

## BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPLE BENCH, NEW DELHI

M.A. No. 98/2023

IN

Original Application No. 198/2023

IN THE MATTER OF:

Harpal Singh Rana &amp; Anr

...APPLICANT

VERSUS

State of Uttarakhand &amp; Ors.

..RESPONDENTS

INDEX

Sl. No.	Particulars	Page(s)
1.	Action Taken Report on behalf of Ministry of Jal Shakti (MoJS) in Compliance to Hon'ble NGT, PB, Order dated 06.10.2023 in the matter of M.A. No. 98/2023 in O.A. No. 198/2023 titled as <i>Harpal Singh Rana &amp; Anr vs. State of Uttarakhand &amp; Ors.</i>	1-4
2.	<b>Annexure-1:</b> Copies of letter dated 21.11.2023 to 13 Metro Corporations	5-79
3.	<b>Annexure-2:</b> Copies of reminder e-mails dated 11.12.2023/ 04.12.2023 to Metro Corporations	80-109
4.	<b>Annexure-3:</b> Copy of e-mail/ reply dated 27.11.2023 from Kochi Metro Rail Ltd (KMRL)	110-112
5.	<b>Annexure-4:</b> Copy of e-mail/ reply dated 23.11.2023/24.11.2023 from Jaipur Metro Rail Corporation (JMRC)	113-120
6.	<b>Annexure-5:</b> Copy reply dated 24.11.2023 from Delhi Metro Rail Corporation (DMRC)	121-126
7.	<b>Annexure-6:</b> Copy E-mails/ replies dated 14.12.2023 from Mumbai Metro Rail Corporation (MMRC) and MMRDA	127-152
8.	<b>Annexure-7:</b> Copy of e-mail/ reply dated 14.12.2023 from Hyderabad Metro Rail Project (HMRP)	153-154
9.	<b>Annexure-8:</b> Copy of e-mail/ reply dated 15.12.2023/ 14.12.2023 from Bangalore Metro Rail Corporation (BMRC)	155-157
10.	<b>Annexure-9:</b> Copy of e-mail/ reply dated 18.12.2023 from UP Metro Rail Corporation (UPMRC)	158-163

  
20/12/2023  
(T B N Singh)

Member Secretary

टी.बी.एन. सिंघ / T. B. N. SINGH

सदस्य सचिव / Member Secretary

केन्द्रीय भूमि जल प्राधिकरण / Central Ground Water Authority  
जल, संसाधन, नदी विकास एवं गंगा संरक्षण विभाग  
Deptt. of Water Resources, River Development & Ganga Rejuvenation  
जल शक्ति मंत्रालय / Ministry of Jal Shakti  
भारत सरकार / Government of India

Place: New Delhi

Dated: 20.12.2023

**ACTION TAKEN REPORT ON BEHALF OF MINISTRY OF JAL SHAKTI (MOJS) IN COMPLIANCE TO HON'BLE NGT, PB, ORDER DATED 06.10.2023 IN THE MATTER OF HARPAL SINGH RANA & ANR VS. STATE OF UTTARAKHAND & ORS. (MA NO. 98/2023 IN O.A. No. 198/2023)**

**A. INTRODUCTION**

Hon'ble NGT has taken cognizance of application by Shri Harpal Singh Rana against undue wastage of water by way of discharge during construction of Metro Rail at Delhi, Jaipur and Mumbai.

**1. Hon'ble NGT Orders in OA No. 198/2023**

Hon'ble Tribunal while disposing of O.A. No. 198/2023 on 15.04.2021 issued following directions to Ministry of Jal Shakti (**MoJS**).

*"2. Considering the above, we direct that a joint Committee of CPCB, Secretary, Ministry of Jal Shakti and Metro Rail Corporations may consider the issue and take requisite remedial measures. Secretary, MoJS will be the nodal agency for coordination and compliance. The Committee may meet within one week, interact with concerned authorities and stakeholders and taking stock of the factual position, prepare and execute an action plan for remedial measures in the matter. It may lay down necessary SOP to ensure proper utilisation of water and installation of Rain Water Harvesting systems (RWHS) to harness rain water. An action taken report may be filed before the Registrar General of this Tribunal."*

**2. Accordingly**, an Action taken report was filed by Central Ground Water Authority (**CGWA**) on behalf of the Ministry of Jal Shakti (MoJS) on 10.08.2023. The report included the Committee Report on 'Inspections of Metro Projects in Delhi, Jaipur and Mumbai' and also apprised the Hon'ble tribunal about the other actions taken – issuance of SOP for proper utilization of water and rainwater management in metro projects. The SOP also included requirement for obtaining NOC from CGWA/ respective SGWA for groundwater dewatering/extraction.

**3. Hon'ble NGT Orders dated 06.10.2023 in MA No. 98/2023 in OA No. 198/2023**

After going through the ATR, Hon'ble NGT in its order dated **06.10.2023 (Para 5)** made following observations and **issued directions (Para 6)**.

*5. "A perusal of the report reveals that the Central Ground Water Authority (CGWA) has issued the SOP to 13 Metro Rail Corporations. The list of which has been enclosed with the report. Clause A.1.viii of the SOP provides for obtaining NOC for ground water dewatering/extraction from CGWA/respective SGWA."*

*6. "In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the **fresh report** from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

**4.** Hence, this fresh report as per directions under Para 6 of Order dated 06.10.2023.

## B. ACTION TAKEN

1. Regarding requirement of NOC, it may be informed that the NOC may be required, both during construction phase, as well as in operational phase. The NOC is essentially required in following cases.

i During Construction Phase: (a) In case a project intends to utilize groundwater for construction of elevated/ underground sections and/ or (b) water table is expected to be encountered during construction of underground section, necessitating dewatering/ pumping out of water.

ii During Operational Phase: The Project proposes/ intends to meet operational water requirement, such as water requirement at metro stations for passengers and/ or other operational purposes, necessitating construction of borewell/ tubewell.

2. Regarding acceptance of SOP by Metro Rail Corporations, letters dated 21.11.2023 were sent by Member Secretary to 13 Metro Projects, seeking their feedback/ acceptance/ status of implementation of SOP. The said letters are annexed as **Annexure-1** and a reminder was sent on 11.12.2023 (**Annexure-2**). Out of 13 Metro Corporations, response has been received from 7 corporations. No response has been received from 6 metro corporations, namely – Gujarat Metro Rail Corporation (**GMRC**), Patna Metro Rail Corporation (**PMRC**), Haryana Mass Rapid Transport Corporation (**HMRTC**), Chennai Metro Rail Lt (**CMRL**), Metro Railway, Kolkata/ Kolkata Metro Rail Corporation (**KMRC**) and MP Petro Rail Corporation (**MPMRC**).

3. The responses received from Metro Projects are summarized in following table.

S. No.	Metro Project	Implementing/ Executing Agency	Present Status
1.	Kochi Metro	Kochi Metro Rail Ltd ( <b>KMRL</b> )	Letter dated 27.11.2023 from <b>KMRL</b> is enclosed as <b>Annexure-3</b> <ul style="list-style-type: none"> <li>• There is no underground construction.</li> <li>• Treated water is being used for gardening.</li> <li>• RWH implemented at 16 stations and under implementation at 3 stations.</li> <li>• NOCs obtained for all wells at stations and depot.</li> </ul>
2.	Jaipur Metro	Jaipur Metro Rail Corporation Ltd ( <b>JMRC</b> )	Letter dated 23.11.2023 and 24.11.2023 from <b>JMRC</b> are enclosed as <b>Annexure-4</b> <ul style="list-style-type: none"> <li>• Construction in underground section not started.</li> <li>• Elevated section 1C and 1D are in evaluation in stage.</li> <li>• NOC applications are in process with CGWA.</li> <li>• Recommendations of SOP shall be followed.</li> </ul>
3.	Delhi Metro	Delhi Metro Rail Corporation Ltd ( <b>DMRC</b> )	Letter dated 24.11.2023 from <b>DMRC</b> is enclosed as <b>Annexure-5</b> . <ul style="list-style-type: none"> <li>• Hydrogeological study was undertaken for Phase-IV.</li> <li>• Measures for prevention of GW contamination enumerated in SOP have already been taken.</li> <li>• All measures for prevention of build-up of water column are being followed in underground sections.</li> <li>• RWH system has been installed wherever feasible and are being maintained.</li> <li>• Piezometers for water level monitoring have</li> </ul>

			<p>been installed on operational sections.</p> <ul style="list-style-type: none"> <li>• Wastewater is being reused at metro depots.</li> <li>• NOCs have been obtained.</li> <li>• All SOP recommendations have been noted for implementation.</li> <li>• Medians are owned by road owning agencies. The medians therefore should be maintained by them.</li> <li>• Recommendations of SOP shall be followed.</li> </ul>
4.	Mumbai Metro	Mumbai Metro Rail Corporation Ltd ( <b>MMRC</b> ) and Mumbai Metropolitan Region Development Authority ( <b>MMRDA</b> )	<p>E-mails dated 14.12.2023 from <b>MMRC</b> and <b>MMRDA</b> along with attachments are enclosed as <b>Annexure-6</b></p> <ul style="list-style-type: none"> <li>• Freshwater requirement for construction/curing was estimated in order to avoid wastage.</li> <li>• RWH systems are installed at Metro stations and Viaducts.</li> <li>• Native tree plantation has been done on medians.</li> <li>• Treatment of water is being done through sedimentation tank installed on the ground surface during construction of underground stations.</li> <li>• Indicative measures for channelizing groundwater have been undertaken in underground sections.</li> <li>• Appropriate techniques are being deployed to reduce fresh water requirement during construction phase.</li> <li>• Mechanism for recycle/ reuse and low-flow fixtures are being installed at depots/ stations for operational phase.</li> <li>• Other SOP recommendations have also been noted for compliance in future.</li> </ul>
5.	Hyderabad Metro	Hyderabad Metro Rail Project ( <b>HMRP</b> )	<p>E-mail dated 14.12.2023 from <b>HMRP</b> along with attachment is enclosed as <b>Annexure-7</b></p> <ul style="list-style-type: none"> <li>• There is no underground section in present Hyderabad Metro Project.</li> <li>• Groundwater is not being used in the project.</li> <li>• 100% Sewage and Effluent generated in the depots is being treated and reused.</li> <li>• Water conservation practices are being implemented in the project. Yearly maintenance of RWH systems is being done.</li> <li>• Car depots facilities are designed and maintained with spillage-free mechanism.</li> <li>• The project has received Indian Green Building Council (IGBC) Platinum award for 23 stations.</li> </ul>
6.	Bengaluru Metro	Bengaluru Metro Rail Corporation Ltd ( <b>BMRC</b> )	<p>E-mail dated 15.12.2023 and letter dated 14.12.2023 from <b>BMRC</b> are enclosed as <b>Annexure-8</b>.</p> <ul style="list-style-type: none"> <li>• RWH system has been installed at stations, depots and workshops.</li> <li>• Rainwater from viaducts installed at every 3m is channelized and is discharged on to median.</li> </ul>

			<ul style="list-style-type: none"> <li>• Plantation has been done on medians and rainwater from viaduct is directed to plantations.</li> <li>• Wastewater from depots and workshop sheds is recycled and reused.</li> <li>• There is no mention of NOC for groundwater.</li> </ul>
7.	UP Metro	UP Metro Rail Corporation Ltd (UPMRC)	<p>E-mail/ letter dated 18.12.2023 from <b>UPMRC</b> are enclosed as <b>Annexure-8</b>.</p> <ul style="list-style-type: none"> <li>• RWH system is being complied with in UP Metro projects.</li> <li>• Necessary steps are being taken in UP Metro projects for prevention of contamination of groundwater.</li> <li>• There is no mention of NOC for groundwater.</li> </ul>

The above is submitted for perusal of Hon'ble NGT and the present Report may kindly be taken on record.



