

BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 490/2022

IN THE MATTER OF:

SUNAINA

... APPLICANT

VERSUS

STATE OF PUNJAB & ORS.

... RESPONDENTS

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(Daljit Singh)

Place: Chandigarh

SUBMITTED

BY:

Dated: 06.01.2023

SH. DALJIT SINGH, ENGINEER-IN-
CHIEF CUM TECHNICAL ADVISOR,
PUNJAB WATER SUPPLY AND
SEWERAGE BOARD, PLOT NO. 1B,
MADHYA MARG, SECTOR 27,
CHANDIGARH


(Daljit Singh)

BEFORE THE NATIONAL GREEN TRIBUNAL

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... RESPONDENTS

REPLY ON BEHALF OF RESPONDENT NO. 6
BY WAY OF AFFIDAVIT OF SH. DALJIT
SINGH, ENGINEER-IN-CHIEF CUM
TECHNICAL ADVISOR, PUNJAB WATER
SUPPLY AND SEWERAGE BOARD, PLOT NO.
1B, MADHYA MARG, SECTOR 27,
CHANDIGARH.

RESPECTFULLY SHOWETH

I, the above named deponent, do hereby solemnly affirm and declare as
under:

PRELIMINARY SUBMISSIONS

1. That the Applicant has filed the present Original Application seeking, *inter-alia*, issuance of appropriate directions to the Respondents to ensure supply of potable and clean water to the residents of Zirakpur-Banur-Rajpura belt and to

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(Daljit Singh)



draw comprehensive plan to find out the root causes of contamination of water and suggest comprehensive remedial measures.

2. That the answering Respondent herein is handling the operation and maintenance ("O&M") of the water supply and sewerage falling within the municipal limits of Rajpura town, on behalf of Municipal Council, Rajpura i.e. the Respondent No. 9 herein. Hence, the present reply pertains to the water supply and sewerage falling within the municipal limits of Rajpura town. O&M of Zirakpur and Banur towns is done by their respective Municipal Councils, who are also impleaded as Respondents in the present case.
3. That this Hon'ble Tribunal vide its order dated 08.07.2022 constituted a Joint Committee comprising of the representative of State PCB; Principal Secretary, Department of Health, Government of Punjab, Punjab Water Supply and Sewerage Board and Deputy Commissioners, Patiala and Mohali and directed the same to submit factual and action taken report within two months.
4. That in compliance thereof, the Joint Committee submitted its report to this Hon'ble Tribunal on 07.10.2022. The relevant part of the said report, pertaining to the water supply and sewerage of Rajpura town is as follows:

4.0. Root Cause of Contamination identified by the Sub- Committee-

• Rajpura-No arrangement for disposal of rain water separately has been provided in the town and as a result of which the road gullies are being connected to sewerage system. Water supply network is around 40 years old and at same depth as of the road gullies and most of the connections in pipelines are broken as a result of which contamination of fresh drinking water is happening. Capacity of STP needs to be augmented as a result of which



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mixing of waste-water with fresh water happens in case of blockage of sewerage system.

5.0 Status of interim remedial measures to reduce pollution loads being followed, if any.

Rajpura - A project for replacing the old pipeline network and household connections has been prepared under AMRUT Scheme with an estimate amounting to Rs 178 crores

6.0. Conclusions:

Based on the inspection and sampling carried by the sub-Committee, the conclusion drawn w.r.t. the quality of drinking water being supplied in Zirakpur-Banur-Rajpura belt is as follows:

- 1. Turbidity was found to be 5.61 NTU from sample of water collected from Tap Water, #26 Shashi Jindal, Harkrishan Enclave, Baltana, Zirakpur is beyond the permissible limits.*
- 2. Parameter Total coliform and E-coli was found to be 150 MPN/100ml and 43 MPN/100 ml respectively from Tap Water, Ratan Ram Ward no.3, Mohalla Kattican, Banur is beyond the permissible limits.*
- 3. Total coliforms and E-coli was found to be 1100 MPN/100ml and 150 MPN/100 ml from sample of water collected from Canal, Treated water, MC Office Rajpura is beyond the permissible limits.*
- 4. Total coliforms and E-coli was found to be 75 MPN/100ml and 23 MPN/100 ml from sample of water collected from Canal Treated Water, 5/3 Dashmesh Colony Rajpura is beyond the permissible limits.*
- 5. Total coliforms and E-coli was found to be 1100 MPN/100ml and 150 MPN/100 ml from sample of water collected from Canal treated water, Saini Sweet, Rajpura is beyond the permissible limits.*
- 6. Fluoride and Sulphate was found to be 3.33 mg/l and 942.83 mg/l respectively from Tubewell, Shamdo, Rajpura is beyond the permissible limits.*



(Daljit Singh)

7. Parameter Fluoride and Sulphate was found to be 3.4 mg/l and 938.5 mg/l respectively from Tap Water, Swaran Singh Shamdo, Rajpura is beyond the permissible limits.

8. Parameter Fluoride and Sulphate was found to be 3.37 mg/l and 944.4 mg/l respectively from Tap Water, Ajay Kumar Shamdo Camp, Rajpura is beyond the permissible limits.

Out of 35 locations from where sample were drawn, samples from 8 locations have failed to meet permissible limits as per IS 10500: 2012.

Presence of E-coli and F-coli in the water samples shows that there is mixing of sewer in the drinking water supply. Presence of turbidity beyond the permissible limits in the water sample can be a result of presence of clay, silt, very tiny inorganic and organic matter, algae, dissolved colored organic compounds, and other microscopic organisms etc in the water sample. Presence of Fluoride beyond the permissible limits can be as a result of runoff from weathering of fluoride-containing rocks & soils, leaching from soil into groundwater, Atmospheric deposition of fluoride-containing emissions from coal-fired power plants and other industrial sources. Presence of sulphate beyond the permissible limits in the water can be due to water passing through soils and rocks containing sulphate minerals, through waste and industrial discharge.

7.0 Recommendations:

- MC, Banur, Zirakpur and Rajpura shall ensure to supply potable water complying with the parameters as prescribed in IS:10500:2012, to the residents.
- MC, Banur, Zirakpur and Rajpura shall identify all the water supply pipelines which are leaking and either replace or provide new water supply line.



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(Daljit Singh)

5. That in addition to the recommendations of the aforesaid Joint Committee, the answering Respondent herein is suggesting additional remedial measures vide document annexed herewith as **ANNEXURE R/6-1**.
6. That in so far as the action taken by the answering Respondent for resolving the issue of water contamination of Rajpura town is concerned, as duly noted in the aforesaid report of the Joint Committee, the answering Respondent herein has prepared an estimate amounting to Rs. 177.54 Cr under AMRUT 2.0 Scheme for resolving the said problem. A copy of the said estimate dated 10.05.2022 is annexed herewith as **ANNEXURE R/6-2**.
7. That after the preparation of the said estimate, the Technical Sub-Committee (“TSC”) of the State herein, in its meeting dated 27.12.2022, has recommended for consideration before the State Level Technical Committee (“SLTC”) a project costing Rs. 31.12 Crores out of this estimate of Rs.177.54 Cr. for Rajpura town, which involves, *inter-alia*, replacement of 35 kms of pipeline in the said town. A copy of the minutes of the said TSC meeting dated 27.12.2022 is annexed herewith as **ANNEXURE R/6-3**.
8. That in addition thereto, as and when the problem of water contamination at specific places in Rajpura town comes to the notice of the answering Respondent herein, prompt action for resolving the said issue is taken by the answering Respondent by adopting suitable measures.
9. That it is further clarified that the water quality of Rajpura town is checked regularly by the answering Respondent.



(Darljit Singh)

10. That it is thus clear that the answering Respondent herein has made and is making all *bona fide* efforts to resolve the issue of water contamination in Rajpura town, both in the short-term and long-term basis. The answering Respondent is further in compliance of the enactments specified in Schedule-I of the National Green Tribunal Act, 2010. In light of this, the present OA may kindly be dismissed against the answering Respondent herein.

PARA-WISE REPLY

1. That the contents of the para 1 of the OA need no reply, being matter of record.
2. That in reply to the contents of para 2 of the OA, the detailed position qua Rajpura town has already been explained in the preliminary submissions above, whose contents are hereby reiterated.
3. That in reply to the content of para 3 of the OA, it is submitted that the area mentioned by the Applicant in this para i.e. Deha Basti is a slum area, which had no approved water supply and sewerage facilities. The answering Respondent herein, on receipt of funds from the office of the Deputy Commissioner, Patiala laid down new water supply lines along with house connections in the said area, which stand commissioned as of date. The Action Taken Report ("ATR") dated 05.01.2023 in this regard is annexed herewith as **ANNEXURE-R/6-4**. Furthermore, samples of the water supply in Deha Basti were taken on dated 18.11.2022, 28.11.2022, 10.12.2022, 16.12.2022, 24.12.2022 and 28.12.2022, which have been found to be satisfactory. A copy of the report in this regard is annexed herewith as **ANNEXURE-R/6-5**.



