th>Name of State/UT Department</th><th>Name of the Nodal officer</th><th>Contact Tel. No.</th><th>Mobile No.</th><th>E.mail</th></tr>
<tr><td>Forest & Wildlife, Department, UT, Chandigarh</td><td>Dr. Abdul Qayum, IFS, Deputy Conservator of Forest</td><td>0172-2970419, 2700284</td><td>90139-04883</td><td>forestchandigarh@gmail.com</td></tr>
</table>
</td></tr>
<tr><td>2.</td><td>Information on water bodies such as Lakes & Ponds</td><td>
<table>
<tr><th rowspan="2">Type of Water Body</th><th rowspan="2">Total No. of Water Bodies Identified</th><th colspan="2">Ownership of Identified Water Bodies (Indicate No. of Water Bodies)</th><th colspan="3">Status On-going Restoration of Water Bodies with Financial Support from NRCD/MoJS/ with own recourses of the State/UT</th></tr>
<tr><th>Government</th><th>Private / Individual</th><th>Total No. of Water Bodies Selected for Restoration</th><th>Total No. of Bodies restored so far</th><th>Total No. of Water Bodies Presently under restoration</th></tr>
<tr><td>Lake</td><td>01</td><td>01</td><td>--</td><td>01</td><td>00</td><td>01</td></tr>
<tr><td>Ponds</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td></tr>
</table>
</td></tr>
<tr><td>3.</td><td>Whether water bodies are geo-tagged / provided with Unique Identification Number (UIN)</td><td>Yes
Latitude-30°45'59.50"N
Longitude-76°45'25.53"E</td></tr>
<tr><td>4.</td><td>Major causes of pollution in identified water bodies</td><td>Improper disposal of Sewage /Industria1 Effluent/Waste like Municipal Solid Waste/Hazardous Waste/Plastic Ste/Construction & Demolition Waste) (Pl. put whichever is correct)
(Improper disposal of Sewage Water)</td></tr>
<tr><td>5.</td><td>Other Problems Associated with the Identified Water Bodies</td><td>Silting/Weeding/Encroachments/No Provision of inflow or outflow control measures/ Poor Embankment/Poor Watershed Management in Catchment/No Adequate Buffer Zone/Any other)
(Silting & Weeding)</td></tr>
<tr><td>6.</td><td>Water Quality Compliance Status of identified lakes, and ponds in the State/UT</td><td>
<table>
<tr><th rowspan="2">Type of Water Body</th><th rowspan="2">Total No. of Water Bodies Identified</th><th rowspan="2">No. of Water Quality Monitoring Stations</th><th colspan="3">No. of Water Bodies complying to</th></tr>
<tr><th>Primary Water Quality Criteria for Bathing</th><th>Drinking Water Quality Criteria after Conventional Treatment</th><th>Water Quality Criteria for Agriculture/ Fishing/Any other criteria</th></tr>
<tr><td>Lakes</td><td>01</td><td>--N.A.--</td><td>--N.A.--</td><td>--N.A.--</td><td>--N.A.--</td></tr>
<tr><td>Ponds</td><td>--</td><td>--</td><td>--</td><td>--</td><td>--</td></tr>
</table>
</td></tr>
<tr><td>7.</td><td>Proposed Water Body-wise Action Plans for restoration of prioritized water bodies with timelines and implementing agencies</td><td>(Water body-wise details as per Annexure-1)</td></tr>
<tr><td>8.</td><td>Any other relevant information</td><td>Bio remediation is being done of wastewater & floating solar foundation installed for aeration of water & to add recreational value.</td></tr>
</table>

Annexure-1

"Following Details of Water Body of Dhanas Lake"