20/12/2023

(T B N Singh)

**Member Secretary, CGWA**

**टी.बी.एन. सिंह / T.B.N. SINGH**

सदस्य सचिव / Member Secretary

केन्द्रीय मृगि जल प्राधिकरण / Central Ground Water Authority

जल, संसाधन, नदी विकास एवं गंगा संरक्षण विभाग

Deptt. of Water Resources, River Development & Ganga Rejuvenation

जल शक्ति मंत्रालय / Ministry of Jal Shakti

भारत सरकार / Government of India

Place: New Delhi

Dated:

Email

Central Ground Water Authority

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:10 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** cmd@jaipurmetrorail.in

**Cc :** Regional Director <rdwr-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** cmd@jaipurmetrorail.in

**Cc:** udh@rajasthan.gov.in, "Regional Director" <rdwr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 12:55:52 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-Jaipur.pdf**

77 KB

 **Rajasthan-1.pdf**

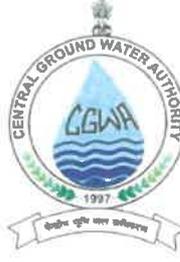
211 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

**File No: CGWA-21/31/2020-CGWA-Part(2) - 611**

**Date: 21.11.2023**

To

Sh. P. Ramesh,  
Chairman and Managing Director  
Admin Building,  
Metro Depot, Bhriugu Path,  
Mansarovar, Jaipur-302020

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023

(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:10 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

3 attachments

**To :** info@gujaratmetrorail.com

**Cc :** G KRISHNAMURTHY <rdwcr-cgwb@nic.in>, Groundwater Desk <gwdesk-mowr@nic.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** info@gujaratmetrorail.com

**Cc:** jsudd@gujarat.gov.in, "G KRISHNAMURTHY" <rdwcr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 12:53:01 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-GUJ.pdf**

73 KB

 **Gujarat-1.pdf**

210 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 612

Date: 21.11.2023

To,

Sh. S. S. Rathore,  
Managing Director,  
Block No. 1, First Floor,  
Karmayogi Bhavan,  
Behind Nirman Bhavan,  
Sector 10/A, Gandhinagar- 382010

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:09 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** feedback@lmrcl.com

**Cc :** RD CGWB NR Lucknow <rdnr-cgwb@nic.in>, Groundwater Desk <gwdesk-mowr@nic.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** feedback@lmrcl.com

**Cc:** "secyud up" <secyud.up@gmail.com>, "RD CGWB NR Lucknow" <rdnr-cgwb@nic.in>, "upgwd in" <upgwd.in@gmail.com>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 12:51:38 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-UP.pdf**

73 KB

 **UP (2).pdf**

212 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 691

Date: 21.11.2023

To,

Shri Sushil Kumar,  
Managing Director,  
Lucknow Metro Rail Corporation,  
Administrative Building,  
Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal,  
Vipin Khand Gomatinagar  
Uttar Pradesh-226010

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023

(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. The Director (GW), DoWR, RD & GR, MoJS – dirgw-mowr@nic.in

  
(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

---

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:23 PM

**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 3 attachments**To :** md@bmrc.co.in**Cc :** Sh N Jyothi Kumar <rdswr-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,****केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>**To:** md@bmrc.co.in**Cc:** secy-ud@karnataka.gov.in, "gwdkar" <gwdkar@gmail.com>, "Sh N Jyothi Kumar" <rdswr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>**Sent:** Tuesday, August 1, 2023 2:34:57 PM**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-bangalore.pdf**

71 KB

 **NGT order 06102023.pdf**

89 KB

 **bangalore.pdf**

199 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2)- 620

Date: 21.11.2023

To

Shri Anjum Parwez  
Managing Director  
Bangalore Metro Rail Corporation Ltd  
3rd Floor, BMTC Complex,  
K.H.Road, Shanthinagar,  
Bangalore 560027  
md@bmrc.co.in

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

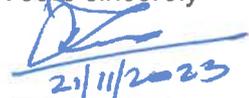
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



21/11/2023  
(T.B.N. Singh)

Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)

Member Secretary

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:28 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg 3 attachments**To :** ccd@ltmetro.com, customerservice@ltmetro.com**Cc :** J Siddhardha Kumar <rdsr-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,****केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>**To:** ccd@ltmetro.com, customerservice@ltmetro.com**Cc:** "Mr Sudarshan Reddy IAS C" <secy-maud@telangana.gov.in>, "crd telangana" <crd.telangana@gmail.com>, "J Siddhardha Kumar" <rdsr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>**Sent:** Tuesday, August 1, 2023 2:53:22 PM**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization

of water and rainwater management in metro projects – reg

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-HYD.pdf**

77 KB

 **NGT order 06102023.pdf**

89 KB

 **Hyderabad Metro Rail-1.pdf**

260 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 617

Date: 21.11.2023

To

Shri K V B Reddy,  
MD and CEO,  
L&T Metro Rail (Hyderabad) Limited,  
Hyderabad Metro Rail  
Administrative Building  
Hyderabad Metro Rail Depot  
Uppal Main Road, Uppal  
Hyderabad, Telangana – 500039

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023

(T.B.N. Singh)

Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

---

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:24 PM

**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 3 attachments**To :** chennaimetrorail@cmrl.in**Cc :** M.Sivakumar Regional Director <rdsecr-cgwb@nic.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,****केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>**To:** chennaimetrorail@cmrl.in**Cc:** ceocmda@tn.gov.in, cegwch@dataone.in, "M.Sivakumar Regional Director" <rdsecr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>**Sent:** Tuesday, August 1, 2023 2:37:51 PM**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-TN.pdf**  
70 KB

 **NGT order 06102023.pdf**  
89 KB

 **tamil nadu-1.pdf**  
214 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 609

Date: 21.11.2023

To

Shri M.A.Siddique,  
Managing Director,  
METROS, No.327,  
Anna Salai, Nandanam,  
Chennai- 600035, Tamil Nadu

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)  
Member Secretary

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:21 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** mdhmrtc@gmail.com

**Cc :** RD NWR CGWB <rdnwr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** mdhmrtc@gmail.com

**Cc:** tcpharyana7@gmail.com, "ceo hwra" <ceo.hwra@hry.gov.in>, "RD NWR CGWB" <rdnwr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 2:23:26 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-panchkula.pdf**

73 KB

 **haryana-1.pdf**

219 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2)-618

Date: 21.11.2023

To

Sh. Ajit Balaji Joshi,  
Managing Director,  
C-3, HSVP Complex,  
Sector 6, Panchkula - 134109

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:11 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** Manish Singh <md.mpmrcl@mp.gov.in>

**Cc :** Sh A K Biswal <rdncr-cgwb@nic.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** "Manish Singh" <md.mpmrcl@mp.gov.in>

**Cc:** "Secretary Urban Administration Department" <secyuad@mp.gov.in>, "Sh A K Biswal" <rdncr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 12:57:23 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-MP.pdf**

76 KB

 **MP.pdf**

213 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 613

Date: 21.11.2023

To

Sh. Manish Singh,  
Managing Director,  
Madhya Pradesh Metro Rail Corporation Limited,  
Bhopal Metro Rail Office, 2nd Floor, Zone-14,  
Bhopal Municipal Corporation,  
Smart City Building, BHEL, Govindpura,  
Near Natraj Petrol Pump, Bhopal-462023

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely,

  
21/11/2023

(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:18 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** contact@patnarailmetro.com

**Cc :** Thakur Brahmanand singh singh <rdmer-cgwb@nic.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** "UDHD" <urbansec-bih@nic.in>, "UDHD BIHAR" <udhd@bihar.gov.in>

**Cc:** "ceo pmaa" <ceo.pmaa@gmail.com>, "Thakur Brahmanand singh singh" <rdmer-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 1:00:12 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-patna.pdf**

75 KB

 **Bihar.pdf**

211 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 615

Date: 21.11.2023

To

Sri Arunish Chawla,  
Additional Chief Secretary  
Patna Metro Rail Corporation,  
Department of Urban Development & Housing,  
Govt. of Bihar, Vikash Bhawan,  
Patna, Bihar-800015.

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

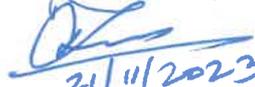
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



21/11/2023

(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)  
Member Secretary

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:22 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** Contact Us KMRL <contact@kmrl.co.in>, NIREESH C <nireesh.c@kmrl.co.in>, Sherin Wilson <sherin.w@kmrl.co.in>

**Cc :** Mini Chandran <rdkr-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** "Contact Us KMRL" <contact@kmrl.co.in>, "NIREESH C" <nireesh.c@kmrl.co.in>, "Sherin Wilson" <sherin.w@kmrl.co.in>

**Cc:** "Kerala Kerala" <prlseacy.lsg@kerala.gov.in>, gwdkerala@gmail.com, "Mini Chandran" <rdkr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 2:33:47 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-kochi.pdf**

71 KB

 **Kerala-1.pdf**

231 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 694

Date: 21.11.2023

To

Shri Loknath Behera,  
Managing Director,  
Kochi Metro Rail Limited,  
4th floor, JLN Metro station,  
Kaloor, Kochi -682017

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

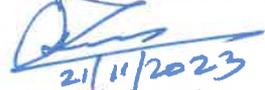
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – dirgw-mowr@nic.in



(T.B.N. Singh)  
Member Secretary

---

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:26 PM

**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 3 attachments**To :** GeneralManager Metro <gm@mtp.railnet.gov.in>, md@kmrc.in**Cc :** ANADI GAYEN <rder-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,****केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>**To:** "GeneralManager Metro" <gm@mtp.railnet.gov.in>, md@kmrc.in**Cc:** "KHALIL AHMED" <secy.ma-wb@gov.in>, "directorswid" <directorswid@gmail.com>, "ANADI GAYEN" <rder-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>**Sent:** Tuesday, August 1, 2023 2:38:56 PM**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-kolkata.pdf**

77 KB

 **NGT order 06102023.pdf**

89 KB

 **west bengal.pdf**

215 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 610

Date: 21.11.2023

To

1. Shri P. Uday Kumar Reddy,  
General Manager's Office  
Metro Rail Bhavan (2nd Floor)  
33/1, Jawaharlal Nehru Road  
Kolkata-700071
2. Shri V. K. Srivastava,  
Managing Director & Principal Chief Engineer,  
Metro Railway  
Kolkata Metro Rail Corporation Ltd  
HRBC Complex, KMRCL Bhawan  
2nd & 3rd Floor, Munsii Premchand Sarani  
Kolkata - 700021

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023  
(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

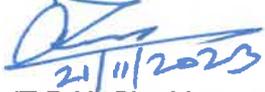
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Central Ground Water Authority <cgwa@nic.in>

Wed, Nov 22, 2023 04:21 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** MD DMRC <mdmetro@dmrc.org>

**Cc :** HOO <oicnd-cgwb@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, Vinayak Bhat <dirgw-mowr@nic.in>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** "MD DMRC" <mdmetro@dmrc.org>

**Cc:** "Shri Sanjay Goel IAS" <psud@nic.in>, spud@nic.in, "secy-ceo djb" <secy-ceo.djb@nic.in>, "ceodelhi.djb" <ceodelhi.djb@nic.in>, "HOO" <oicnd-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 2:30:50 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **metro letter-delhi.pdf**

77 KB

 **Delhi-1.pdf**

221 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

**File No: CGWA-21/31/2020-CGWA-Part(2) - 616**

**Date: 21.11.2023**

To

1. Shri Manoj Joshi,  
Chairman,  
Metro Bhawan, Fire Brigade Lane,  
Barakhamba Road, New Delhi-110001
2. Shri Vikas Kumar,  
Managing Director,  
Metro Bhawan, Fire Brigade Lane,  
Barakhamba Road, New Delhi-110001

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

**Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in>

Mon, Dec 04, 2023 12:44 PM

**Subject :** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

4 attachments

**To :** mcmrda@gmail.com,  
dpmetro@mailmmrda.maharashtra.gov.in,  
dw@mailmmrda.maharashtra.gov.in,  
mumbaimetro3@mmrcl.com

**Cc :** anil jamadar  
<anil.jamadar@mailmmrda.maharashtra.gov.in>,  
shantaram dalvi <shantaram.dalvi@mmrcl.com>

Sir

Please find attached this office letters on the subject and also the **e-mail dated 01.08.2023** vide which SOP for Proper Water Utilization in Metro Projects was circulated to metro projects. Hon'ble NGT Order dated 06.10.2023 in the matter is also attached for ready reference. It appears that due to inadvertent oversight, the SOP was not sent earlier to correct e-mail IDs of MMRDA and MMRC.