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(Daljit Singh)

4. That the contents of para 4 of the OA do not relate with the answering Respondent herein.
5. That the contents of para 5 of the OA do not relate with the answering Respondent herein.
6. That the contents of para 6 of the OA do not relate with the answering Respondent herein.
7. That the contents of para 7 of the OA need no reply, being matter of record.
8. That in reply to the contents of para 8 of the OA, it is admitted that the answering Respondent herein received the Demand Notice dated 20.06.2022. However, it is hereby denied that the answering Respondent took no action on the said Demand Notice. The detailed position qua Rajpura town has already been explained in the preliminary submissions above as well as in Para-3 above whose contents are hereby reiterated.
9. That in reply to the contents of para 9 of the OA, it is denied that the answering Respondent is negligent in performing its duty. The detailed position qua Rajpura town has already been explained in the preliminary submissions as well as in Para-3 above, whose contents are hereby reiterated.
10. That in reply to the contents of para 10 of the OA, it is hereby reiterated that the answering Respondent has made and is making all *bona fide* efforts to resolve the problem of water contamination in Rajpura town.
11. That the contents of para 11 of the OA are admitted.
12. That in reply to the contents of para 12 of the OA, it is submitted that in light of the detailed position as explained in the preliminary submissions and the paras



(Daljit Singh)

above, the present OA may kindly be dismissed against the answering Respondent herein.

J.S. 06/11/2023
(Daljit Singh)
Engineer-in-Chief
-cum-
Technical Advisor,
Pb. W/S & Sew. Board,
Chandigarh
DEPONENT

Chandigarh
Dated:

(On behalf of Respondent No. 6)

Verification:

Verified that the contents of the above reply by way of affidavit are true to my knowledge and belief, based on the official record. No part of it is false and nothing material has been concealed therein.

J.S. 06/11/2023
(Daljit Singh)
Engineer-in-Chief
-cum-
Technical Advisor,
Pb. W/S & Sew. Board,
Chandigarh
DEPONENT

Chandigarh
Dated

(On behalf of Respondent No. 6)

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6/11/23



Subject:- The Original Application (O.A.) no. 490 of 2022 titled as Sunaina versus State of Punjab and others before National Green Tribunal, New Delhi, under the provision of the National Green Tribunal Act, 2010.

- The above original application was first time appeared before Hon'ble NGT on 08.07.2022, the case was filed by Advocate Ms. Sunaina for seeking the issuance of appropriate direction to respondents to ensure supply of potable and clean water to the residents of Zirakpur-Banur-Rajpura belt and to draw comprehensive plan to find out the root causes of contamination of water and suggest comprehensive remedial measures. Question was also raised relating to the environment arising out of the implementation of enactment of schedule-1 to NGT Act 2010.
- On the first hearing of this case on dated 08.07.2022. The Hon'ble National Green Tribunal ordered to constitute a joint committee comprising of representative of State PCB, Principal Secretary, Department of Health, Government of Punjab, PWSSB, DC Mohali & DC Patiala respectively, among which PPCB will act as Nodal Agency
- Accordingly, the committee was constituted under chairmanship of Additional Deputy Commissioner vide DC Mohali order no. DC/MHL/3552-53 dated 22.02.2022.
- After the submission of Joint District level committee report, the case was again heard on 10.10.2022 by Hon'ble NGT & NGT having discussions over the report of committee. The main crux of the orders in the above mentioned case and issue wise Action Taken Report is as under:-

3 (Para3.0) - Compliance of the directions of Hon'ble NGT.

A.	Constitution of Joint District level committee	The committee was constituted under the chairmanship of ADC (VD) vide DC Mohali order no. DC/MHL/3552-59 dt. 22.08.2022.
B.	Meeting of the Joint District Committee	The joint district level committee meeting was held on 30.08.2022 and 7 steps of action were devised for the compliance of the orders of Hon'ble NGT.
C.	Visit of Sub Committee to the water supply locations to verify the status	In compliance of NGT order dated 08.07.2022, and to follow the steps decided in meeting of Joint District level committee held on 30.08.2022, the committee visited the affected water supply locations at Zirakpur, Banur and Rajpura on 01.09.2022 and collected the water samples from these locations are as under: <ol style="list-style-type: none">1. Zirakpur area – 15 nos samples from different locations.2. Banur area- 10 nos samples from different locations.3. Rajpura area – 10 nos samples from different locations.

3 (Para 4.0) - Root cause of contamination identified by the Sub-committee:-

The sub-committee finds the following root causes of water contamination described as under:-

1. **Banur-** old water supply lines from ward no. 8 to ward no. 9 old bus stand have gone old as a result of which there is problem of leakage observed in this pipe line which is being **repaired by the MC Banur** as soon as the same is noticed.

2. **Rajpura-** There is no storm sewer in town, as a result of which the storm water road gullies are being connected with the sewerage system. The water supply network in the area of contamination is about 40 yrs old and at the same depth as of the road gullies, which is having broken house connection & pipes as a result of which contamination of fresh drinking water is happening.

3 (Para- 5)- Status of interim remedial measures:-

- (i) **Zirakpur:-** MC, Zirakpur has installed the chlorinators over all the tube-wells to control the presence of coliforms.
- (ii) **Banur:-** MC has installed chlorine dosing machines over all the 7 tube-wells for controlling the coliform. MC has also got prepared estimate amounting to Rs. 53.49 Lacs approximately for replacing the water supply lines between ward no 8 & ward no 9, for which the arrangement of funds are being made by MC.
- (iii) **Rajpura:-** A Project for replacing the 35 Km old water supply distribution network having frequent contamination complaints is prepared under ongoing water supply project of AMRUT-2.0 for replacing the old and outdated pipe lines.

3 (Para-6) - Conclusions:-

Based on the inspection and sampling carried by the sub-committee, the conclusion drawn is as follows: -

Out of total 35 samples collected from different locations; 8 no's samples have failed to meet permissible limits as per IS10500:2012.

Most of the samples are failed due the presence of coliform whereas the rest are regarding excessive turbidity, fluoride & sulphate contents.

The presence of coliform is due to mixing of sewage with drinking water whereas turbidity is result of presence of clay, silt, very tiny inorganic and

organic particulate matters. Presence of fluoride and sulphates are due to runoff from rocks and soils, leaching from soil into groundwater, deposition of fluorides and sulphates from waste and industrial sources,

3 (Para-7) - Recommendations:-

Sr. No.	Recommendations	Remedial measures
1	MC, Banur, Zirakpur and Rajpura shall ensure to supply potable water as per IS 10500: 2012 and identify all the water supply pipelines which are leaking and either replace or provide new water supply line.	<p><u>MC Banur & MC Zirakpur</u></p> <p>Most of the consumers have installed individual suction pumps directly on the water supply distribution line, which causes negative pressure in the pipeline resulting to suction of contaminated water from the outside in the pipe due to vacuum there. Hence the removal of these suction pumps from the pipelines is one of the major remedy for which Municipal Administration has to take the strict steps.</p> <p>O&M of these towns is under the control of concerned MC's.</p> <p><u>Rajpura</u></p> <p>Most of the consumers have installed individual suction pumps directly on the water supply distribution line, which causes negative pressure in the pipeline resulting to suction of contaminated water from the outside in the pipe due to vacuum there. Hence the removal of these suction pumps from the pipelines is one of the major remedy for which Municipal Administration has to take the strict steps.</p>

The contamination of water is checked regularly. As and when comes in the notice, prompt actions are taken by adopting the suitable measures and the points of contamination are identified and rectified without any delay. Ultimately it will be stopped by replacing the pipes in that area for which 35 Km pipeline is proposed to be replaced under the ongoing project of AMRUT 2.0 after which the problem of contamination will be resolved completely. **(Copy of the minutes of meeting of Technical Sub Committee held on 27.12.2022 is enclosed).**

That the answering respondent is regularly operating the disinfecting unit at the source of supply of water to check the contamination in drinking water.