1.	Location details of the Water Body (Address with GPS location)	Latitude-30°45'59.50"N Longitude-76°45'25.53"E
2.	Details of Area and Dimensions of the Water Body	Area- 17 acres
3.	Water Depth (in m) (during monsoon and non-monsoon period)	Monsoon period- 7m Non- Monsoon period- 4m
4.	Ownership of the wafer body	Forest & Wildlife Department, UT, Chandigarh
5.	Allocated Unique Identification Number (UIN)	Latitude-30°45'59.50"N Longitude-76°45'25.53"E
6.	Details on Habitat Surrounding Areas/towns with population and no. of industries in the surrounding area /industrial estates in the catchment of pond or lake	Chandigarh (Population- 10,55,450 as per census of 2011) No industrial estates surrounding Lake in Chandigarh
7.	Details on inflow/outflow, Evaporation, flooding frequency, magnitude of flow into the water body	Inflow-Forest area & Post Graduate Institute of Medical Education & Research(PGIMER), Chandigarh
8.	Major Plant and Animal communities present in the water body	Attached as per **Annexure- 2**
9.	Designated Use of Pond or Lake(Drinking/Irrigation/Aq0a Culture/Tourism/ Protected Bio-diversity	Protected Bio-diversity
10.	Major Drains outfall into Water Body	Sewage discharge from PGIMER
11.	Physical condition of the water Body	Good
12.	Water Quality of Water Body	Report of (**2018 & 2020**) is Attached as per **Annexure- 3**
13.	Proposed Action Plans with action-wise implementing agency, estimated cost and timeline for completion	--N.A.--

14.	Status of Sewage Management in the Catchment area	Total sewage inflow into the water body (in MLD)	Existing Sewage Treatment Capacity (in MLD)	Gap in Sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Sewage Treatment Capacity (in MLD)	Implementing Agency, Estimated Cost and Time lines for completion
		Bio remediation is being done					
15.	Status of Industrial Effluent Management in the Catchment area	Total Industrial Effluent Inflow into the water body (in MLD)	Existing Industrial) Effluent Treatment Capacity (both captive and CETPs) (in MLD)	Gap in Industrial Effluent Treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed treatment Capacity (in M LD)	Implementing Agency, Estimated Cost and Time lines for completion
		----N.A.----					
16.	Waste Management in the Catchment Area of water body	Type of waste	Quantity Waste Generation in The catchment Area (TPD)	No. of Treatment and disposal Facilities and Capacity in the Catchment area (in TDA)	Gap in Treatment and Disposal of Waste in the Catchment area(in TPD)	Proposed No. of Facilities and their (in TPD)	Implementation Agency, Estimated Cost and Time lines for completion
		MSW HW BMW C&D Plastic	----N.A.----				
17	Additional Measures (Pl. indicate action-wise implementing agency, estimated cost and the timelines for completion)	I & D of Sewage/industrial effluent from drains to the nearby treatment or upcoming facilities; Restoration of natural drains: Silt control measures in natural drains contributing to inflow; Inflow and outflow' flood control provisions (with sluice gates as well as constructed wetlands on u/s): Strengthening of Earthen embankment surrounding the pond or lake with stone revetment or pitching); in-situ measures (like desilting, de-weeding, surface aeration, floating adoption of biological treatment options); Buffer Zone and Development of Bio-diversity Park; Recreational Provision, Training and Awareness Programmer; Public Participation for C leaning of surroundings any other actions. **The lake is situated within the Reserve Forest Area of Patiala-ki-Rao, Chandigarh. The impounded water which is basically used for recreation and Conservation of aquatic biodiversity.**					

Annexure-2

PLANTS/ TREES AROUND THE LAKE

S.No.	Plants/ Trees name	Scientific Name
1.	Shisham	*Dalbergia sissoo*
2.	Khair	*Acacia catechu*
3.	Paper mulbeery	*Broussonetia papyrifera*
4.	Arjuna	*Terminalia arjuna*
5.	Papri	*Dolichos lablab*
6.	Jungle Jalebi	*Pithecellobium dulce*
S.No.	**Animal Communities present in the water body**	
1.	Fish	
2.	Turtle	
3.	Spot billed bird	
4.	Common coot	

Dhanas Lake(2018)