It is requested to please provide your feedback on SOP as directed by Hon'ble NGT by 06.12.2023 so as to enable this office to submit fresh ATR to Hon'ble NGT.

Regards

Dr Vikas Ranjan

Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** contactus@mahametro.org

**Cc:** "ce mmrda" <ce.mmrda@gmail.com>, "N Varadaraj" <rdcr-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>

**Sent:** Wednesday, November 22, 2023 4:12:57 PM

**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** contactus@mahametro.org

**Cc:** "sec ud2" <sec.ud2@maharashtra.gov.in>, "ce mmrda" <ce.mmrda@gmail.com>, "N Varadaraj" <rdcr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 12:58:53 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



**From :** Central Ground Water Authority <cgwa@nic.in> Tue, Aug 01, 2023 12:58 PM

**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.  5 attachments

**To :** contactus@mahametro.org

**Cc :** sec ud2 <sec.ud2@maharashtra.gov.in>, ce mmrda <ce.mmrda@gmail.com>, N Varadaraj <rdcr-cgwb@nic.in>, Groundwater Desk <gwdesk-mowr@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, A.K.Agrawal <mcgwa-cgwb@gov.in>

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



 **Maharashtra (2).pdf**

222 KB [View](#) [Download](#)

 **NGT Order dated 17032023.pdf**

81 KB [View](#) [Download](#)

 **Annexure I - SOP.pdf**

36 KB [View](#) [Download](#)

 **DoWR Advisory for prevention of GW contamination from RWH.pdf**

124 KB [View](#) [Download](#)

 **BIS\_standard\_RooftopRainWaterHarvesting.pdf**

8 MB [View](#) [Download](#)

 [Download all attachments](#)

 **metro letter-mumbai.pdf**

84 KB

 **Maharashtra (2).pdf**

222 KB

 **NGT Order dated 17032023.pdf**

81 KB

---

**Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 12:59 PM  
**Subject :** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 6 attachments  
**To :** md@bmrc.co.in  
**Cc :** MCGWA <mcgwa-cgwb@gov.in>, Sh N Jyothi Kumar <rdswr-cgwb@nic.in>

## REMINDER

Sir

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards

Dr Vikas Ranjan

Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Sh N Jyothi Kumar" <rdswr-cgwb@nic.in>

**To:** md@bmrc.co.in

**Cc:** "Central Ground Water Authority" <cgwa@nic.in>, "Tejas.Y.Mankikar" <mankikar.tejas-cgwb@gov.in>

**Sent:** Wednesday, December 6, 2023 1:21:36 PM

**Subject:** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

sir/madam

pls refer the trailing mail and mail dt. 02.08.2023 (attached) reg. compliance of Hon'ble NGT Order dated 17.03.2023 in above referred case.

In this regard it is requested to provide the status of implementation of SOP in metro projects being executed / proposed to be executed at the earliest.

The SOP has already been shared vide mail dt. 02.08.2023 and the same are attached again.

Regards

**Sh. N. Jyothi Kumar / श्री। एन ज्योति कुमार**

Regional Director / क्षेत्रीय निदेशक

Central Ground Water Board / केंद्रीय भूमिजल बोर्ड

South Western Region / दक्षिण पश्चिमी क्षेत्र

Bengaluru / बेंगलुरु

[हम हिन्दी में पत्राचार का स्वागत करते हैं](#)

---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** md@bmrc.co.in

**Cc:** "Sh N Jyothi Kumar" <rdsr-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>

**Sent:** Wednesday, November 22, 2023 4:23:01 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** md@bmrc.co.in

**Cc:** secy-ud@karnataka.gov.in, "gwdkar" <gwdkar@gmail.com>, "Sh N Jyothi Kumar" <rdsr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal"

210

&lt;mcgwa-cgwb@gov.in&gt;

**Sent:** Tuesday, August 1, 2023 2:34:57 PM**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,****केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)**From :** Sh N Jyothi Kumar <rdswr-cgwb@nic.in>

Wed, Aug 02, 2023 04:31 AM

**Subject :** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

5 attachments

**To :** md@bmrc.co.in**Cc :** Central Ground Water Authority <cgwa@nic.in>



Madam,

With respect to the NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs water and rainwater management in metro projects, please find attached the relevant documents this office within 2 months.

Regards

**Sh. N. Jyothi Kumar / श्री। एन ज्योति कुमार**

Regional Director / क्षेत्रीय निदेशक

Central Ground Water Board / केंद्रीय भूमिजल बोर्ड

South Western Region / दक्षिण पश्चिमी क्षेत्र

Bengaluru / बेंगलुरु

[हम हिन्दी में पत्राचार का](#)

**From:** "Central Ground Water Authority" <cgwa@nic.in>**To:** md@bmrc.co.in**Cc:** secy-ud@karnataka.gov.in, gwdkar@gmail.com, "Sh N Jyothi Kumar" <rdsr-cgwb@nic.in>, "vikasranjan-cgwb@gov.in", "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-**Sent:** Tuesday, August 1, 2023 2:34:57 PM**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures.

Regards,

**O/o सदस्य सचिव Member Secretary,****केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)

वसुधैव कुटुम्बकम्

ONE EARTH • ONE FAMILY • ONE FUTURE

-  **bangalore.pdf**  
199 KB [View](#) [Download](#)
-  **NGT Order dated 17032023.pdf**  
81 KB [View](#) [Download](#)
-  **Annexure I - SOP.pdf**  
36 KB [View](#) [Download](#)
-  **DoWR Advisory for prevention of GW contamination from RWH.pdf**  
124 KB [View](#) [Download](#)
-  **BIS\_standard\_RooftopRainWaterHarvesting.pdf**  
8 MB [View](#) [Download](#)
-  [Download all attachments](#)

-  **Annexure I - SOP.pdf**  
36 KB
-  **metro letter-bangalore.pdf**  
71 KB
-  **NGT order 06102023.pdf**  
89 KB
-  **bangalore.pdf**  
199 KB

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2)- 620

Date: 21.11.2023

To

Shri Anjum Parwez  
Managing Director  
Bangalore Metro Rail Corporation Ltd  
3rd Floor, BMTC Complex,  
K.H.Road, Shanthinagar,  
Bangalore 560027  
md@bmrc.co.in

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



21/11/2023  
(T.B.N. Singh)

Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)

Member Secretary

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 01:22 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 3 attachments  
**To :** chennaietrorail@cmrl.in  
**Cc :** M.Sivakumar Regional Director <rdsecr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D  
Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** chennaietrorail@cmrl.in  
**Cc:** "M.Sivakumar Regional Director" <rdsecr-cgwb@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>  
**Sent:** Wednesday, November 22, 2023 4:24:19 PM  
**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [chennaietrorail@cmrl.in](mailto:chennaietrorail@cmrl.in)

**Cc:** [ceocmda@tn.gov.in](mailto:ceocmda@tn.gov.in), [cegwch@dataone.in](mailto:cegwch@dataone.in), "M.Sivakumar Regional Director" <[rdsecr-cgwb@nic.in](mailto:rdsecr-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 2:37:51 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **metro letter-TN.pdf**

70 KB

 **NGT order 06102023.pdf**

89 KB

 **tamil nadu-1.pdf**

214 KB



भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 609

Date: 21.11.2023

To

Shri M.A.Siddique,  
Managing Director,  
METROS, No.327,  
Anna Salai, Nandanam,  
Chennai- 600035, Tamil Nadu

**Sub:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.

**Ref:** (i) This office letter dated 31.07.2023

(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

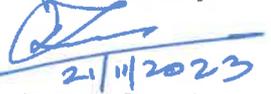
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:32 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 4 attachments  
**To :** info@gujaratmetrorail.com  
**Cc :** G KRISHNAMURTHY <rdwcr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards

Dr Vikas Ranjan

Sc D

Regards,

**O/o सदस्य सचिव Member Secretary,****केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)

---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** info@gujaratmetrorail.com  
**Cc:** "G KRISHNAMURTHY" <rdwcr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>  
**Sent:** Wednesday, November 22, 2023 4:10:08 PM  
**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [info@gujaratmetrorail.com](mailto:info@gujaratmetrorail.com)

**Cc:** [jsudd@gujarat.gov.in](mailto:jsudd@gujarat.gov.in), "G KRISHNAMURTHY" <[rdwcr-cgwb@nic.in](mailto:rdwcr-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 12:53:01 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **NGT order 06102023.pdf**

89 KB

 **metro letter-GUJ.pdf**

73 KB

 **Gujarat-1.pdf**

210 KB



**NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 612

Date: 21.11.2023

To,

Sh. S. S. Rathore,  
Managing Director,  
Block No. 1, First Floor,  
Karmayogi Bhavan,  
Behind Nirman Bhavan,  
Sector 10/A, Gandhinagar- 382010

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023

(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)  
Member Secretary

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:33 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg 3 attachments  
**To :** ccd@ltmetro.com, customerservice@ltmetro.com  
**Cc :** J Siddhardha Kumar <rdsr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D  
Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** ccd@ltmetro.com, customerservice@ltmetro.com  
**Cc:** "J Siddhardha Kumar" <rdsr-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>  
**Sent:** Wednesday, November 22, 2023 4:28:46 PM  
**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [ccd@ltmetro.com](mailto:ccd@ltmetro.com), [customerservice@ltmetro.com](mailto:customerservice@ltmetro.com)

**Cc:** "Mr Sudarshan Reddy IAS C" <[secy-maud@telangana.gov.in](mailto:secy-maud@telangana.gov.in)>, "crd telangana" <[crd.telangana@gmail.com](mailto:crd.telangana@gmail.com)>, "J Siddhardha Kumar" <[rdsr-cgwb@nic.in](mailto:rdsr-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>, "RD, CGWA" <[rdocgwa-cgwb@nic.in](mailto:rdocgwa-cgwb@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 2:53:22 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **metro letter-HYD.pdf**