**Project Report for
Providing 24 x7 Canal Based Water Supply
Scheme Rajpura.
(Under AMRUT-2.00)**



PROJECT COST: Rs. 177.54 CRORES

**PUNJAB WATER SUPPLY & SEWERAGE BOARD
DIVISION NO.1, PATIALA**

Project Report Framed by Executive Engineer Pb. Water Supply & Sewerage Division No.1, Patiala for Providing 24X7 Canal Based Water Supply at Rajpura Town. (Under AMRUT 2.0)

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1.0 REPORT:-

RAJPURA Town is an important town of Patiala District. It is situated at distance of about 25 km. from Patiala on Patiala-Chandigarh road. It is connected with Patiala District Head Quarter and State Head Quarter Chandigarh by road. The Municipal Water Supply system exists in the town and the sewerage system also exists in the town. The water supply system of the town is depended on canal based. . The Total Population of the town is 92301 persons as per census 2011. The present population of the town for the year 2022 is 121651 persons. 96% population of the town is covered with existing water supply system. About 85% system of the town is covered with Sewerage System. The major parts of the town has been covered under for water supply scheme Under PM/DC Project for Rs.19.97Cr. . The Project Report for Extension and Augmentation of Sewerage Scheme was prepared for Rs. 37.90Cr. under Urban Mission Project. The project's are completed but some areas in the town which was developed later after preparation of DPR are left for providing water supply & sewerage facilities in the town. The DPR has been prepared for Providing Water Supply and Sewerage Scheme Under PUIEP-II Project for Rs.40.06 crore. The Project is under Progress and the work of execution is going on under this project .

A meeting was held at Rajpura in the presence of Smt. Neena Mittal MLA Rajpura. In the meeting it was decided that the Water Supply Scheme for 24x7 canal based be prepared for providing water supply scheme for Rajpura Town Under AMRUT- 2.0. So, this Project Report has been prepared for Providing of 24x7 canal based Water Supply Scheme for the whole town.

The Existing facilities of WS & Sewerage System are as below:-

2. STATUS OF EXISTING WATER SUPPLY :-

Water supply of Rajpura Town is based on Canal.

- Population served = 90%
- Water Treatment Plant Capacity = 1 No. 6.30 MGD
- Over Head Service Reservoirs
Total 6728 m³ Capacity = 12 Nos.
- Tubewell's = 3 No.
- Distribution pipe lines(AC/CI) = 140 kms.

3. STATUS OF EXISTING SEWERAGE SYSTEM

85% population of the town has access to sewerage system. The existing facilities are as under:-

Lateral Sewer	125.83 km.
Main Sewer	12.09 km.
House Connections	13091 no.
MPS	2No.
STP10 MLD	1 No.
7 MLD	1 No.

Design Statement of Sewerage System stands approved vide letter no. 8281 dated 22.04.2013 for 41538 person for year 2043 & SE PWSS Circle, Patiala letter no. 3822 dated 20.08.2014. The design statement of the remaining areas has been proposed and enclosed in this estimate.

4. COMPLETED PROJECT:-

A) Water Supply:- Major work of Water Supply has been completed against various estimates of providing water supply scheme under various projects such as HUDCO,URP, MDF & PMIDC Projects.

B) Sewerage:- Major work of sewerage system has been done against Urban Mission Project. Through various projects of providing sewerage scheme during the previous years. These project are completed during the previous years..

5. ON GOING PROJECTS:-

A) Water Supply:- Major work of Water Supply is under progress against project of Extension and Augmentation water supply and Sewerage scheme Rajpura under PUEIP/HUDCO amounting to Rs. 40.06 Cr. in year 2021. Funds for which have been tied up to the time of Rs. 35.00 Crore. Due to financial gap between tied up funds and DPR Cost some scope of rising main from canal to water works can not be covered which is now covered in this new project report.

B) Sewerage:- At present work of Extension and Augmentation Sewerage System and Providing Sewage Treatment Plants at under HUDCO Rajpura is under progress against the DPR amounting to Rs. 4.24 Cr. which was prepared under Urban Mission Project funded by Punjab Govt. against HUDCO loan. The funds for this project amounting to Rs. 4.00 Cr. was provided by the Pb. Govt. against HUDCO loan. This project is likely to be completed very soon. Extension and Augmentation water supply and Sewerage scheme Rajpura under PUEIP/HUDCO amounting to Rs. 40.06 Cr. in year 2021. The work of providing sewer lines is under progress against this project.

6. NECESSITY OF THIS PROJECT:-

The Punjab Government has decided to provide 100% of basic urban civic infrastructure in all towns of Punjab. For this funds shall be provided by AMRUT 2.0 from Good of India and good of Punjab.

In this town major work of Water Supply and Sewerage is under progress and this Project Report has been prepared for provide 24x7 canal based water supply scheme for Rajpura Town Under AMRUT 2.0

7. On Going Project Scope Under PUIEP/HUDCO Coverd under DPR 40.06Cr. :-

The scope of on going work of sewerage scheme covered in separate DPR under PUIEP Phase-II is as under:-

Water Supply	
100 mmi/d	27495 mtr
150 mmi/d	2902 mtr
200 mmi/d	2542mtr
250 mmi/d	881 mtr
300 mmi/d	820 mtr
350 mmi/d	800 mtr
400 mmi/d	55 mtr
Total	35495 mtr Say 35.49 km
Water Supply House Connection	600 No
OHSR 2.00 Lacs Gls	1 No
Machinery for water Works	
Transformer 500 Kva & 1000 Kva	2 No
Clear Water Pumping Set 5800 LPM 75 mtr head	3 No
VFD Starter old pump set	3 no
D. G. Set 810 Kva	2 No
Rising main from Narwana Branch (Ganda Kheri) to Water Works Parallel to existing 1100mmi/d Rising main 1000mmi/d=	1810 mtr
Sewerage	
Lateral Sewer	
160 mmi/d	10532 mtr
200 mmi/d	29449 mtr
250 mmi/d	3647mtr
315 mmi/d	3042 mtr
Total	46670 mtr or 46.67 km

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Main Sewer	
400 mmi/d	1679 mtr
600mmi/d	1310 mtr
Total	2989 mtr Say 2.99 km
Sewer House Connection	700 no
Trenchless Crossing 600mmi/d	80 mtr
Transformer 500kva for Existing MPS	2 no

8. SCOPE OF WORK :-

The scope of work covered under this project report is as below:-

Sr. No.	Description	Scope
1	Water treatment Plant (WTP 3.15 MGD)	1 No
2	Storage & Sedimentation Tank (S & S Tank) Top Size=722' x 352'	4 No
3	Pump Chamber Size=30' x 90'	1 No
4	1000 mm i/d Rising main DI-K9	1800 mtr
5	Clear Water tank Capacity=5.50 lac gls.	1 No
6	UGSR 1.00 Lac= 8 No UGSR 2.00 Lac= 4 No UGSR 3.00 Lac= 1No	13 No
	Tubewell	6 No
7	Transmission Mains (DI-K9)	
	200 mmi/d	7350mtr
	250 mmi/d	5025mtr
	300 mmi/d	6779 mtr
	400 mmi/d	6605 mtr
	500 mmi/d	1990 mtr
	Total	27749 mtr or 27.75km

8	Distribution Lines (DI-K7)	
	100 mmi/d	66612 mtr
	150 mmi/d	39962 mtr
	200 mmi/d	19983 mtr
	250 mmi/d	6661 mtr
	Total	133223 mtr or 133.22 km
9	Water Supply House Connection,	28000 No
10	Land Acquisition	36 Acre
11	Railway Line by Trenchless Crossing (i) Rajpura- Patiala Railway line =1 No (ii) Rajpura- Ludhiana Railway line =1 No	2 No
12	National Highway road by Trenchless Crossing. (i) Liberty Chowk near By-Pass= 1 No (ii) Rajpura- Ludhiana NH1 Road=1 No (iii) Rajpura- Ambala NH1 Road=1 No	3 No

9. COST OF THE PROJECT:-

The total cost of the project has been estimated to Rs 177.54 Cr. including 1% Labour cess, 2% cancer & culture cess charges, 0.1% TPI charges & 6% Supervision Charges.

10. NATIONAL HIGHWAY CROSSING:-

3No. Crossing of State Highway are required to be done.

11. Railway Crossing:-

2No. Crossing of Railway line are required to be done.

11. Land Acquisition:-

Provision For land Acquisition for construction of Water Treatment Plant /UGSR / OHSR has been taken in the Progress.

12. RATES/SPECIFICATIONS:-

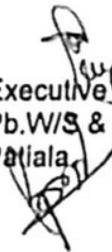
The cost has been worked out on the basis of CSR+ceiling premium for scheduled items and market rate for items not covered in the CSR as per rates covered in DPR for NRCP Project. The work will be executed according to PWD specifications.

13. FUNDS:-

The Funds for the project will be provided by Government of India and Punjab through AMRUT 2.0

14. TIME:-

The work shall be completed in 3 year.


Executive Engineer.
Pb.W/S & Sewerage Division no 1,
Patiala.