Sr.No.	Parameters	Unit	Jan		Feb.		March		April	
			Location D1	Location D3	Location D1	Location D3	Location D1	Location D3	Location D1	Location D3
1	pH	-	7.4	8.5	8.1	8.9	8.6	8.4	7.7	7.3
2	DO	mg/l	9.7	13.6	10.9	15.0	12.1	9.7	7.0	4.1
3	COD	mg/l	78	122	75	77	62	82	26	54
4	BOD	mg/l	3	15	4	13	4	10	3	9
5	NH_3-N	mg/l	1.03	1.38	0.60	0.60	0.51	0.84	0.28	0.74
6	Phosphate	mg/l	0.18	0.13	0.06	0.10	0.07	0.07	0.04	0.03
7	Total Suspended Solid	mg/l	11	29	2	24	5	12	6	16

Location D1=Small lake

ion D3=Big lake

Annexure - 3

Results of Monitoring in & around Dhanas Lake

Date - 04.08.2020

DESCRIPTION	PARAMETERS						
	pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	TSS (mg/l)	NH_3-N (mg/l)	PO_4-P (mg/l)
Dhanas Lake (small)	7.50	9.09	4.8	8	21	1.02	0.05
Dhanas Lake (Big)	7.58	11.21	6.4	10	19	0.90	0.04
A (Starting point of water into forest area)	7.35	7.16	6.2	13	10	0.58	0.03
B (Around 500 m from Point A towards Lake)	7.31	7.16	1.5	6	4	0.48	0.07
C (Around 700 m from Point B towards Lake)	7.18	7.38	3.5	7	28	0.77	0.09
Before mixing into Dhanas Lake	7.12	5.82	7.6	54	270	0.71	0.05

PROPOSED ACTION PLANS FOR RESTORATION OF POLLUTED WATER BODIES (LAKES AI
PONDS)" IN COMPLIANCE TO HON'BLE NGT ORDERS DATED 10.05.2019 & 25.02.2020 IN O.
NO. 325/2015

Sr. No.	Content		
1.	Name of the State/UT	:	Union Territory (U.T.) Chandigarh
	Contact Details (Department-wise)	:	

Name of the State/UT Department	Name of the Nodal Officer	Contact Tel. No.	Mobile No.	E-mail
Municipal Corporation Chandigarh	Vijay Kumar Premi	9872511245	9872511245	Vijaypremi64@gmail.com

2.	Information on water bodies such as Lakes & Ponds	:

Type of Water Body	Total No. of Water Bodies Identified	Ownership of Identified Water Bodies (Indicate no. of Water Bodies)		States On-going restoration water bodies with financial sup from NRCD-MeJS/with resources of the State/UT		
		Govt.	Private / Industrial	Total No. of Water Bodies Selected for Restoration	Total No. of Water Bodies restored so far	Total No Water Bc presently under restoratio
Lakes	-	-	-	-	-	-
Ponds	3	Govt	-	3	nil	3

3	Whether water bodies are geo-tagged/provided with Unique Identification Number (UIN)	:	Yes/NO
4.	Major causes of pollution in identified water bodies	:	Improper disposal of Sewage/Industrial Effluent/Waste Like Muni Solid Waste/Hazardous Waste/Plastic Waste/Construction Demolition Waste) (Pl. Put √ whichever is correct)
5	Other problems Associated with the Identified Water Bodies	:	Silting/Weeding/Encroachments/No Provision of inflow or ou control measures/Poor Embankment/Poor Watershed Manageme Catchment/No Adequate Buffer Zone/Any other) (Pl. Put √ whichever is correct)
6	Water Quality Compliance Status of Identified Lakes, and ponds in the State/UT	:	

Type of Water Body	No. of identified water bodies	No. of water quality Monitoring Stations	No. of Water Bodies complying to		
			Primary Water Quality Criteria for Bathing	Drinking Water Quality Criteria after Conventional Treatment	Water qualit Criteria fc Agriculture/ Fishing/ an other criteria
Lakes	-	-	-	-	-
Ponds	3	nil	-	-	yes

7	Proposed Body-wise Action Plans restoration of prioritised water bodies with timelines and implementing agencies.	:	18 months), Municipal Corporation Chandigarh
8	Any Other relevant information	:	----------

Executive Engineer
M.C.P.H. No.4,
Chandigarh

Superintending Engineer
M.C.Public Health Circle
Chandigarh.