77 KB

 **NGT order 06102023.pdf**

89 KB



**Hyderabad Metro Rail-1.pdf**

260 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 617

Date: 21.11.2023

To

Shri K V B Reddy,  
MD and CEO,  
L&T Metro Rail (Hyderabad) Limited,  
Hyderabad Metro Rail  
Administrative Building  
Hyderabad Metro Rail Depot  
Uppal Main Road, Uppal  
Hyderabad, Telangana – 500039

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:35 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 3 attachments  
**To :** feedback@lmrcl.com  
**Cc :** RD CGWB NR Lucknow <rdnr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** feedback@lmrcl.com  
**Cc:** "RD CGWB NR Lucknow" <rdnr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>  
**Sent:** Wednesday, November 22, 2023 4:09:17 PM  
**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [feedback@lmrcl.com](mailto:feedback@lmrcl.com)

**Cc:** "secyud up" <[secyud.up@gmail.com](mailto:secyud.up@gmail.com)>, "RD CGWB NR Lucknow" <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>, "upgwd in" <[upgwd.in@gmail.com](mailto:upgwd.in@gmail.com)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 12:51:38 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **metro letter-UP.pdf**  
73 KB

 **UP (2).pdf**  
212 KB

 **NGT Order dated 17032023.pdf**  
81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 691

Date: 21.11.2023

To,

Shri Sushil Kumar,  
Managing Director,  
Lucknow Metro Rail Corporation,  
Administrative Building,  
Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal,  
Vipin Khand Gomatinagar  
Uttar Pradesh-226010

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023

(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. The Director (GW), DoWR, RD & GR, MoJS – dirgw-mowr@nic.in

  
(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:38 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 4 attachments  
**To :** Manish Singh <md.mpmrcl@mp.gov.in>  
**Cc :** Sh A K Biswal <rdncr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** "Manish Singh" <md.mpmrcl@mp.gov.in>  
**Cc:** "Sh A K Biswal" <rdncr-cgwb@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>  
**Sent:** Wednesday, November 22, 2023 4:11:35 PM  
**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** "Manish Singh" <[md.mpmrcl@mp.gov.in](mailto:md.mpmrcl@mp.gov.in)>

**Cc:** "Secretary Urban Administration Department" <[secyuad@mp.gov.in](mailto:secyuad@mp.gov.in)>, "Sh A K Biswal" <[rdncr-cgwb@nic.in](mailto:rdncr-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 12:57:23 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **NGT order 06102023.pdf**

89 KB

 **metro letter-MP.pdf**

76 KB

 **MP.pdf**

213 KB

 **NGT Order dated 17032023.pdf**  
81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 613

Date: 21.11.2023

To

Sh. Manish Singh,  
Managing Director,  
Madhya Pradesh Metro Rail Corporation Limited,  
Bhopal Metro Rail Office, 2nd Floor, Zone-14,  
Bhopal Municipal Corporation,  
Smart City Building, BHEL, Govindpura,  
Near Natraj Petrol Pump, Bhopal-462023

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely,

  
21/11/2023

(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:40 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 4 attachments  
**To :** mdhmrtc@gmail.com  
**Cc :** RD NWR CGWB <rdnwr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** mdhmrtc@gmail.com  
**Cc:** "RD NWR CGWB" <rdnwr-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>  
**Sent:** Wednesday, November 22, 2023 4:21:18 PM  
**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [mdhmrtc@gmail.com](mailto:mdhmrtc@gmail.com)

**Cc:** [tcpharyana7@gmail.com](mailto:tcpharyana7@gmail.com), "ceo hwra" <[ceo.hwra@hry.gov.in](mailto:ceo.hwra@hry.gov.in)>, "RD NWR CGWB" <[rdnwr-cgwb@nic.in](mailto:rdnwr-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 2:23:26 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **NGT order 06102023.pdf**

89 KB

 **metro letter-panchkula.pdf**

73 KB

 **haryana-1.pdf**

219 KB



**NGT Order dated 17032023.pdf**

81 KB

---

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2)-618

Date: 21.11.2023

To

Sh. Ajit Balaji Joshi,  
Managing Director,  
C-3, HSVP Complex,  
Sector 6, Panchkula - 134109

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:44 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 3 attachments  
**To :** GeneralManager Metro <gm@mtp.railnet.gov.in>, md@kmrc.in  
**Cc :** ANADI GAYEN <rder-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** "GeneralManager Metro" <gm@mtp.railnet.gov.in>, md@kmrc.in  
**Cc:** "ANADI GAYEN" <rder-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdocgwa-cgwb@nic.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>  
**Sent:** Wednesday, November 22, 2023 4:26:56 PM  
**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** "GeneralManager Metro" <[gm@mtp.railnet.gov.in](mailto:gm@mtp.railnet.gov.in)>, [md@kmrc.in](mailto:md@kmrc.in)

**Cc:** "KHALIL AHMED" <[secy.ma-wb@gov.in](mailto:secy.ma-wb@gov.in)>, "directorswid" <[directorswid@gmail.com](mailto:directorswid@gmail.com)>, "ANADI GAYEN" <[rder-cgwb@nic.in](mailto:rder-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 2:38:56 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **metro letter-kolkata.pdf**

77 KB

 **NGT order 06102023.pdf**

89 KB

 **west bengal.pdf**

215 KB



भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 610

Date: 21.11.2023

To

1. Shri P. Uday Kumar Reddy,  
General Manager's Office  
Metro Rail Bhavan (2nd Floor)  
33/1, Jawaharlal Nehru Road  
Kolkata-700071
2. Shri V. K. Srivastava,  
Managing Director & Principal Chief Engineer,  
Metro Railway  
Kolkata Metro Rail Corporation Ltd  
HRBC Complex, KMRCL Bhawan  
2nd & 3rd Floor, Munsii Premchand Sarani  
Kolkata - 700021

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023  
(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

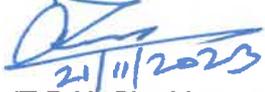
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely

  
21/11/2023  
(T.B.N. Singh)  
Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)

  
(T.B.N. Singh)  
Member Secretary

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:46 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 6 attachments  
**To :** mcmrda@gmail.com,  
dpmetro@mailmmrda.maharashtra.gov.in,  
dw@mailmmrda.maharashtra.gov.in,  
mumbaimetro3@mmrcl.com  
**Cc :** anil jamadar  
<anil.jamadar@mailmmrda.maharashtra.gov.in>,  
shantaram dalvi <shantaram.dalvi@mmrcl.com>, N  
Varadaraj <rdcr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**  
**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**  
जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India  
18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011  
18/11, Jamnagar House, Mansingh Road, New Delhi-110011  
Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** mcmrda@gmail.com, dpmetro@mailmmrda.maharashtra.gov.in,  
dw@mailmmrda.maharashtra.gov.in, mumbaimetro3@mmrcl.com  
**Cc:** "anil jamadar" <anil.jamadar@mailmmrda.maharashtra.gov.in>, "shantaram dalvi"

<shantaram.dalvi@mmrcl.com>

**Sent:** Monday, December 4, 2023 12:44:25 PM

**Subject:** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir

Please find attached this office letters on the subject and also the **e-mail dated 01.08.2023** vide which SOP for Proper Water Utilization in Metro Projects was circulated to metro projects. Hon'ble NGT Order dated 06.10.2023 in the matter is also attached for ready reference. It appears that due to inadvertent oversight, the SOP was not sent earlier to correct e-mail IDs of MMRDA and MMRC.

It is requested to please provide your feedback on SOP as directed by Hon'ble NGT by 06.12.2023 so as to enable this office to submit fresh ATR to Hon'ble NGT.

Regards

Dr Vikas Ranjan

Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [contactus@mahametro.org](mailto:contactus@mahametro.org)

**Cc:** "ce mmrda" <[ce.mmrda@gmail.com](mailto:ce.mmrda@gmail.com)>, "N Varadaraj" <[rdcr-cgwb@nic.in](mailto:rdcr-cgwb@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "MCGWA" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "Vinayak Bhat" <[dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)>

**Sent:** Wednesday, November 22, 2023 4:12:57 PM

**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** contactus@mahametro.org

**Cc:** "sec ud2" <sec.ud2@maharashtra.gov.in>, "ce mmrda" <ce.mmrda@gmail.com>, "N Varadaraj" <rdcr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 12:58:53 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



**From :** Central Ground Water Authority <cgwa@nic.in>

Tue, Aug 01, 2023 12:28 AM

**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

5 attachments

**To :** contactus@mahametro.org

**Cc :** sec ud2 <sec.ud2@maharashtra.gov.in>, ce mmrda <ce.mmrda@gmail.com>, N Varadaraj <rdcr-cgwb@nic.in>, Groundwater Desk <gwdesk-mowr@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, A.K.Agrawal <mcgwa-cgwb@gov.in>

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosure

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



**Maharashtra (2).pdf**

222 KB [View](#) [Download](#)



**NGT Order dated 17032023.pdf**

81 KB [View](#) [Download](#)



**Annexure I - SOP.pdf**

36 KB [View](#) [Download](#)



**DoWR Advisory for prevention of GW contamination from RWH.pdf**

124 KB [View](#) [Download](#)



**BIS\_standard\_RooftopRainWaterHarvesting.pdf**

8 MB [View](#) [Download](#)



[Download all attachments](#)



**NGT order 06102023.pdf**

89 KB



**metro letter-mumbai.pdf**

84 KB



**Maharashtra (2).pdf**

222 KB



**NGT Order dated 17032023.pdf**

81 KB

भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 619

Date: 21.11.2023

To

1. SHRI. MANOJ JOSHI,  
Chairman,  
Maharashtra Metro Rail Corporation Limited & Secretary  
Ministry of Housing & Urban Affairs,  
METRO BHAVAN, VIP road,  
Near Dikshabhoomi, Nagpur - 440010
2. SHRI. NITIN KARIR  
Managing Director,  
Maharashtra Metro Rail Corporation Limited  
Metro Bhavan, VIP road,  
Near Dikshabhoomi, Nagpur - 440010
3. Dr. Sanjay Mukherjee  
Metropolitan Commissioner,  
MMRDA  
Bandra-kurla complex  
M.M.R.D.A. Office building,  
bandra-kurla complex,  
C-14 & 15, E block bandra (East),  
MUMBAI - 400 051

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

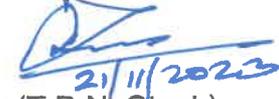
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



(T.B.N. Singh)

Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)

Member Secretary

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** Central Ground Water Authority <cgwa@nic.in> Mon, Dec 11, 2023 02:57 PM  
**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 3 attachments  
**To :** contact@patnarailmetro.com, UDHD <urbansec-bih@nic.in>, UDHD BIHAR <udhd@bihar.gov.in>  
**Cc :** Thakur Brahmanand singh singh <rdmer-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <cgwa@nic.in>  
**To:** contact@patnarailmetro.com  
**Cc:** "Thakur Brahmanand singh singh" <rdmer-cgwb@nic.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "MCGWA" <mcgwa-cgwb@gov.in>, "Vinayak Bhat" <dirgw-mowr@nic.in>  
**Sent:** Wednesday, November 22, 2023 4:18:53 PM  
**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** "UDHD" <[urbansec-bih@nic.in](mailto:urbansec-bih@nic.in)>, "UDHD BIHAR" <[udhd@bihar.gov.in](mailto:udhd@bihar.gov.in)>

**Cc:** "ceo pmaa" <[ceo.pmaa@gmail.com](mailto:ceo.pmaa@gmail.com)>, "Thakur Brahmanand singh singh" <[rdmer-cgwb@nic.in](mailto:rdmer-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>

**Sent:** Tuesday, August 1, 2023 1:00:12 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

 **metro letter-patna.pdf**

75 KB

 **Bihar.pdf**

211 KB

 **NGT Order dated 17032023.pdf**

81 KB



भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण  
विभाग  
केंद्रीय भूजल प्राधिकरण  
18/11 जामनगर हाउस, मानसिंह रोड  
नई दिल्ली-110011  
ई-मेल: cgwa@nic.in



Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
RD & GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh  
Road  
New Delhi – 110011  
E-mail: cgwa@nic.in

File No: CGWA-21/31/2020-CGWA-Part(2) - 615

Date: 21.11.2023

To

Sri Arunish Chawla,  
Additional Chief Secretary  
Patna Metro Rail Corporation,  
Department of Urban Development & Housing,  
Govt. of Bihar, Vikash Bhawan,  
Patna, Bihar-800015.