**Project Report for Providing 24 x7 Canal Based Water Supply Scheme Rajpura.
(Under AMRUT-2.00)**

General Abstract of Cost

Sub Head No.	Description	Amount (Rs. In Lacs)
1	Head works (3.15 MGD)	Rs 2357.68
2	Cost of UGSR.	Rs 1663.07
3	Transmission Lines	Rs 1785.31
4	Distribution Lines	Rs 4075.62
	Total (A) Rs	9881.68
5	Deposit work	Rs 2118.00
6	Land Aquisition	Rs 3000.00
7	Misc. works, unforeseen work @10% of Total A	Rs 988.17
	Total (B) Rs	6106.17
	Add 1% Labour cess on Total A	Rs 98.82
	Add 2% cancer & culture cess charges on Total A	Rs 197.63
	Add 6% Deparment Charges on Total A	Rs 592.90
	Add 1% TPI Charges.	Rs 98.82
	Total (C) Rs	988.17
8	Price Escalation for 2nd Year @ 7.5 % on 70% of Total A	Rs 518.79
9	Price Escalation for 3rd Year @ 7.5% on 35% of Total A	Rs 259.39
	Total (D) Rs	778.18
	GRAND TOTAL (A TO D) Rs	17754.20
	Say Rs. 177.54 Cr	


Executive Engineer
Pb W/S Sew. Divn. No.
Patiala

Minutes for 5th meeting of Technical Sub-Committee (TSC) for AMRUT 2.0 Mission held on 27.12.2022 under the Chairmanship of Engineer-in-Chief cum Technical Advisor, Punjab Water Supply & Sewerage Board, Chandigarh.

List of Participants is placed at Annexure – 1.

Agenda	Appraisal of DPRs for rejuvenation of following water bodies under
Item No.	AmritSarovar Special State Water Action Plans (Special
5.1	SWAPs), AMRUT 2.0 for the approval of State High Powered Steering Committee (SHPCS): Rajindra Lake (Patiala)

1. Team Leader, PDMC explained the agenda as under:

- In view of the Speaking Order of Commissioner, Municipal Corporation, Patiala dated 07.04.2017, the DPR has been revised after discussion with Municipal Corporation, Patiala.
- The revised capital cost of DPR is Rs. 177 lakhs and 5 years O&M cost is Rs. 88.37 lakh.

2. Chairman TSC suggested that water to be pumped out of the lake for recirculation of the water, may be reused for irrigation of Baradari Gardens.

3. Team Leader, PDMC intimated that there is a provision for reuse of treated waste water at Patiala under AMRUT 2.0. The pipeline for reuse of water from Rajindra Lake to Baradari shall be laid under the project for reuse of water.

The Committee after discussion recommended to place the DPR before SLTC for consideration.

Agenda Item No. 5.2 Appraisal of State Water Action Plan- 2 (SWAP-2), aggregating CWAPs of Tranche-2 for Sector- Water Supply, Sewerage & Septage Management, Water Body Rejuvenation and Parks and Green Spaces Development for the approval of State High Powered Steering Committee (SHPSC) under AMRUT 2.0

1. Team Leader, PDMC explained the agenda as under:
 - Projects for Water Supply Sector of 87 towns have been approved in Tranche – 1 by Apex Committee, Gol.
 - Following are the projects proposed for Tranche – 2:-
 - i. 58 towns (7 towns with population more than 1 lakh, 51 towns with population with less than 1 lakh).
 - 61 projects (57 for Water Supply and 04 for Sewerage).
 - Development of 29 Green Spaces and Parks.
 - Rejuvenation of 15 Water Bodies
2. Town-wise/Project-wise details were discussed. It was decided by TSC that rehabilitation of only 20 kms water supply pipeline may be proposed in this Tranche for Gurdaspur town instead of 74 kms.
3. Team Leader presented the revised Tranche – 2 (Annexure -1) after changing the Gurdaspur pipeline as under:-

i.	Total capital cost	771.84 Cr.
ii.	Central Assistance in Capital Cost	326.39 Cr.
iii.	State Share in Capital Cost	445.45 Cr.
iv.	Five year O&M cost for new WTPs & STPs	22.27 Cr.

4. TSC recommended following:-

- Each ULB to pass resolution regarding adoption of AMRUT 2.0 Scheme for getting the works done and bear the cost of O&M for assets created under AMRUT 2.0.
- Only the regularised colonies/areas as certified by ULBs may be considered while preparing the Detailed Project Report.
- A Committee be constituted at city level to decide water supply pipeline to be rehabilitated. The Committee may consist Executive Engineer of concerned ULB, Executive Officer of ULB/Commissioner, Municipal Corporation and Executive Engineer of Executing Agency (PWSSB/DWSS).

The Committee recommended to place the details of proposed City Water Action Plans of 58 towns (Tranche – 2 for 105 projects for water supply and other components) with estimated cost of Rs. 771.84 Cr. (Central Share Rs. 326.39 Cr. and State Share as Rs. 445.45 Cr.) before SLTC for consideration.

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

<i>Abstract of Town-wise CWAP, Tranche - 2 for SWAP-2 under AMRUT - 2.0</i>							
SI No	Project Category	Number of Projects	Estimated CAPEX Cost (Rs. Crore)	Project Central Assistance (Rs. Crore)	Project State Share CAPEX Cost (Rs. Crore)	Estimated O&M cost (Rs. Crore)- ULB Share	Total Cost (Rs. Crore)
(A)	WATER SUPPLY						
(a)	Augmentation of WSS having Population more than One Lakh (Towns of AMRUT-1)	6	189.98	63.32	126.66	2.11	192.09
(b)	Augmentation of WSS having Canal source and Population less than One Lakh	25	236.27	118.18	118.09	1.38	237.65
(c)	Augmentation of WSS based on Tube well source and Population less than One Lakh	26	149.40	74.79	74.61	0.61	150.01
	Sub Total (a+b+c)	57	575.65	256.29	319.36	4.10	579.75
(B)	Sewerage & Septage Management	4	163.28	54.43	108.85	7.5	170.78
(C)	Water Body Rejuvenation	15	19.09	8.76	10.33	5.66	24.75
(D)	Parks and Green Spaces Development	29	13.82	6.91	6.91	5.01	18.83
	G.Total	105	771.84	326.39	445.45	22.27	794.11

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
(A) Category: WATER SUPPLY																
(a) Augmentation of WSS having Population more than One Lakh (AMRUT-1 Towns)																
1	Abohar	Fazilka	Abohar	800214	145302	9.1	0	9.1	Dist. Network - 5 Km HSC - 500 Nos OHSR (2.5 LG cap.) - 1 No, OHSR (3 LG cap.) - 1 No UGSR (0.5 G cap.) - 3 Nos with pump & machinery Clear water tank - 100' x80'x7' - 1No Pump Chamber - 0 1 No Repair of S&S tank Road Dismantling and restoration	9.1	3.03	6.07	0	9.1	626	Existing Canal Source Proposed Augmentation of Distribution System
2	Batala	Gurdaspur	Amritsar 2	800149	156619	22.03	0	22.03	New Dist. network - 47 km Rehabilitation of Dist. network - 16 km Replacement of GI pipe 50 mm i/d - 4 km HSC (new) - 9400 Nos HSC (Rehab.) - 3200 Nos OHSR (2 LG cap) - 1 no.; OHSR (0.50 LG cap) - 1 no.	22.03	7.34	14.69	0	22.03	1407	Tube well based existing scheme Proposed Augmentation of Distribution System
3	Bathinda	Bathinda	Bathinda 1	800226	285788	35.98	0	35.98	New Distribution network - 60 km Rehabilitation of Dist. network - 30 km Rising main 400 mm i/d D.I K9 - 4.5 km HSC (new) - 12000 Nos HSC (Rehab.) - 6000 Nos OHSR (2 LG cap) - 2 no. Rehabilitation of main water works Rehabilitation of Growth Centre water works	35.98	11.99	23.99	0	35.98	1259	Tube well based existing scheme Proposed Augmentation of Distribution System
4	Ferozepur City	Ferozepur	Ferozepur	800207	110313	67.67	1.25	68.92	Sedimentation & Raw water storage tank - 1 No each Raw water pipeline 800 mm DI K-9 - 15 Km Clear water pipe line - 8 km Construction of WTP - 26.5 MLD	68.92	22.97	45.95	1.78	70.7	6248	Proposed Augmentation based on Canal Source
5	Pathankot	Gurdaspur	Gurdaspur	800144	237853	2.12	0.000	2.12	Drilling of Tube wells - 6 Nos Rising Main 8" dia DI K-9- 400 m	2.12	0.71	1.41	0	2.12	89	Tube well based existing scheme Proposed Augmentation of Distribution System
6	Sri Muktsar Sahib	Sri Muktsar Sahib	Bathinda 2	800217	116747	51.83	0.000	51.83	Main City Area: Replacement of WS dist. line - 88.262 km, Concreting of S&S tank (Bed & lining)- 4 Nos, Construction of OHSR (2 LG) - 3 Nos, Rising main 400 mm D.I. K-9 - 1100 m, Repair of OHSR - 1 No, Clariflocculator arm for 1.6 MGD WTP- 1 No, Construction of Boundary Wall Across the Railway line: WS dist. line - 45 km, Concreting of S & S Tank (Bed & lining) -1No., Construction of OHSR (2 LG cap.) - 1 No Chak Bir Sarkar Water Works: Construction of OHSR (2 LG cap.) - 1 No Pipe inlet Channel 300mm RCC NP II - 91 m, Construction of New S & S tank - 8277 cum, Repair of existing S & S tank -1 No, Construction of 2.60 MLD WTP, Construction of OHSR (0.22 LG cap.) - 1 No, Head Works - 1 no, Chlorination plant - 1 no	51.83	17.28	34.55	0.33	52.16	4440	Existing Canal Source Proposed Augmentation of Distribution System
Sub-Total (a)					1,052,622	188.73	1.25	189.98		189.98	63.32	126.66	2.11	192.09	2,345	