1	Location details of the Water Body (Address with GPS location)	Khuda Alisher, 30.774,76.809
2	Details of Area and Dimension of the Water Body	1.15 Acre
3	Water Depth (in m) (During monsoon and non-monsoon period)	During Monsoon 3.5 mtr and Non Monsoon 1 mtr
4	Ownership of the water body	Municipal Corporation Chandigarh
5	Allocated Unique Identification Number (UN)	MCC/KR/WB/1
6	Details on Habitat (Surrounding Area/Towns with population and no. of Industries in the surrounding area/industrial estates in the catchment of pond or lake)	Residential Area with population
7	Details on inflow/outflow, evaporation, flooding frequency, magnitude of flow into the water body	Presently there is very little inflow of rain water. Out flow is Nil. Evaporat Nil, Flooding Frequency-Nil, Magnitude of flow of into water body neglected.
8	Major Plant and Animal communities present in the water body.	Nil
9	Designated Use of Pond or Lake (Drinking/irrigation/Aqua Culture/Tourism/protected Bio-diversity.	Fishing/Ground water recharging/Recreation
10	Major Drains outfall into Water Body	Rain water from surrounding area
11	Physical condition of the water body	Not good, Need repair for restoration
12	Water quality of Water Body (w.r.t pH, Temperature, Turbidity, BOD, COD, DO, Salinity, Dissolved Gases; Dissolved on suspended Nutrients; Dissolved Organic Carbon Conductivity, Heavy Metals and Faecal Coliform)	The samples shall be got tested after restoration as presently it is dry.
11	Proposed Action Plans with action-wise implementing agency, estimated cost and timelines for completion	Restoration time-18 months The approximate expenditure involved to rest abandoned water body is Rs.10 Lakh.

12 Status of Sewage Management in the Catchment area

Total Sewage inflow into the water body (in MLD)	Existing sewage treatment capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Sewage Treatment Capacity (in MLD)	Implementir Agency, Estimated Cost ar time lines f completion.
Nil	In this village Ni as sewage of village already go to Sewage treatment plant in Chandigarh	Nil	Nil	Nil	Nil

13 Status of Industrial Effluent Management in the catchment area

Total Industrial Effluent Inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (both captive and CETPs) (in MLD)	Gap in Industrial Effluent Treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Treatment Capacity (in MLD)	Implementir Agency Estimated Cost an time lines f completion.
Nil	Nil	Nil	Nil	Nil	Nil

14	Water Management in the Catchment Area of Water Body	Type of Waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal facilities and capacity in the catchment area (in TPD)	Gap in treatment and disposal of wastein the catchment area (in TPD)	Proposed No. of facilities and their (in TPD)	Implementin Agency, Estimated Cost an Time Line for completion
		MSW	Negligible	Nil	Nil	Nil	Nil
		HW	Nil	Nil	Nil	Nil	Nil
		BMW	Nil	Nil	Nil	Nil	Nil
		C&D	Negligible	Nil	Nil	Nil	Nil
		Plastic	Negligible	Nil	Nil	Nil	Nil
15	Additional Measures (Pl. indicate action wise implementing agency, estimated cost and the timelines for completion) I&D of Sewage/Industrial effluent from drains to the nearby treatment or upcoming facilities; Restoration of natural drains; Silt control measures in natural drains contributing to inflow; Inflow and outflow flood control provisions (with sluice gates as well as constructed wetlands on u/s): Strengthening of Earthen embankment surrounding the pond or lake with stone revetment or pitching): In-situ measures (like desilting, de-weeding, surface aeration, floating adoption of biological treatment options): Buffer Zone and Development of Bio-diversity Park; Recreational Provision, Training and Awareness Programme, Public Participation for cleaning of surroundings, any other actions	Desilting of abandoned pond, repairing/strengthening of embankm surrounding, connections of storm water drains to accumulate rain water in pond. Implementing Agency ---Municipal Corporation Chandigarh Approximate Expenditure—Rs 10 Lakh					

Executive Engineer
M.C.P.H. DivisionNo.4,
Chandigarh

Superintending Engineer
M.C. Public Health Circle
Chandigarh.