**Sub: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/ 2023) wrt to proper utilization of water and rainwater management in Metro Projects.**

**Ref: (i) This office letter dated 31.07.2023**

**(ii) Hon'ble NGT Order dated 06.10.2023 in the matter MA 98/2023 in O.A. 198/2023**

This is with reference to the letter cited above on the subject (copy enclosed for ready reference) vide which SOP for proper utilization of water and rainwater management in metro projects was circulated.

**Hon'ble NGT vide Order dated 06.10.2023** referred above at S. No. (ii) (copy enclosed), has directed the committee to submit a fresh report. **Para 6 of the order** reads as following.

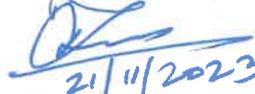
*"In order to ascertain that SOP has been accepted by the Metro Rail Corporations and they are acting upon the said SOP and also to find out at what stage the NOC is required, we deem it proper to call for the fresh report from a joint Committee. Let the report be submitted before the Registrar General of the Tribunal on the issue mentioned above by the joint Committee within eight weeks by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

In view of above, it is requested to provide the status of implementation of SOP in Metro Project being executed/ proposed to be executed.

The ATR may be submitted latest by 24.11.2023 so as to enable this office to submit the report to Hon'ble NGT in time.

Encl: as above

Yours sincerely



21/11/2023  
(T.B.N. Singh)

Member Secretary

Copy to:

1. All Regional Directors, CGWB.
2. Director (GW), DoWR, RD & GR, MoJS – [dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)



(T.B.N. Singh)  
Member Secretary

Email

Central Ground Water Authority

---

**Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** Director Systems <ds@kmrl.co.in>

Mon, Nov 27, 2023 04:39 PM

**Subject :** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg. 1 attachment**To :** Central Ground Water Authority <cgwa@nic.in>**Cc :** Loknath Behera <md@kmrl.co.in>, Manikandan A <manikandan@kmrl.co.in>, Madankumar P <madan.k@kmrl.co.in>

Dear Sir,

Please find attached letter ref.no.KMRL/SYS/DS/2023/18 dt.27.11.2023 regarding the Status of Implementation of SoP in Kochi Metro Project.

Kind regards,

Sanjay Kumar  
Director-Systems  
Kochi Metro Rail Limited | [www.kochimetro.org](http://www.kochimetro.org)  
A Joint Venture company of Govt. of India & Govt. of Kerala  
JLN Stadium Metro Station, 4th Floor,  
Kaloor, Ernakulam  
Kerala - 682017  
India  
ds@kmrl.co.in | Ph: 0484 2846700, 0484 2846770 | Fax: 0484 2970810

---

 **Implementation of SoP.pdf**  
830 KB

## KOCHI METRO RAIL LIMITED

A 50-50 Joint Venture of Govt. of India & Govt. of Kerala



KMRL/SYS/DS/2023/18

27<sup>th</sup> November 2023

To,

Shri T.B.N Singh,  
Member Secretary,  
Central Ground Water Authority,  
Government of India  
18/11, Jamnagar House, Mansingh Road,  
New Delhi – 110011

Sir,

**Sub: Status of implementation of SOP in Kochi Metro Project**  
**Ref: Your letter CGWA-21/31/2020-CGWA-PART (2)-614 dated 21.11.2023**

With reference to the subject mentioned above, the following are the status of implementation of SoP in Kochi Metro.

Sl.No.	Reference Clause in the SOP	Action Taken in this Regard
1	A –I (i. to x.)	NA – No underground construction in Kochi metro
2	A –II (i)	Noted
3	A –II (ii)	Noted
4	A –II (iii)	Noted
5	B (i)	NA – No underground construction in Kochi metro
6	B (ii)	NOC is obtained for all the wells in Stations and Depot of Kochi metro
7	B (iii)	Already implemented, treated water from ETP/STP is being used for gardening purpose.
8	B (iv)	Noted
9	B (v)	Noted
10	B (vi)	Out of 24 stations in Kochi Metro, Rainwater Harvesting System is already implemented in 16 Stations, however work is under progress at 6 stations which will be completed in 3 months time (The detailed working of rain water harvesting system is provided as <b>Annexure-1</b> )
11	B (vii)	Noted
12	B (viii)	Noted
13	B (ix)	Noted

Encl : **Annexure-1**

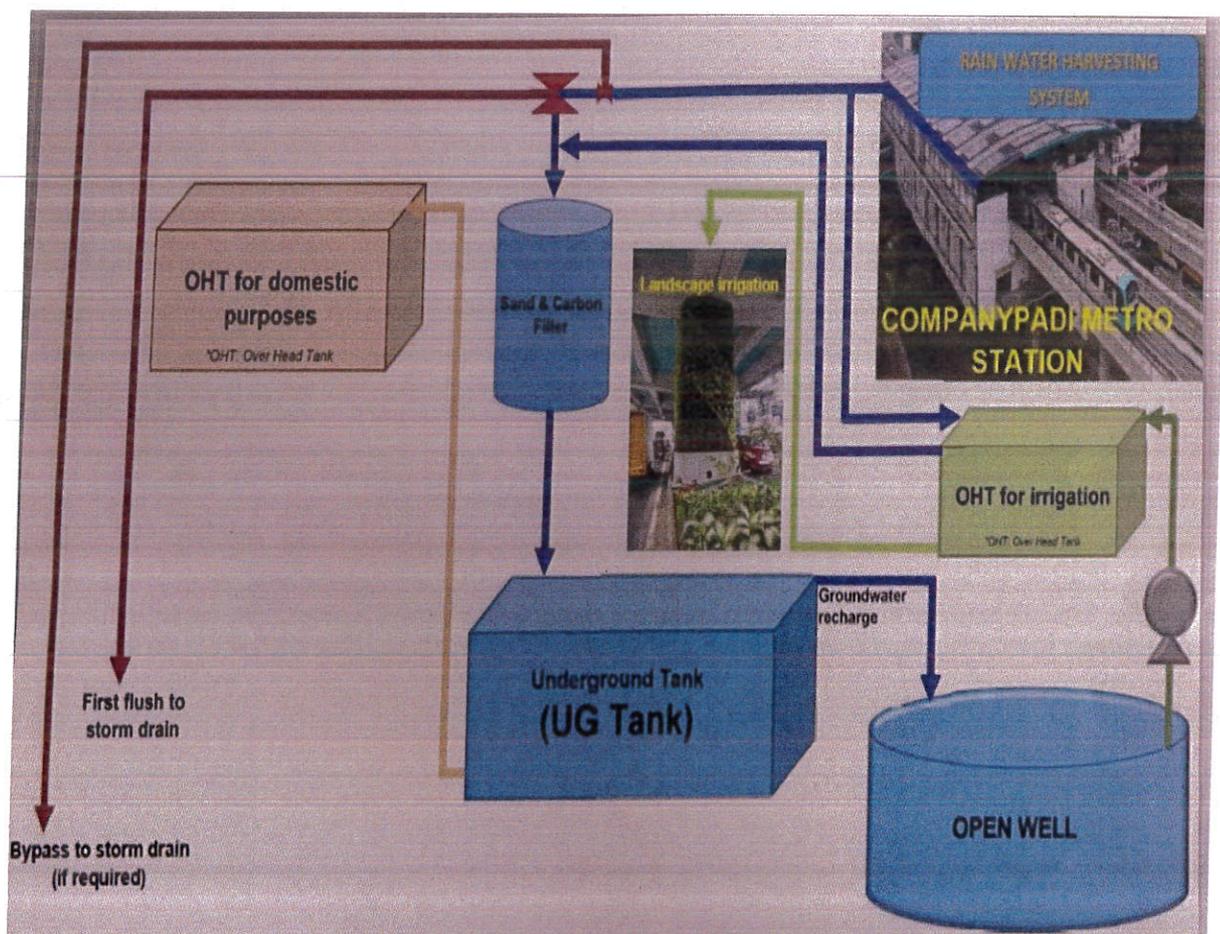
Thanking you,



Sanjay Kumar  
Director(Systems)

*Annexure-1***Rain water Harvesting System:**

- At each metro station, the roof area is utilized for rainwater collection.
- The water is collected from the roof top and passed through a filter system. Then the water is stored in the underground sump provided in the pump room of each station.
- The stored water is then used for the domestic activities in the station and excess water collected is used for recharging the ground water through existing open well and bore well.
- Since the Ground water table is shallow, the scope for recharging is limited in the area.
- Rainwater collected from station rooftops and circulated in the metro stations has saved the usage/requirement of Kerala Water Authority water considerably.
- A separate special provision is made in some stations to Fill the irrigation tank directly from the roof that can supply water to irrigate the premises of the station by gravitational flow. The additional connection reduces power consumption by eliminating the requirement to pump the water to the elevated tank.
- The medians along the metro alignment are provided with flower bed.
- Overall, The Rainwater harvesting system reduce the wastage of rainwater and recharging of the wells benefit the public staying in and around the station premises.
- Typical arrangement of the Rain water Harvesting system in station is shown below.



---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** dp@JAIPURMETRORAIL.IN

Thu, Nov 23, 2023 05:11 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 15 attachments

**To :** Central Ground Water Authority <cgwa@nic.in>

**Cc :** cmd@JAIPURMETRORAIL.IN, udh@rajasthan.gov.in, Regional Director <rdwr-cgwb@nic.in>, Groundwater Desk <gwdesk-mowr@nic.in>, VIKAS RANJAN <vikasranjan-cgwb@gov.in>, RD, CGWA <rdcgwa-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>

Sir,

In reference to E-Mail dated 22.11.2023 on the subject matter, kindly see the attached letter regarding Compliance of Hon'ble NGT Order dated 17.03.2023 w.r.t. proper utilization of water and rainwater management in upcoming metro projects (Phase-1C and 1D) of JMRC.

Thanks & Regards

PS to Director (Project)  
Jaipur Metro Rail Corporation Ltd.  
Contact No.+91-141-2822780(O), Fax No.- +91-141-2822781.