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) Incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
(b) Augmentation of WSS having Canal source and Population less than One Lakh																
1	Anandpur Sahib (M CL)	Roop Nagar	Ropar	800257	16282	3.18	0.03	3.21	Rising main - 1.30 km. New Dist. network - 7.60 km. HSC - 1000 nos. Repair of OHSR Construction of Sump well, chamber Road cutting and Restoration.	3.21	1.61	1.6	0	3.21	1972	Proposed Augmentation of Distribution System
2	Amiwal Sheikh Subhanpur	Fazilka	Abohar	900062	9353	8.6	0.2	8.8	Rehabil. of Dist. network - 10.51 km. New Dist. network - 14.35 km. OHSR -(1 Lakh Gal. cap) - 1 No. HSC - 2550 Nos., Road cutting and Restoration.	8.8	4.4	4.4	0	8.8	9409	Proposed Augmentation of Distribution System
3	Bareta	Mansa	Mansa	800233	17432	5.28	0	5.28	New Distribution network - 9.26 km. OHSR - (0.50 LG) - 1 No HSC - 1000 nos. Road cutting and Restoration	5.28	2.64	2.64	0	5.28	3029	Proposed Augmentation of Distribution System
4	Bariwala (NP)	Muksar	Bathinda 2	800218	8668	3.28	1	4.28	New Distribution network - 9.00 km. HSC - 1600 nos. Road cutting and Restoration	4.28	2.14	2.14	0	4.28	4938	Proposed Augmentation of Distribution System
5	Bhikhi (NP)	Mansa	Mansa	800235	17825	0.67	0	0.67	New Distribution network - 2.30 km. HSC - 250 nos. Road cutting and Restoration	0.67	0.34	0.33	0	0.67	376	Proposed Augmentation of Distribution System
6	Boha	Mansa	Mansa	900053	12170	7.32	0	7.32	New Dist. network - 11.54 km HSC - 450 nos. WTP (0.75 MGD) - 1 no. OHSR -(1 LG cap) - 1 no. Road cutting and Restoration	7.32	3.66	3.66	0.27	7.59	6015	Proposed Augmentation of Distribution System
7	Budhlada	Mansa	Mansa	800234	26172	6.41	1	7.41	Rising main - 1.18 km. New Dist. network - 17.74 km. HSC - 2500 Nos. Road cutting and Restoration.	7.41	3.71	3.7	0	7.41	2831	Proposed Augmentation of Distribution System
8	Faridkot (M CL)	Faridkot	Moga	800219	87695	18.77	0	18.77	Const. of Boundary wall - 265.00 mt. Rising main - 4.00 Km. New Dist. Network - 38.00 Km. HSC - 5911Nos New S & S Tank - 105m x 110m x 2.65 m New Clear Water tank - 30m x 35m x 3m New OHSR of cap. - 1781 cum Road cutting & Restoration.	18.77	9.39	9.38	0	18.77	2140	Proposed Augmentation of Distribution System based on Canal Source
9	Fazilka	Fazilka	Abohar	800213	76492	11.44	0	11.44	Water works (1.5 MGD) - 1 no. and Rehab. of existing 2.5 MGD WTP S&S Tank (1.5 MGD) - 1 no. CWT - 1 no. Pump chamber (incl. P. Machinery)- 1 no. New Distribution network - 8.66 km. HSC - 2382 Nos. Rehabilitation work for WTP and Bore well Road cutting and Restoration	11.44	5.72	5.72	0.61	12.05	1496	Proposed Augmentation of existing system based on Canal Source

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
10	Gidderbaha	Sri Muktsar Sahib	Bathinda 2	800216	45370	10.1	0.75	10.85	Rising main - 2.50 km., New Dist. network - 15.00 km. OHSR (1.50 Lakh Gal. capacity) - 1 No. HSC - 4160 Nos., Road cutting and Restoration.	10.85	5.43	5.42	0	10.85	2391	Proposed Augmentation of Distribution System
11	Goniana	Bathinda	Bathinda 2	800225	15208	3.13	0.15	3.28	New Dist. network - 10.00 km. HSC - 1357 Nos., Road cutting and Restoration.	3.28	1.64	1.64	0	3.28	2157	Proposed Augmentation of Distribution System
12	Jaitu	Faridkot	Moga	800221	37377	10.88	0.000	10.88	New Dist. network - 6.73 km., HSC - 898 nos. Road cutting and Restoration Renovation of water works S&S Tank - 2 nos. (De-silting, side slope lining 100% , bed lining 45%) Clear water tank - 2 nos. (Slab M-30, Bed M-30) Meter room 10'x12' = 1 no. Gantry 2 ton capacity 3 way - 1 no. OHSR - 1 no (Replacement sluice valves 300 mm /d=4 nos.)	10.88	5.44	5.44	0	10.88	2911	Proposed Augmentation of existing system based on Canal Source
13	Joga	Mansa	Mansa	900058	11287	0.92	0.000	0.92	New Dist. network - 3.3 km. HSC - 360 nos. Road cutting and Restoration	0.92	0.46	0.46	0	0.92	815	Proposed Augmentation of Distribution System
14	Kiratpur Sahib	Ropar	Ropar	900107	2348	3.08	0.000	3.08	Drilling of Tube well - 1 no. New Distribution network - 6.57 km. HSC - 500 nos. Road cutting and Restoration.	3.08	1.54	1.54	0	3.08	13118	Proposed Augmentation of Distribution System
15	Kot Fatta	Bathinda	Bathinda 2	800228	7412	2.48	0.000	2.48	Rehab. of Dist. network - 2.33 km New Dist. network - 2.10 km. HSC - 691 nos. Repair of S & S Tank - 1 no. Road cutting and Restoration.	2.48	1.24	1.24	0	2.48	3346	Proposed Augmentation of Distribution System
16	Kotkapura	Faridkot	Moga	800220	92040	10.14	0.000	10.14	New Dist. network - 29.50 km. HSC - 3945 nos. Renovation of Water works Road cutting and Restoration.	10.14	5.07	5.07	0	10.14	1102	Proposed Augmentation of Distribution System
17	Malout	Sri Muktsar Sahib	Bathinda 2	800215	95722	23.61	0.000	23.6092	Rising main - 6.97 DI Double planged pipe - 135 m New Distribution network - 16.32 m HSC - 7810 Nos. Construction of room - 1 job Construction of Boundary wall - 840 m Construction of Pump chamber Pump machinery - 2 No Vertical shaft Construction of CWT - 1 No DG set, transformer	23.61	11.81	11.8	0	23.61	2467	Proposed Augmentation of existing system based on Canal Source
18	Maluka	Bathinda	Bathinda 2	900056	6651	2.30	0.000	2.3	Construction of Boundary wall - 900 mt. Rising main - 300 mt. New Distribution network - 4.00 km. HSC - 1357 Nos. Road cutting and Restoration	2.3	1.15	1.15	0	2.3	3458	Proposed Augmentation of Distribution System