1	Location details of the Water Body (Address with GPS location)	Sarangpur 30.780, 76.772)
2	Details of Area and Dimension of the Water Body	0.54 Acre
3	Water Depth (in m) (During monsoon and non-monsoon period)	During Monsoon 3 mtr and Non Monsoon 1 mtr
4	Ownership of the water body	Municipal Corporation Chandigarh
5	Allocated Unique Identification Number (UN)	MCC/Pond/Sarangpur/1
6	Details on Habitat (Surrounding Area/Towns with population and no. of Industries in the surrounding area/industrial estates in the catchment of pond or late)	Residential Area with population
7	Details on inflow/outflow, evaporation, flooding frequency, magnitude of flow into the water body.	Presently there is very little inflow of rain water. Out flow is Nil. Evaporal Nil, Flooding Frequency-Nil, Magnitude of flow of into water body neglected
8	Major Plant and Animal communities present in the water body.	Grass is there and Animal Community is Nil
9	Designated Use of Pond or Lake (Drinking/irrigation/Aqua Culture/Tourism/protected Bio-diversity.	Fishing/Ground water recharging/Recreation
10	Major Drains outfall into Water Body	Rain water from surrounding area
11	Physical condition of the water body	Not good, Need repair for restoration
12	Water quality of Water Body (w.r.t pH, Temperature, Turbidity, BOD, COD, DO, Salinity, Dissolved Gases; Dissolved on suspended Nutrients; Dissolved Organic Carbon Conductivity, Heavy Metals and Faecal Coliform)	The samples shall be got tested after restoration as presently it is dry.
11	Proposed Action Plans with action-wise implementing agency, estimated cost and timelines for completion	Restoration time-18 months The approximate expenditure involved to rest abandoned water body is Rs.12 Lakh.

12	Status of Sewage Management in the Catchment area	Total Sewage inflow into the water body (in MLD)	Existing sewage treatment capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Sewage Treatment Capacity (in MLD)	Implementir Agency, Estimated Cost ar time lines f completion.
		Nil	In this village Nil as sewage of village already go to Sewage treatment plant in Chandigarh	Nil	Nil	Nil	Nil

13	Status of Industrial Effluent Management in the catchment area	Total Industrial Effluent Inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (both captive and CETPs) (in MLD)	Gap in Industrial Effluent Treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Treatment Capacity (in MLD)	Implementin Agency, Estimated Cost an time lines fc completion.
		Nil	Nil	Nil	Nil	Nil	Nil

14	Water Management in the Catchment Area of Water Body	Type of Waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal facilities and capacity in the catchment area (in TPD)	Gap in treatment and disposal of wastein the catchment area (in TPD)	Proposed No. of facilities and their (in TPD)	Impleme Agency, Estimate Cost Time for complet
		MSW	Negligible	Nil	Nil	Nil	Nil
		HW	Nil	Nil	Nil	Nil	Nil
		BMW	Nil	Nil	Nil	Nil	Nil
		C&D	Negligible	Nil	Nil	Nil	Nil
		Plastic	Negligible	Nil	Nil	Nil	Nil
15	Additional Measures (Pl. indicate action wise implementing agency, estimated cost and the timelines for completion) I&D of Sewage/Industrial effluent from drains to the nearby treatment or upcoming facilities; Restoration of natural drains; Silt control measures in natural drains contributing to inflow; Inflow and outflow flood control provisions (with sluice gates as well as constructed wetlands on u/s): Strengthening of Earthen embankment surrounding the pond or lake with stone revetment or pitching): In-situ measures (like desilting, de-weeding, surface aeration, floating adoption of biological treatment options): Buffer Zone and Development of Bio-diversity Park; Recreational Provision, Training and Awareness Programme, Public Participation for cleaning of surroundings, any other actions	De-weeding, Desilting of abandoned pond, repairing/strengthenir embankment surrounding, connections of storm water drains to accur rain water in the pond Implementing Agency ---Municipal Corporation Chandigarh Approximate Expenditure—Rs. 12 Lakh					

Executive Engineer
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Chandigarh

Superintending Engineer
M.C. Public Health Circle
Chandigarh.