---

**From:** cmd@jaipurmetrorail.in

**Sent:** 22 November 2023 16:34:36

**To:** dos@jaipurmetrorail.in; dp@jaipurmetrorail.in; dc@jaipurmetrorail.in

**Subject:** Fw: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

---

**From:** Central Ground Water Authority <cgwa@nic.in>

**Sent:** Wednesday, November 22, 2023 4:10 PM

**To:** cmd@jaipurmetrorail.in

**Cc:** Regional Director; VIKAS RANJAN; RD, CGWA; MCGWA; Vinayak Bhat

**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



**From:** "Central Ground Water Authority" <cgwa@nic.in>

**To:** cmd@jaipurmetrorail.in

**Cc:** udh@rajasthan.gov.in, "Regional Director" <rdwr-cgwb@nic.in>, "Groundwater Desk" <gwdesk-mowr@nic.in>, "VIKAS RANJAN" <vikasranjan-cgwb@gov.in>, "RD, CGWA" <rdcgwa-cgwb@nic.in>, "A.K.Agrawal" <mcgwa-cgwb@gov.in>

**Sent:** Tuesday, August 1, 2023 12:55:52 PM

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



266 115  
NEW-1: **Rajasthan Single Sign On (RajSSO)** - One Digital Identity (username and password) for various state government applications. Please register/ logon at <http://rajasthan.gov.in> and click "SSO Sign-in".

NEW-2: **RajMAIL** - FREE Govt. Email A/c (yourname@rajasthan.in). Download RAJMAIL mobile app from Google Play Store today and enjoy FREE Webmail Service with option to add Hindi Email address <आपकानाम@राजस्थान.भारत>

---



---

 **JMRC Letter 746 Dated 23.11.23.pdf**  
699 KB

---



JAIPUR METRO

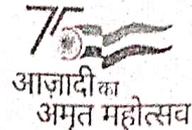
**JAIPUR METRO RAIL CORPORATION LIMITED**
**(A Government of Rajasthan Undertaking)**

 1<sup>st</sup> Floor, Administrative Building Wing - A, Bhriugu Path,

Mansarovar Metro Depot, Jaipur - 302020

CIN: U60221RJ2010SGC030630

Tel: No. 0141- 2822780/Fax No.0141-2822781

 Website: [transport.rajasthan.gov.in/jmrc](http://transport.rajasthan.gov.in/jmrc) Email: [dp@jaipurmetrorail.in](mailto:dp@jaipurmetrorail.in); [gmpc@jaipurmetrorail.in](mailto:gmpc@jaipurmetrorail.in)


F7 (C-427 &amp; 428) /JMRC/ Phase-1C&amp;1D/2023/146

Dated: 23.11.2023

To,

The Member Secretary,  
Central Ground Water Authority,  
18/11, Jamnagar house, Mansingh Road,  
New Delhi-110011  
Email: [cgwa@nic.in](mailto:cgwa@nic.in)

**Sub:** Compliance of Hon'ble NGT Order dated 17.03.2023 regarding proper utilization of water and rainwater management in metro projects.

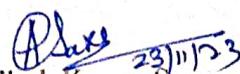
- Ref:**
1. Email received from Ministry of Housing and Urban Affairs dated 11.08.2023
  2. Jmrc letter no.F7(C-447&448)/JMRC/Correspondences-GC(Elev.&UG)/2023/518 dated 12.09.2023 with enclosed copy of SOP to General Consultant(GC) i.e. DMRC for its implementation for the project phase-1C and 1D of Jaipur Metro.
  3. Email received from Ministry of Jal Shakti dated 22.11.2023 regarding compliance of Hon'ble NGT order dated 17.03.2023 for proper utilization of water and rainwater management in metro projects.

Sir,

With reference to the above cited subject, it is informed that status of compliance to Standard Operating Procedures (SOP) for "Utilization of Water and Rain Water Management in Metro Projects" issued on date 31.07.2023 by CWGA are as under:-

1. Civil works contract for underground section of Phase-1C (Badi Chaupar Metro Station to Transport Nagar chauraha) has been awarded on 04.09.2023 & construction work not yet started at site. The contract covers provisions of water management, rain water harvesting system and certification under IGBC. Hence all the provisions as mentioned under para-A of SOP shall be followed during execution of construction works.
2. The civil work of elevated section of Project Phase-1C (Badi chaupar to Transport Nagar) and Phase 1D (Mansarovar Metro Station Dead End to Ajmer Road Chauraha) is under tender evaluation stage and shall be awarded by Dec, 2023. The contract covers provisions of water management, rain water harvesting system and certification under IGBC. Hence all the provisions as mentioned under para-A of SOP shall be followed during execution of construction works.
3. The copy of guidelines & SOP issued by CGWA on the subject matter has been shared with General Consultant (DMRC) for Project Phase-1C and 1D of Jaipur Metro (ref-2) for implementation during the construction work of both the upcoming projects.

This is for your kind information please.

  
(Akhilesh Kumar Saxena)  
Director (Project)

Copy to: PS to CMD, JMRC for kind information, please.

---

**The status of implementation of SOP in Metro Project of JMRC in Compliance of Hon'ble NGT order dated 17.03.2023 in Harpal Singh Rana.**

---

**From :** com@JAIPURMETRORAIL.IN Fri, Nov 24, 2023 06:44 PM  
**Subject :** The status of implementation of SOP in Metro Project of JMRC in Compliance of Hon'ble NGT order dated 17.03.2023 in Harpal Singh Rana. 📎 2 attachments  
**To :** Central Ground Water Authority <cgwa@nic.in>  
**Cc :** cmd@JAIPURMETRORAIL.IN,  
dos@JAIPURMETRORAIL.IN,  
edop@JAIPURMETRORAIL.IN,  
gmop@JAIPURMETRORAIL.IN

Sir,

Greetings of the day !

As directed, enclosed please find attached as per caption subject, for your information please.

Thanks with Regards

**Commercial Cell, JMRC**

Phone:-0141-2822148

Ext.-10193



---

NEW-1: **Rajasthan Single Sign On (RajSSO)** - One Digital Identity (username and password) for various state government applications. Please register/logon at <http://rajasthan.gov.in> and click "SSO Sign-in".

NEW-2: **RajMAIL** - FREE Govt. Email A/c (yourname@rajasthan.in). Download RAJMAIL mobile app from Google Play Store today and enjoy FREE Webmail Service with option to add Hindi Email address <आपकानाम@राजस्थान.भारत>

---



---

 **COMPLIANCE 815024112023.pdf**  
656 KB

---



JAIPUR METRO

118

**JAIPUR METRO RAIL CORPORATION LIMITED**

**Executive Director (Operations)**

**(Directorate of Operations & Systems)**

406, Admin Building, Metro Depot, Bhrigu Path, Mansarovar, Jaipur-302020

Tel. No. 0141- 2822104 (O) E- mail:edop@jaipurmetrorail.in

269



F. 121 (1) JMRC/O&S/OP/MoHUA/2022-23 / 8150

Dated: 29.11.2023

**Member Secretary**  
**Ministry of Jal Shakti**  
**Department of Water Resources, RD & GR**  
**Central Ground Water Authority**  
**18/11, Jamnagar House, Mansingh Road**  
**New Delhi-110011**  
**E-mail: cgwa@nic.in**

**Sub:-** Compliance of Hon'ble NGT order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttarakhand & Ors (OA No. 198/2023) wrt to proper utilization of water and rainwater management in Metro Projects.

**Ref:-** 1. Member Secretary, CGWA Office letter No. CGWA-21/31/2020-CGWA-Part(2)-611 dated 21.11.2023.

With reference to above, the status of implementation of SOP in Metro Project of JMRC is as follows:-

Description of Items	Compliance
<b>A. Water Management During Construction Phase</b>	
. Underground Construction (Stations/ Tunnels)	Civil works contract for underground section of Phase-1C (Bade Chaupar Metro Station to Transport Nagar Chauraha) has been awarded on 04.09.2023 & contraction work not yet started at site. The contract covers provisions of water management, rain water harvesting system and certification under IGBC. Hence all the provisions as mentioned under para-A of SOP shall be followed during execution of construction works.
(II) Elevated Construction	The civil work of elevated section of project Phase-1C(Badi Chaupar Metro Station to Transport Nagar ) and Phase 1 D (Mansarovar Metro Station Dead End to Ajmer Road Chauraha) is under tender evaluation stage and shall be awarded by Dec, 2023. The contract covers provisions of water management, rain water harvesting system and certification under IGBC. Hence all the provisions as mentioned under para-A of SOP shall be followed during execution of construction works.



**JAIPUR METRO RAIL CORPORATION LIMITED**  
**Executive Director (Operations)**  
**(Directorate of Operations & Systems)**

<b>B. Water Management During Operational Phase</b>	
(i) Along underground sections, water level data being received from installed piezometers must be continuously and religiously monitored. Metro corporations are required to get regular studies conducted by professional agencies / academic institutions. In the event undesirable effect on groundwater regime – such as build-up of groundwater column against the construction is noticed, and the cause is established as Metro construction, mitigation measures like pumping out groundwater and its gainful utilization may be adopted. Metro corporations may seek technical advice from universities/ IITs/ Central ground Water Board / state GW Department etc. in such situations.	Noted and study will be undertaken in due course of time.
(ii) In case of use of groundwater/ construction of tubewell by the Metro Corporation for operation/ maintenance of stations, groundwater NOC must be obtained from CGWA/ respective SGWA as mandated by Ministry of Jal Shakti Guidelines for infrastructure projects (available on CGWA website <a href="https://cgwa-noc.gov.in">https://cgwa-noc.gov.in</a> ).	For taking NOC, the process is going on with Central Ground Water Authority, Jaipur.
(iii) Channelization of wastewater for reuse may be considered in large facilities like car depots.	This is being undertaken in Jaipur Metro Mansarovar Depot.
(iv) Metro projects should make all efforts to reduce fresh water usage for operation/ maintenance of depot/ metro stations and also to minimize wastage.	Noted and it is being done by Jaipur Metro.
(v) Metro projects create additional constructions, which can lead to some increased surface run off during rainfall events. Proper stormwater management techniques can help mitigate the impact of stormwater runoff, reduce erosion, and prevent flooding.	Noted and no additional construction is being done by Operations department.
(vi) Bureau of Indian standards (BIS) has a dedicated committee- <b>Ground Water And Related Investigations Sectional Committee, WRD 03</b> . The committee, in consultation with experts have developed BIS standard <b>IS15797:2008 For roof top Rainwater harvesting – Guidelines</b>	Noted and necessary action is being taken.



JAIPUR METRO

120

**JAIPUR METRO RAIL CORPORATION LIMITED**

**Executive Director (Operations)**

**(Directorate of Operations & Systems)**

406, Admin Building, Metro Depot, Bhriugu Path, Mansarovar, Jaipur-302020

Tel. No. 0141- 2822104 (O) E- mail:edop@jaipurmetrorail.in



(enclosed as Appendix-G). Same should be used for implementing RWH at elevated metro stations and elevated tracks.	
(vii) RWH System at medians/Greenbelt below the track may be maintained more frequently. In Case of theft/ Breakage of downpipes/ Chamber slabs, same may be replaced immediately. The environmental concerns far outweigh physical damages.	Noted and greenbelt below track is being maintained. Down take pipe is also replaced whenever required.
(viii) Caution may be applied in the stretches with chances of oil/grease mixing with rainwater. In such stretches, recharge may be avoided.	Noted.
(xi) Native tree plantation should be encouraged near project areas/on medians. This would help in formations of macropores, thereby increasing recharging capacity of aquifers.	Noted, tree plantation is being done in medians.

This is for your kind information please.