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
19	Mansa	Mansa	Mansa	800236	82903	10.28	1.000	11.28	Rehab. of Distribution network - 30.00 km. (Replacement of 1.04 km.is also included) HSC - 3260 Nos. Replacement of Filter media in WTP Repair of S & S Tank Road cutting and Restoration.	11.28	5.64	5.64	0	11.28	1361	Proposed Augmentation of existing system based on Canal Source
20	Maur	Bathinda	Bathinda 1	800231	31849	17.66	3.890	21.55	Rising main - 2.50 km New Distribution network - 40.00 Km HSC - 5900 Nos Road cutting and Restoration.	21.55	10.78	10.77	0	21.55	6766	Proposed Augmentation of Distribution System
21	Nangal	Rupnagar	Ropar	800258	48497	8.84	0.000	8.84	Rehabilitation of Dist. Network - 8.00 Km. HSC - 800 Nos. Road cutting & Restoration. Upgradation of WTP - 2 nos.	8.84	4.42	4.42	0	8.84	1823	Proposed Augmentation of existing system based on Canal Source
22	Rajpura	Patiala	Patiala 1	800245	92301	30.12	1.000	31.12	Cross head regulator Rising main 1000 mm I/d - 1.8 Km WTP 6.3 MGD (Existing) - upgradation - 1 Job UGSR (New) - 4 nos. New Dist. Network incl. rehab. - 32 km Replacement of pipeline - 35 Km HSC - 7500 Nos. Road cutting and Restoration.	31.12	15.56	15.56	0	31.12	3372	Proposed Augmentation of existing system based on Canal Source
23	Raman	Bathinda	Bathinda 1	800229	22553	16.75	3.690	20.44	Rising main - 2.50 km Rehab. of Dist. Network - 10.00 Km. New Dist. Network - 5.00 Km. HSC - 2042 Nos. Road cutting & Restoration. WTP 1 MGD Collecting water tank, S&S Tank, Pump chamber ,Cleaning water wall, Raw water wall, Machinery etc. OHSR (1.5 LG cap.) - 1 No	20.44	10.22	10.22	0.5	20.94	9063	Proposed Augmentation of existing system based on Canal Source
24	Rupnagar (M CL)	Ropar	Ropar	800259	56038	1.64	3.190	4.83	New Dist. Network - 0.97 km HSC - 150 Nos. Replacement of raw water pipeline Road cutting and Restoration.	4.83	2.42	2.41	0	4.83	862	Proposed Augmentation of Distribution System
25	Sardulgarh	Mansa	Mansa	800232	19219	3.49	0.000	3.49	New Dist. Network - 14.653 Km. HSC - 509 Nos. Road cutting & Restoration.	3.49	1.75	1.74	0	3.49	1816	Proposed Augmentation of Distribution System
Sub-Total (b)					938,864	220.37	15.90	236.27		236.27	118.18	118.09	1.38	237.65	3,561	

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Annexure-1/4.1 to the Report of the State Water Audit Mission (SWAM) - 2011-12
CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
(c) Augmentation of WSS based on Tube well source and Population less than One Lakh																
1	Adampur (M CL)	Jalandhar	Jalandhar 1	800168	20922	1.09	0	1.09	New Dist. network - 3.83 km. HSC - 479 nos. Road cutting and Restoration.	1.09	0.55	0.54	0	1.09	521	Proposed Augmentation of Distribution System
2	Alawalpur	Jalandhar	Jalandhar 1	800167	7815	0.21	0	0.21	New Dist. network - 0.79 km. HSC - 200 Nos Road cutting and Restoration.	0.21	0.11	0.1	0	0.21	269	Proposed Augmentation of Distribution System
3	Balachaur (M CL)	Nawan Shehar	Hoshiarpur	800183	21631	5.59	0	5.59	New Dist. network - 16.00 km. OHSR (1.0 LG cap) - 1 no. HSC - 1631 nos. Road cutting and Restoration.	5.59	2.8	2.79	0	5.59	2584	Proposed Augmentation of Distribution System
4	Banur (M CL)	(M S.A.S. Nagar (Mohali)	Patiala 1	800265	18775	2.12	0.05	2.17	Drilling of Tube well - 3 nos. Pump house - 3 Nos New Distribution network - 4.50 km. HSC - 600 nos. Road cutting and Restoration	2.17	1.09	1.08	0	2.17	1156	Proposed Augmentation of Distribution System
5	Bhogpur	Jalandhar	Jalandhar 1	800170	17549	0.53	0	0.53	New Distribution network - 1.75 km. HSC - 70 nos. Road cutting and Restoration	0.53	0.27	0.26	0	0.53	302	Proposed Augmentation of Distribution System
6	Bhulath	Kapurthala	Jalandhar 2	800153	10548	1.35	0	1.35	New Dist. network - 4.69 km HSC - 880 nos. Road cutting and Restoration	1.35	0.68	0.67	0	1.35	1280	Proposed Augmentation of Distribution System
7	Dera Baba Nanak	Gurdaspur	Gurdaspur	800152	6394	3.53	1.01	4.54	Drilling of Tube well - 1 no Pump house - 1 no Rising main - 0.20 km. New Dist. network - 8.80 km. HSC - 1954 Nos. Road cutting and Restoration.	4.54	2.27	2.27	0	4.54	7100	Proposed Augmentation of Distribution System
8	Dera Bassi	(Mohali)	Patiala 1	800268	26295	2.89	0.09	2.98	Drilling of Tube well - 3 Nos Pump house - 3 Nos New Dist. Network - 5.50 Km. HSC - 800 Nos. Road cutting & Restoration.	2.98	1.49	1.49	0	2.98	1133	Proposed Augmentation of Distribution System
9	Ferozepur Cantt..	Ferozepur	Ferozepur	800208	53199	27.16	0.25	27.41	New Dist. network - 11.0 km; HSC - 300 Nos Repair of OHSR Road cutting & Restoration Sedimentation & Raw water storage tank - 1 No each Clear water pipe line - 11 km Construction of WTP - 7.0 MLD	27.41	13.71	13.7	0.61	28.02	5152	Proposed Augmentation of Distribution System and Proposed Augmentation based on Canal Source

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
10	Gardhiwala	Hoshiarpur	Hoshiarpur	800173	7593	0.29	0	0.29	Tube well - 1 no. HSC - 180 nos. Road cutting and Restoration.	0.29	0.15	0.14	0	0.29	382	Proposed Augmentation of Distribution System
11	Gurdaspur	Gurdaspur	Gurdaspur	800146	77928	20.18	2.830	23.01	Drilling of Tube well - 14 Nos. Tube well Pump House - 14 Nos. OHSR (1 LG) - 6 Nos. OHSR (0.5 LG) - 3 nos.. Cost of Instrumentation and SCADA Rising main - 2250.00 mt. Rehab. of Dist. Network - 20 km HSC - 5000 Nos. Road cutting and Restoration.	23.01	11.51	11.5	0	23.01	2953	Proposed Augmentation of Distribution System
12	Handiaya	Barnala	Sangrur	800282	12507	2.05	0.000	2.05	New Dist. network - 5.70 km. HSC - 1000 nos. Road cutting and Restoration	2.05	1.03	1.02	0	2.05	1639	Proposed Augmentation of Distribution System
13	Hariana	Hoshiarpur	Hoshiarpur	800175	8928	0.77	0.000	0.77	Rehabilitation of Dist. network - 1.60 km. HSC - 1520 nos. Road cutting and Restoration.	0.77	0.39	0.38	0	0.77	862	Proposed Augmentation of Distribution System
14	Kapurthala	Kapurthala	Jalandhar 2	800155	98916	29.50	0.000	29.50	Rehab. of Dist. Network - 94.21 Km. OHSR - (1.0 LG) - 1 No.. HSC - 9500 nos. Road cutting & Restoration. Deposit works	29.50	14.75	14.75	0	29.5	2982	Proposed Augmentation of Distribution System
15	Kartarpur	Jalandhar	Jalandhar 1	800169	25662	0.81	0.000	0.81	New Dist. network - 3.45 km. HSC - 230 nos. Road cutting and Restoration	0.81	0.41	0.4	0	0.81	316	Proposed Augmentation of Distribution System
16	Kot Isse Khan	Moga	Moga	900043	12800	2.85	1.000	3.85	Drilling of Tube well - 2 nos. Pump house - 2 nos. Boundary wall - 70 mt. New Dist. network - 5.00 km. OHSR (1.0 LG capacity) - 1 no. HSC - 479 nos. Road cutting and Restoration. NH crossing deposit amount - 1 no.	3.85	1.93	1.92	0	3.85	3008	Proposed Augmentation of Distribution System
17	Lalru	(Mohali)	Patiala 1	900059	21394	2.80	0.000	2.80	Drilling of Tube well - 2 nos. Pump house - 2 nos. New Dist. Network - 6.00 Km. HSC - 800 Nos. Road cutting & Restoration.	2.80	1.4	1.4	0	2.8	1309	Proposed Augmentation of Distribution System
18	Mamdot	Ferozepur	Ferozepur	900176	10910	7.53	0.000	7.53	Drilling of Tube well - 2 nos. Pump house - 2 nos. Boundary wall - 450 mt. Rising main - 0.33 km New Dist. network - 22.00 km OHSR (1.0 LG) - 1 no. HSC - 2929 nos. Road cutting and Restoration	7.53	3.77	3.76	0	7.53	6902	Proposed Augmentation of Distribution System
19	Mehatpur	Jalandhar	Jalandhar 1	900060	5804	1.34	0.000	1.34	New Distribution network - 3.05 Km. GI - 50 mm./d. pipeline - 2.67 km. HSC - 485 Nos. Road cutting and Restoration.	1.34	0.67	0.67	0	1.34	2309	Proposed Augmentation of Distribution System