	Location details of the Water Body, Address with GPS location	Kaimbwala (30.756, 76.828)
2	Details of Area and Dimension of the Water Body	1.5 Acre
3	Water Depth (in m) (During monsoon and non-monsoon period)	During Monsoon 3 mtr and Non Monsoon 1 mtr
4	Ownership of the water body	Municipal Corporation Chandigarh
5	Allocated Unique Identification Number (UN)	MCC/Pond/Kaimbwala /1
6	Details on Habitat Surrounding Area Towns with population and no. of industries in the surrounding area/industrial estates in the catchment of pond or lake)	Residential Area with population
7	Details on inflow/outflow, evaporation, flooding frequency, magnitude of flow into the water body	Presently there is very little inflow of rain water. Out flow is Nil. Evapora Nil, Flooding Frequency-Nil, Magnitude of flow of into water body neglecte
8	Major Plant and Animal communities present in the water body.	Grass is there and Animal Community is Nil
9	Designated Use of Pond or Lake (Drinking/irrigation/Aqua Culture/Tourism/protected Bio-diversity.	Fishing/Ground water recharging/Recreation
10	Major Drains outfall into Water Body	Rain water from surrouncing area
11	Physical condition of the water body	Not good. Need repair for restoration
12	Water quality of Water Body (wrt pH, Temperature, Turbidity, BOD, COD, DO, Salinity, Dissolved Gases; Dissolved on suspended Nutrients; Dissolved Organic Carbon Conductivity, Heavy Metals and Faecal Coliform)	The samples shall be got tested after restoration as presently it is dry.
11	Proposed Action Plans with action-wise implementing agency, estimated cost and timelines for completion	Restoration time-18 months The approximate expenditure involved to res abandoned water body is Rs.12 Lakh.

12	Status of Sewage Management in the Catchment area	Total Sewage inflow into the water body (in MLD)	Existing sewage treatment capacity (in MLD)	Gap in sewage treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Sewage Treatment Capacity (in MLD)	Implementi Agency, Estimated Cost a time lines f completion.
		Nil	In this village Nil as sewage of village already go to Sewage treatment plant in Chandigarh	Nil	Nil	Nil	Nil

13	Status of Industrial Effluent Management in the catchment area	Total Industrial Effluent Inflow into the water body (in MLD)	Existing Industrial Effluent Treatment Capacity (both captive and CETPs) (in MLD)	Gap in Industrial Effluent Treatment (in MLD)	Proposed No. of Treatment Facilities	Proposed Treatment Capacity (in MLD)	Implementir Agency, Estimated Cost ar time lines f completion.
		Nil	Nil	Nil	Nil	Nil	Nil

14	Water Management in the Catchment Area of Water Body	Type of Waste	Quantity of Waste Generation in the catchment area (TPD)	No. of Treatment and disposal facilities and capacity in the catchment area (in TPD)	Gap in treatment and disposal of wastein the catchment area (in TPD)	Proposed No. of facilities and their (in TPD)	Implemer Agency, Estimate Cost Time L for completic
		MSW	Negligible	Nil	Nil	Nil	Nil
		HW	Nil	Nil	Nil	Nil	Nil
		BMW	Nil	Nil	Nil	Nil	Nil
		C&D	Negligible	Nil	Nil	Nil	Nil
		Plastic	Negligible	Nil	Nil	Nil	Nil
15	Additional Measures (Pl. indicate action wise implementing agency, estimated cost and the timelines for completion) I&D of Sewage/Industrial effluent from drains to the nearby treatment or upcoming facilities; Restoration of natural drains; Silt control measures in natural drains contributing to inflow; Inflow and outflow flood control provisions (with sluice gates as well as constructed wetlands on u/s): Strengthening of Earthen embankment surrounding the pond or lake with stone revetment or pitching): In-situ measures (like desilting, de-weeding, surface aeration, floating adoption of biological treatment options): Buffer Zone and Development of Bio-diversity Park; Recreational Provision, Training and Awareness Programme, Public Participation for cleaning of surroundings, any other actions	De-weeding, Desilting of abandoned pond, repairing/strengthenir embankment surrounding, connections of storm water drains to accun rain water in the pond. Implementing Agency ---Municipal Corporation Chandigarh Approximate Expenditure—Rs. 12 Lakh					

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