  
ED (Operations)  
JMRC

Copy to: For Kind information.

1. PS to CMD, JMRC for kind information, Please.
2. Director (O&S)/JMRC Please.



# दिल्ली मेट्रो रेल कॉर्पोरेशन लि० DELHI METRO RAIL CORPORATION LTD.

(भारत सरकार एवं दिल्ली सरकार का संयुक्त उपक्रम)  
(A JOINT VENTURE OF GOVERNMENT OF INDIA AND GOVT. OF DELHI)

No. DMRC/Env/559A/2023/ 7672

Date: 24.11.2023

The Member Secretary,  
Central Ground Water Authority,  
18/11, Jamnagar House,  
Mansingh Road,  
New Delhi- 110011

**Sub: Action Taken report by DMRC in reference to Hon'ble NGT OA No. 198/2023.**

Ref: Your File No. CGWA-21/31/2020-CGWA-Part(2)-616 dt. 21.11.2023.

Sir,

This is in reference to the NGT O.A. No. 198/2023 in the subject matter cited above.

Please find attached the Action Taken Report (ATR) providing the status of implementation of SOP in DMRC.

Encl: a/a

Thanking you

Yours faithfully

  
(S A Verma)

Executive Director/ Env

24/11

**ATR ON PROPER UTILIZATION OF WATER AND RAINWATER MANAGEMENT**

**IN METRO PROJECTS**

**A WATER MANAGEMENT DURING CONSTRUCTION PHASE**

**1. Underground Construction (Stations/ Tunnels)**

- (i) 'Fresh water' requirement for construction/ curing may be estimated prior to physical execution so that wastage of fresh water may be minimized.

Reply: Noted for future.

- (ii) Underground metro projects can have several potential impacts on groundwater, which depend on various factors such as the project's depth, construction methods, hydrogeological conditions, and the surrounding environment. To mitigate the potential impacts on groundwater, thorough hydrogeological investigations and monitoring programs should be conducted before, during, and after the construction of underground metro projects. The implementing agency must take into account hydrogeological set up of the area, prior to taking up actual execution of work. This will include understanding the subsurface geology, water levels, groundwater flow direction etc. of the area. These assessments help identify potential risks and allow for the implementation of appropriate measures to protect groundwater resources, maintain water quality, and ensure the long-term sustainability of the project

Reply: Prior to the execution of its Phase-IV construction, DMRC had commissioned a study titled "Report on Hydrogeological Study for Delhi MRTS Phase-IV". The study comprehensively addresses the hydrogeological setup of the area, water levels, ground water flow directions, etc. The study has suggested measures for protection of ground water resources.

- (iii) Wherever water table is encountered, behaviour/ pattern of groundwater flow and likely impact of construction activity and permanent underground construction on prevailing groundwater regime must be studied. Metro tunnels may intersect or pass through aquifers. Construction activities can disrupt these aquifers, affecting their ability to store and transmit groundwater and affect their hydraulic connectivity. This interference may alter the flow and distribution of groundwater. Proper engineering techniques, such as grouting and tunnel lining, should be employed to minimize the potential interference with aquifers and preserve their hydrogeological properties.

Reply: This aspect has also been taken up in the study mentioned at Para ii above.

- (iv) There could be situations where the construction of structures (tunnels/stations) act as sub-surface barriers to groundwater flow, creating build-up of groundwater column against the barrier on upstream side, imposing threat to buildings in the vicinity. Metro Corporations may seek technical advice from Universities/IITs/ Central Ground Water Board/ State GW Department etc. in such situations and take up appropriate mitigation measures.

Reply: Noted. If such a need arises in future, specialized agencies will be approached.

- (v) Quantification of expected quantum of dewatering should be part of hydrogeological study for proper planning for gainful utilization of dewatered water.

Reply: This point has been addressed in the report mentioned at Para ii above.

- (vi) Construction activities, particularly tunnelling and drilling, may introduce contaminants into the groundwater. These contaminants may include construction related chemicals, fuels, lubricants, and other substances. If not properly managed, they can infiltrate the groundwater and cause water quality issues. Maintaining water quality within and around the metro project area is vital to protect public health and the environment. Proper safeguards, such as using appropriate construction materials, implementing containment measures, and monitoring groundwater quality, should be put in place to prevent contamination. Measures like sedimentation basins, oil-water separators, and water treatment systems can be employed to remove pollutants and contaminants from construction runoff and wastewater generated during metro operations.

Reply: Such measures as suggested are already being taken by DMRC during the construction phase.

- (vii) Piezometers along with automatic water level recorders should be installed along the metro alignment for continuous monitoring of water level behaviour in the vicinity of metro constructions during such periods. In the event of likely long-term deviation from normal pattern, the build-up of groundwater may be channelized or redirected to other locations through appropriate engineering measures. This can help manage groundwater levels and prevent excessive pressure against the tunnel walls. A few indicative methods that can be used to redirect the groundwater away from the metro tunnels are following:
- (a) **Dewatering Wells:** Dewatering wells can be installed strategically around the metro tunnels to lower the groundwater levels. These wells are equipped with pumps that extract groundwater, effectively lowering the water table and reducing hydrostatic pressure against the tunnels.
  - (b) **Drainage Systems:** Installing a network of drainage systems, such as perforated pipes or weep holes, along the tunnel walls can provide a pathway for groundwater to flow and be collected. These drainage systems can be designed to lead the collected groundwater to designated discharge points.
  - (c) **Pumping Systems:** In cases where the groundwater level needs to be actively managed, pumping systems can be employed to extract excess groundwater from the area surrounding the metro tunnels. These pumps can redirect the water to appropriate locations.
  - (d) **Permeable Backfill:** Using permeable backfill material around the tunnels can allow groundwater to flow more easily through the surrounding soil, reducing the build-up of pressure against the tunnel walls. This can involve the use of granular materials or geo-composite drainage layers that facilitate the movement of water away from the tunnels.

It may be ensured that channelized groundwater is gainfully utilized as far as possible. It's important to note that the specific measures employed to manage groundwater around metro tunnels may vary depending on site-specific conditions, including the hydrogeological characteristics of the area, groundwater flow patterns, and the local regulatory requirements. A comprehensive hydrogeological study and proper engineering design are crucial to determine the most effective and sustainable methods for channelizing groundwater away from metro tunnels while ensuring the stability and safety of the tunnel structure.

Reply: Such measures as suggested under (a), (b), (c) and (d) above are already being followed by DMRC, as per site conditions and technical feasibility.

- (viii) NOC for groundwater dewatering/ extraction must be obtained from CGWA/ respective SGWA as mandated under Ministry of Jai Shakti guidelines for infrastructure projects involving dewatering (available on CGWA website <https://cgwa-noc.gov.in>).

Reply: NOC for groundwater dewatering has been obtained by DMRC.

- (ix) Projects may fix targets for reduction in water requirement in construction/ curing through different available techniques (curing compounds/ hessian clothing for wrapping etc.).

Reply: Hessian cloth is used extensively. In addition, DMRC is also using curing compound for RCC structures made of grade M50 concrete or below.

- (x) During rains, arrangements may be made to divert rainwater from the construction to nearby rainwater harvesting channels, if possible/ feasible. This arrangement would also be useful during operational phase.

Reply: Same is being done during construction to divert rainwater to RWH structures which have been constructed at Casting yards/ Batching Plants.

## II. Elevated Construction

- (i) Fresh water requirement for construction/ curing may be estimated prior to execution so that wastage of fresh water may be minimized.

Reply: Noted for future.

- (ii) Wherever water table is expected to be encountered during construction work (it may be small quantity), same may be gainfully utilized/ properly discharged, instead of letting it flow on ground.

Reply: Noted, wherever such situation is encountered necessary steps as advised in the SOP will be taken.

- (iii) RWH system may be inbuilt into the plans of metro stations. For elevated tracks, wherever feasible, arrangement may be in place for diverting rainwater from viaduct to RWH system on medians/ greenbelt below the elevated metro track. Recharge system may not be required where water levels are very shallow and may be completely avoided in stretches having chances of oil/ grease/ chemicals mixing into the rainwater.

Reply: Elevated tracks of DMRC have been provided with provision of collecting rainwater and discharging it into ground wherever possible and feasible.

**B Water Management During Operational Phase**

- i. Along underground sections, water level data being received from installed piezometers must be continuously and religiously monitored. Metro Corporations are required to get regular studies conducted by professional agencies/ academic institutions. In the event undesirable effect on groundwater regime - such as buildup of groundwater column against the construction - is noticed, and the cause is established as Metro construction, mitigation measures like pumping out groundwater and its gainful utilization may be adopted. Metro Corporations may seek technical advice from Universities/ IITs/ Central Ground Water Board/ State GW Department etc. in such situations.

Reply: Piezometers have been installed at few locations and at other locations, it is in process.

Further, regarding seeking advice from specialised agencies in case of undesirable effect on ground water regime, the same has been noted for necessary action in future.

- ii. In case of use of groundwater/ construction of tubewells by the Metro Corporation for operation/ maintenance of stations, groundwater NOC must be obtained from CGWA/ respective CGWA as mandated by Ministry of Jal Shakti Guidelines for infrastructure projects (available on CGWA website <https://cgwanoc.gov.in>).

Reply: Permissions had been obtained for use of Bore-wells from statutory authority.

- iii. Channelization of wastewater for reuse may be considered in large facilities like car depots.

Reply: Channelisation of waste water for re-use is being done in DMRC Metro depots (car depots).

- iv. Metro Projects should make all efforts to reduce fresh. water usage for operation/ maintenance of Depots/Metro Stations and also to minimize wastage.

Reply: Noted.

- v. Metro projects create additional constructions, which can lead to some increased surface runoff during rainfall events. Proper stormwater management techniques can help mitigate the impact of stormwater runoff, reduce erosion, and prevent flooding.

Reply: Storm water Management techniques are already in place to mitigate the impact of storm water run-off, prevent erosion and prevent flooding.

- vi. Bureau of Indian Standards (BIS) has a dedicated Committee —Ground Water and Related investigations Sectional Committee, WRD 03. The Committee, in consultation with experts have developed BIS Standard IS-15797:2008 for Roof Top Rainwater Harvesting-Guidelines (enclosed as Appendix-G). Same should be used for implementing RWH at elevated metro stations and elevated tracks.

Reply: Noted. The guidelines will be reviewed for upcoming metro stations and tracks.

- vii. **RWH system at medians/ greenbelt below the track may be maintained more frequently. In case of thefts/ breakage of downpipes/ chamber slabs, same may be replaced immediately. The environmental concerns far outweigh physical damages.**

Reply: A committee of PWD, MCD, DMRC and DPCC formed by NGT in another matter OA NO 263/2022 (Sh Harpal Singh Rana Vs DMRC & Ors.). The committee has given following recommendations.

- (1) There is a safety concern of DMRC structure for making any pit/boreholes in the 1st Reserve.
- (2) It is found that capacity is available in median to store the rain water hence no additional pit is required in the span of metro alignment. It is economical to maintain the natural system.
- (3) Average depth of around 110 mm or equivalent above soil should be ensured in central median to behave as storage for rain water coming from metro deck.
- (4) Central median should not be covered with paver/concrete, wherever feasible to allow infiltration of water in subsoil.
- (5) Horticulture/vegetation (small height plants), wherever feasible, should be developed in central median having high seasonal water requirement.
- (6) Pier down take pipes should not be towards road side. It should be ensured that runoff through drainage pipes should fall in the central median.