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
20	Nadala	Kapurthala	Jalandhar 2	900054	6733	12.92	0.000	12.92	New Dist. Network - 45.90 Km., OHSR (1.0 LG) - 1 No HSC - 1834 nos., Road cutting and Restoration	12.92	6.46	6.46	0	12.92	19189	Proposed Augmentation of Distribution System
21	Nakodar	Jalandhar	Jalandhar 1	800161	36973	8.20	2.400	10.60	Rehab. of Dist. Network - 6.79 Km., New Dist. Network - 22.12 Km., HSC - 1843Nos. Road cutting & Restoration. Deposit Works.	10.60	5.3	5.3	0	10.60	2867	Proposed Augmentation of Distribution System
22	Naya Gaon	(Mohali)	Ropar	800264	50869	2.74	0.090	2.83	Drilling of Tube well - 4 nos. Pump house - 4 nos. Boundary wall - 100.00 mt. New Dist. Network - 4.60 km. HSC - 600 Nos. Road cutting & Restoration.	2.83	1.42	1.41	0	2.83	556	Proposed Augmentation of Distribution System
23	Numahal	Jalandhar	Jalandhar 1	800164	14560	0.36	0.370	0.73	New Dist. Network - 1.11 Km. HSC - 139 Nos. Road cutting & Restoration.	0.73	0.37	0.36	0	0.73	501	Proposed Augmentation of Distribution System
24	Phagwara	Kapurthala	Jalandhar 2	800158	97864	2.07	0.000	2.07	New Dist. Network - 8.64 Km. HSC - 1062 Nos. Road cutting & Restoration.	2.07	1.04	1.03	0	2.07	212	Proposed Augmentation of Distribution System
25	Sham Churassai	Hoshiarpur	Hoshiarpur	800177	4426	0.64	0.000	0.64	New Dist. Network - 2.25 Km. HSC - 53 Nos. Road cutting & Restoration.	0.64	0.32	0.32	0	0.64	1446	Proposed Augmentation of Distribution System
26	Zirakpur	S.A.S. Nagar (Mohali)	Patiala 1	800267	95553	1.36	0.430	1.79	Drilling of Tube well - 2 nos. Pump house - 2 nos. New Dist. Network - 3.00 Km. HSC - 650 Nos. Road cutting & Restoration.	1.79	0.9	0.89	0	1.79	187	Proposed Augmentation of Distribution System
Sub-Total (c)					772,548	140.88	8.52	149.40		149.40	74.79	74.61	0.61	150.01	2,581	
(A) Category: WATER SUPPLY - Total (a+b+c)					2,764,034	549.98	25.67	575.65		575.65	256.29	319.36	4.10	579.75	2,829	
(B) Category: Sewerage & Septage Management																
1	Bathinda	Bathinda	Bathinda 1	800226	285788	21.57	0.00	21.57	Multania Rd 30" Sewer - 1000 m Malout Rd, Jassi to Growth Centre, Lal Singh Basti Rd 16" Sewer - 3500 m Bir Road 12" Sewer - 4800 m Bir Road 10" Sewer - 2800 m Adarsh Nagar Area & various areas 8" Sewer - 24000 m; HSC - 1000 Nos, RM near Chand Bhan Drain 500 mm dia - 1.4 Km, RM 32" Id incl. canal crossing Near Railway boundary near Sanjay Nagar to Growth Centre - 500 m Road cutting & Restoration of Roads	21.57	7.19	14.38	0	21.57	755	
2	Ludhiana	Ludhiana	Ludhiana	800196	1618879	29.60	4.00	33.60	Rising Main from Sunder Nagar IPS to Kundan Puri IPS (proposed dia 800 mm DI K9) - 3500 m; Dismantling & Reconditioning of roads Construction of IPS at Shivpuri Provision Sum for Railway Crossing, NHAI Dept.& Public Utility Services	33.6	11.2	22.4	0	33.6	208	

CWAP of Towns for Tranche - 2 for SWAP-2 under AMRUT - 2.0

S.no.	Town	District	PWSSB Division	ULB Code	City Population 2011	Capital Cost (Rs. Cr)	Prov. Sum (Rs. Cr)	Total Cost (Rs. Cr)	Components Details	Capex Cost (Cr.)	Central Share (Cr.)	State Share (Cr.)	5 Yrs. O&M Cost (Cr.)	Total Project Cost (Rs Cr.) incl. O&M	Per Capita Cost of Aug. based on 2011 Census	Remarks
3	Pathankot	Gurdaspur	Gurdaspur	800144	237853	6.75	0.00	6.75	MPS (2 MLD) -2 Nos , STP(2 MLD) -1 No IPS (0.6 MLD) -1 No Rising Main 450 mm i/d DI- K9 Pipeline with 1.2 x 1.2 RCC encasing of DI -K9 pipeline of 30 m length for Nallah Crossing	6.75	2.25	4.5	2.5	9.25	284	
4	Sri Muktsar Sahib	Sri Muktsar Sahib	Bathinda 2	800217	116747	85.85	15.51	101.36	Lateral/Main Sewer, Precast Manholes and Rising Main 600mm Dia House Service Connection and IC Dismantling & Restoration of Roads Rehabilitation of Work STPs Rehab & Re-Survey for pipe line network E & M Works	101.36	33.79	67.57	5	106.36	8682	
(B) Category: Sewerage & Septage Management - Sub-Total					2,259,267	143.77	19.51	163.28		163.28	54.43	108.85	7.5	170.78	2482	
Water Supply & Sewerage -Total (A) + (B)					5,023,301	693.75	45.18	738.93		738.93	310.72	428.21	11.60	750.53	2,656.0	

List - Water Bodies confirmed by ULB for Tranche-2 (SWAP 2.0) under AMRUT 2.0

Sr No	Towns	Population (2011)	Name	No of WB's	Area (Acre)	Capital Cost (Rs. Lakh)	Central share (Rs. Lakh)	State share (Rs. Lakh)	O&M Cost for 5 years (Rs.Lakh),ULB Share	Total Cost (Rs.Lakh)
1	Malerkotla	135,424	Dabour khanna road	1	12.0	250	83.33	166.67	50	300.0
2	Gurdaspur	77,928	Bebowal	1	1.2	74	37	37	32.4	106.4
3	Ferozepur	110,313	Pond-1	1	3.0	110	36.67	73.33	36	146.0
			Pond-2	1	3.0	110	36.67	73.33	36	146.0
4	Maur	31,849	Pond-1	1	3.5	120.8	60.4	60.4	37.08	157.9
5	Budhlada	26,172	Ward no 4	1	8.5	220	110	110	47	267.0
6	Bareta	17,432	Near Bibdan Mandir	1	2.0	90	45	45	34	124.0
7	Boha	12,170	Pond-1	1	3.0	110	55	55	36	146.0
8	Bhikhi (NP)	17,311	Bhajani walla Toba	1	2.0	90	45	45	34	124.0
9	Joga	10,180	Near water works	1	2.0	90	45	45	34	124.0
10	Bilga	10,125	Pond-1	1	2.0	90	45	45	34	124.0
11	Cheema	11,615	Baba polagir samadha ward no 6	1	10.2	250	125	125	50	300.0
12	Longowal	23,851	vill Logowal duttal patta near gopi khan workshop.	1	1.7	84	42	42	33.4	117.4
13	Bhawanigarh	22,320	Pond-1	1	3	110	55	55	36	146.0
14	Sangrur	88,043	Pond-1	1	3	110	55	55	36	146.0
Total				15	60.1	1908.8	876.07	1032.73	565.88	2474.68
Amount in Cr.						19.09	8.76	10.33	5.66	24.75

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List -Divyang Friendly Park confirmed by ULB for Tranche-2 (SWAP 2.0) under AMRUT 2.0

Sr No	Towns	Population	Name of Park	No of Parks	Area (Acre)	Capital Cost (Rs. Lakh)	Central share (Rs. Lakh)	State share (Rs. Lakh)	O&M Cost for 5 years (Rs.Lakh),ULB Share	Total Cost (Rs.Lakh)
1	Gidderbaha	45,370	Chirangi lal dhir municipal park	1	3	60.00	30.00	30.00	18.50	78.50
2	Jagraon	65,240	Lala rajpat rai park	1	1.32	43.20	21.60	21.60	16.82	60.02
3	Mehraj	87,695	Patti Karamchand Park	1	0.2	32.00	16.00	16.00	15.70	47.70
4	Mukerian	29,841	Park shah Nehar Colony	1	0.65	36.50	18.25	18.25	16.15	52.65
5	Lalru	21,394	Dappar colony park	1	0.41	34.10	17.05	17.05	15.91	50.01
6	Rupnagar (M CL)	56,038	Main park Giani Singh nagar	1	1.69	46.90	23.45	23.45	17.19	64.09
7	Fazilka	76,492	Sanjay Gandhi park	2	2	50.00	25.00	25.00	17.50	67.50
			Divya joti park		0.92	39.20	19.60	19.60	16.42	55.62
8	Gurdaspur	77,928	Park -1	2	1	40.00	20.00	20.00	16.50	56.50
			Park -2		1	40.00	20.00	20.00	16.50	56.50
9	Rajpura	92,301	Urban Estate Focal Point park, Rajpura	2	2.6	56.00	28.00	28.00	18.10	74.10
			Ambedkar Park, Rajpura		7.1	101.00	50.50	50.50	22.60	123.60
10	Samana	54,072	MC Park, Near Tehsil Road Samana	2	1.82	48.20	24.10	24.10	17.32	65.52
			Environment Park, Patiala Road Samana		2	50.00	25.00	25.00	17.50	67.50
11	Sujanpur	28,270	Near ADC	2	0.85	38.50	19.25	19.25	16.35	54.85
			Mirpur colony		0.71	37.10	18.55	18.55	16.21	53.31
12	Zirakpur	95,553	Dhakolli park	2	6.61	96.10	48.05	48.05	22.11	118.21
			Lohgarh Park		1.8	48.00	24.00	24.00	17.30	65.30
13	Kurali	31,060	Park -1	1	1	40.00	20.00	20.00	16.50	56.50
14	Ferozepur Cantt	53,199	Gandhi garden	2	2.56	55.60	27.80	27.80	18.06	73.66
			Kumar mandi		2.81	58.10	29.05	29.05	18.31	76.41
15	Sunam Udham Singh Wala	69,069	Near rose garden	2	2.7	57.00	28.50	28.50	18.20	75.20
			Ward no 3 MC park		0.73	37.30	18.65	18.65	16.23	53.53
16	Cheema	11,615	Ward no 7 mann patti	2	0.14	31.40	15.70	15.70	15.64	47.04
			ward no 9 near MLG School		2.36	53.60	26.80	26.80	17.86	71.46
17	Longowal	23,851	Peer baba park	2	0.69	36.90	18.45	18.45	16.19	53.09
			Park ghu patti		0.53	35.30	17.65	17.65	16.03	51.33
18	Bhawanigarh	22,320	Park -1	2	1	40.00	20.00	20.00	16.50	56.50
			Park -2		1	40.00	20.00	20.00	16.50	56.50
Total				29	51.2	1382.00	691.00	691.00	500.70	1882.70
Amount (Rs. Cr.)						13.82	6.91	6.91	5.01	18.83

**Punjab Water Supply & Sewerage Board,
Division-1, Patiala**

To,

Director (Planning and Design)
Punjab Water Supply and Sewerage Board
Chandigarh

No. 55

dated: 05.01.2023

Subject: National Green Tribunal- Original Application No.490 of 2022- Sunaina v State of Punjab.

(Reg: Brief Report regarding replacement of water supply in Deha Basti)

Kindly Find enclosed herewith brief report regarding work done at Deha Basti Rajpura by this office.

This report is submitted for further necessary action.

DA/Copy of above

Sd/-
Executive Engineer
Punjab Water Supply and Sewerage Divi No.1
Patiala.

TRUE COPY

Engineer-in-Chief
-cum-
Technical Advisor,
Pb. W/S & Sew. Board,
Chandigarh

DEHA BASTI BRIEF REPORT

The area is situated in the vicinity of urban areas of Rajpura Town. This is particularly a slum area in the Mirch Mandi Area of Rajpura Town. The area was suffered with the Diarrhoea outbreak during Novemeber 2021 and at that place 04 nos persons were died due to the same. The whole slum area (i.e. Deha Basti) had taken illegal connections in the pipeline crossing underneath with the help of garden pipe and monoblock pumps fitted on these pipeline. The sewer pipeline was also laid on their own which was completely chocked at that time and resulting in contamination in drinking water.

- To eliminate this problem as a whole the funds were provided by Deputy Commissioner, Patiala under Punjab Nirman Programme vide authority letter no. 3316-27 dated 17.12.2021 of Rs. 67.30 lakhs.
- The total project costing Rs. 78.11 lakhs out of which the amount of Rs. 67.30 was given by Deputy Commissioner, Patiala under Punjab Nirman Programme and Rs. 10.81 lakhs was given by Municipal Council, Rajpura.
- The work was allotted vide EE Letter No. 1314 dated 27.04.2022.
- The work was started in the month of May 2022 and completed in the month of December.
- The area has been restored with canal-based supply line in the month of November and the drinking water has been found fit for drinking
- The total water supply lines of 2.73 Kms. have been laid under this project.



Executive Engineer,
Punjab W/S & Sew. Divin. No.1,
Patiala.

Daily Residual Chlorine Monitoring, Sub Division Rajpura				
Date	No. of Tail End Point where Residual Chlorine Checked	Result	Water fit for drinking	Signature
16.11.22	# Saini Sweets Mohinderay	0.2 PPM	Yes	Sd/-
17.11.22	B-/4475 Sham Nagar	0.3 PPM	Yes	Sd/-
17.11.22	105 Guru Nanak Colony	0.4 PPM	Yes	Sd/-
18.11.22	118 Deha Basti	0.2 PPM	Yes	Sd/-
19.11.22	4803 Old Mirch Mandi	0.2 PPM	Yes	Sd/-
20.11.22	195 Gulab Nagar	0.4 PPM	Yes	Sd/-
21.11.22	F9114 Arya Samaj Road	0.3 PPM	Yes	Sd/-
24.11.22	2543 Gujjarwala Mohalla Old Rajpura	0.2 PPM	Yes	Sd/-
26.11.22	10841 C Gandhi Colony	0.5 PPM	Yes	Sd/-
28.11.22	121 Deha Basti	0.2 PPM	Yes	Sd/-
29.11.22	4815 Old Mirch Mandi	0.2 PPM	Yes	Sd/-
30.11.22	185 Katurba Road	0.4 PPM	Yes	Sd/-
02.12.22	#2888 Panjiri Plant	0.3 PPM	Yes	Sd/-
02.12.22	#3080 Janakpuri Colony	0.3 PPM	Yes	Sd/-
05.12.22	#4807 Old Mirch Mandi	0.2 PPM	Yes	Sd/-
06.12.22	#1718/A Shanidev Mandir Rajpura	0.3 PPM	Yes	Sd/-

06.12.22	#1524 Mahavir Mandir Bypass	0.4 PPM	Yes	Sd/-
08.12.22	#2545 Teacher Colony	0.3 PPM	Yes	Sd/-
08.12.22	#10 Adarsh Colony	0.3 PPM	Yes	Sd/-
09.12.22	# 23 Gobind Colony	0.3 PPM	Yes	Sd/-
09.12.22	#3216 Gurudwara Singh Sabha Road	0.2 PPM	Yes	Sd/-
10.12.22	#108 Deha Basti	0.2 PPM	Yes	Sd/-
12.12.22	#4804 Old Mirch Mandi	0.2 PPM	Yes	Sd/-
14.12.22	#49 Vikram Colony	0.4 PPM	Yes	Sd/-
14.12.22	#65 New Arjun Dev Colony	0.4 PPM	Yes	Sd/-
16.12.22	#100 Deha basti	0.2 PPM	Yes	Sd/-
18.12.22	#4810 Old Mirch Mandi	0.2 PPM	Yes	Sd/-
19.12.22	#8 Neelapur	0.4 PPM	Yes	Sd/-
19.12.22	2737/A Near Durga Mandir	0.4 PPM	Yes	Sd/-
21.12.22	#71 Islampur	0.4 PPM	Yes	Sd/-
21.12.22	#96 SBS Colony	0.4 PPM	Yes	Sd/-
23.12.22	#4801 Old Mirch Mandi	0.3 PPM	Yes	Sd/-
24.12.22	#119 Deha Basti	0.2 PPM	Yes	Sd/-
26.12.22	108/B Singla Colony	0.3 PPM	Yes	Sd/-

27.12.22	#8 Bansal Colony	0.2 PPM	Yes	Sd/-
28.12.22	#4809 Old Mirch Mandi	0.2 PPM	Yes	Sd/-
28.12.22	#103 Deha Basti	0.2 PPM	Yes	Sd/-
TRUE COPY				

Engineer-in-Chief
-cum-
Technical Advisor,
Pb. W/S & Sew. Board,
Chandigarh