Hon'ble NGT court has given the next date 20.02.2024 for hearing with action plan as per recommendation.

- viii. **Caution may be applied in the stretches with chances of oil/ grease mixing with rainwater. In such stretches, recharge may be avoided.**

Reply: Noted.

- ix. **Native tree plantation should be encouraged near project areas/ on medians. This would help in formation of macropores, thereby increasing recharging capacity of aquifers.**

Reply: Since, medians are owned by road owning agencies and not by metro, such plantation should be maintained by road owning agency.

Email

Central Ground Water Authority

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** shantaram dalvi <shantaram.dalvi@mmrcl.com>

Thu, Dec 14, 2023 03:25 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 3 attachments

**To :** Central Ground Water Authority <cgwa@nic.in>

**Cc :** ajay fulmali <ajay.fulmali@mmrcl.com>, mumbaimetro3@mmrcl.com

Dear Sir,

Please find attached herewith the MMRCL's ATR on SOP as was directed by Hon'ble NGT in order dated 06.12.2023.

Regards,

Dalvi S. G.

(दळवी एस. जी.)

Sr. Deputy General Manager – Civil

(वरिष्ठ उप-महाप्रबंधक – स्थापत्य)



Mumbai Metro Rail Corporation. (UGC-02)

( मुंबई मेट्रो रेल कॉर्पोरेशन लिमिटेड )

Mob.: 9819197004

---

**From:** Central Ground Water Authority <cgwa@nic.in>

**Sent:** 11 December 2023 14:46

**To:** mcmmrda@gmail.com <mcmmrda@gmail.com>; dpmetro@mailmmrda.maharashtra.gov.in <dpmetro@mailmmrda.maharashtra.gov.in>; dw@mailmmrda.maharashtra.gov.in <dw@mailmmrda.maharashtra.gov.in>; Mumbai Metro <mumbaimetro3@mmrcl.com>

**Cc:** anil jamadar <anil.jamadar@mailmmrda.maharashtra.gov.in>; Shantaram Dalvi <shantaram.dalvi@mmrcl.com>; N Varadaraj <rdr-cgwb@nic.in>; MCGWA <mcgwa-cgwb@gov.in>

**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.



**Mumbai Metro Rail Corporation Limited**  
(JV of Govt. of India and Govt. of Maharashtra)

No. MMRC/Env./2023/3082

Dt.14/12/2023

To,  
The Member Secretary,  
Central Ground Water Authority, 18/11, Jamnagar House,  
Mansingh Road,  
New Delhi 110011

Sub: Action taken report by MMRCL in reference to Hon'ble NGT OA No.198/2023  
Ref.: Your file no. CGWA-21/31/2020-CGVVA-Part (2)-616 Dt.21.11.2023

Dear Sir,

This is in reference to NGT O.A. No.198/2023 in the subject matter cited above.

Please find the attached Action Taken Report (ATR) providing the status of implementation of SOP in MMRCL.

Thanking

Yours faithfully,

Subodh Kumar Gupta  
(Director/Projects)

Encl: a/a

**ATR FOR PROPER UTILIZATION OF WATER AND RAINWATER MANAGEMENT IN METRO PROJECTS**

**A. WATER MANAGEMENT DURING CONSTRUCTION PHASE**

**1. Underground Construction (Stations/Tunnels)**

(i) 'Fresh water' requirement for construction/ curing may be estimated prior to physical execution so that wastage of fresh water may be minimized.

**Reply : The physical execution/construction of metro line -3 project is already started long back. This aspect is therefore noted for future activities.**

(ii) Underground metro projects can have several potential impacts on groundwater, which depend on various factors such as the project's depth, construction methods, hydrogeological conditions, and the surrounding environment. To mitigate the potential impacts on groundwater, through hydrogeological investigations and monitoring programs should be conducted before, during, and after the construction of underground metro projects. The implementing agency must take into account hydrogeological set up of the area, prior to taking up actual execution of work. This will include understanding the sub-surface geology, water levels, groundwater flow direction etc. of the area. These assessments help identify potential risks and allow for the implementation of appropriate measures to protect groundwater resources, maintain water quality, and ensure the long-term sustainability of the project.

**Reply: This aspect is noted for future activities.**

(iii) Wherever water table is encountered, behaviour/ pattern of groundwater flow and likely impact of construction activity and permanent underground construction on prevailing groundwater regime must be studied. Metro tunnels may intersect or pass through aquifers. Construction activities can disrupt these aquifers, affecting their ability to store and transmit groundwater and affect their hydraulic connectivity. This interference may alter the flow and distribution of groundwater. Proper engineering techniques, such as grouting and tunnel lining, should be employed to minimize the potential interference with aquifers and preserve their hydrogeological properties.

**Reply: This aspect is noted for future activities.**

(iv) There could be situations where the construction of structures (tunnels/ stations) act as sub-surface barriers to groundwater flow, creating build-up of groundwater column against the barrier on upstream side, imposing threat to buildings in the vicinity. Metro Corporations may seek technical advice from Universities/ IITs/ Central Ground Water Board/ State GW Department etc. in such situations and take up appropriate mitigation measures.

**Reply: This aspect will be considered, if the need arises.**

(v) Quantification of expected quantum of dewatering should be part of hydrogeological study for proper planning for gainful utilization of dewatered water.

**Reply: This aspect is noted for future activities.**

(vi) Construction activities, particularly tunnelling and drilling, may introduce contaminants into the groundwater. These contaminants may include construction related chemicals, fuels, lubricants, and other substances. If not properly managed, they can infiltrate the groundwater and cause water quality issues. Maintaining water quality within and around the metro project area is vital to protect public health and the environment. Proper safeguards, such as using appropriate construction materials, implementing containment measures, and monitoring groundwater quality, should be put in place to prevent contamination. Measures like sedimentation basins, oil-water separators, and water treatment systems can be employed to remove pollutants and contaminants from construction runoff and wastewater generated during metro operations.

**Reply: Treatment of contaminated water is done through sedimentation tank installed on the ground surface during construction phase.**

(vii) Piezometers along with automatic water level recorders should be installed along the metro alignment for continuous monitoring of water level behavior in the vicinity of metro constructions during such periods. In the event of likely long-term deviation from normal pattern, the build-up of groundwater may be channelized or redirected to other locations through appropriate engineering measures. This can help manage groundwater levels and prevent excessive pressure against the tunnel walls. A few indicative methods that can be used to redirect the groundwater away from the metro tunnels are following.

- a) Dewatering Wells: Dewatering wells can be installed strategically around the metro tunnels to lower the groundwater levels. These wells are equipped with pumps that extract groundwater, effectively lowering the water table and reducing hydrostatic pressure against the tunnels.
- b) Drainage Systems: Installing a network of drainage systems, such as perforated pipes or weep holes, along the tunnel walls can provide a pathway for groundwater to flow and be collected. These drainage systems can be designed to lead the collected groundwater to designated discharge points.
- c) Pumping Systems: In cases where the groundwater level needs to be actively managed, pumping systems can be employed to extract excess groundwater from the area surrounding the metro tunnels. These pumps can redirect the water to appropriate locations.
- d) Permeable Backfill: Using permeable backfill material around the tunnels can allow groundwater to flow more easily through the surrounding soil, reducing the build-up of pressure against the tunnel walls. This can involve the use of granular materials or geo-composite drainage layers that facilitate the movement of water away from the tunnels.

It may be ensured that channelized groundwater is gainfully utilized as far as possible. It's important to note that the specific measures employed to manage groundwater around metro tunnels may vary depending on site-specific conditions, including the hydrogeological characteristics of the area, groundwater flow patterns, and the local regulatory requirements. A comprehensive hydrogeological study and proper engineering design are crucial to determine the most effective and sustainable methods for channelizing groundwater away from metro tunnels while ensuring the stability and safety of the tunnel structure.

**Reply: The measures mentioned above are implemented at the site as per prevailing conditions and technical feasibility.**

(viii) NOC for groundwater dewatering/ extraction must be obtained from CGWA/ respective SGWA as mandated under Ministry of Jal Shakti guidelines for infrastructure projects involving dewatering (available on CGWA website <https://cgwa-noc.gov.in>).

**Reply: The groundwater/seepages generation is not purposeful/ intended activity. Moreover, it is not used for construction activities. Hence, NOC is not required. If purposeful activity of groundwater extraction is envisaged, in that case NOC from CGWA/SGWA would be obtained.**

(ix) Projects may fix targets for reduction in water requirement in construction/curing thorough different available techniques (curing compounds/ hessian clothing for wrapping etc.).

**Reply: Curing compounds/hessian clothes are being used for reduction in freshwater requirement during construction period.**

(x) During rains, arrangements may be made to divert rainwater from the construction to nearby rainwater harvesting channels, if possible/ feasible. This arrangement would also be useful during operational phase.

**Reply: Accumulated rain water at the work site is diverted into Storm water drains of City Corporation**

## **II. Elevated Construction**

(i) Fresh water requirement for construction/ curing may be estimated prior to execution so that wastage of fresh water may be minimized.

(ii) Wherever water table is expected to be encountered during construction work (it may be small quantity), same may be gainfully utilized/ properly discharged, instead of letting it flow on ground.

(iii) RWH system may be inbuilt into the plans of metro stations. For elevated tracks, wherever feasible, arrangement may be in place for diverting rainwater from viaduct to RWH system on medians/ greenbelt below the elevated metro track. Recharge system may not be required where water levels are very shallow and may be completely avoided in stretches having chances of oil/ grease/ chemicals mixing into the rainwater.

**Reply: Above aspects (i, ii and iii) are noted for future activities.**

## **B. Water Management During Operational Phase**

(i) Along underground sections, water level data being received from installed piezometers must be continuously and religiously monitored. Metro Corporations are required to get regular studies conducted by professional agencies/ academic institutions. In the event undesirable effect on groundwater regime - such as build-up of groundwater column against the construction - is noticed, and the cause is established as Metro construction, mitigation measures like pumping out groundwater and its gainful utilization may be adopted. Metro Corporations may seek technical advice from Universities/ IITs/ Central Ground Water Board/ State GW Department etc. in such situations.

**Reply: Noted for future actions**

(ii) In case of use of groundwater/ construction of tubewells by the Metro Corporation for operation/ maintenance of stations, groundwater NOC must be obtained from CGWA/ respective SGWA as mandated by Ministry of Jal Shakti Guidelines for infrastructure projects

(available on CGWA website <https://cgwa-noc.gov.in>).

**Reply: If purposeful extraction of groundwater is envisaged, NOC of CGWA/SGWA will be obtained.**

(iii) Channelization of wastewater for reuse may be considered in large facilities like car depots.

**Reply: The reuse of treated wastewater will be done as per the conditions of consent to operate that will be granted by Maharashtra Pollution Control Board for Car shed depot in future.**

(iv) Metro Projects should make all efforts to reduce freshwater usage for operation/ maintenance of Depots/ Metro Stations and also to minimize wastage.

**Reply: Reuse/recycle of treated wastewater at Car shed will be practiced. Low flow fixtures will be adopted for regulating the freshwater consumptions at metro stations during operational phase.**

(v) Metro projects create additional constructions, which can lead to some increased surface runoff during rainfall events. Proper stormwater management techniques can help mitigate the impact of stormwater runoff, reduce erosion, and prevent flooding.

**Reply: Noted for future activities, if need arises.**

(vi) Bureau of Indian Standards (BIS) has a dedicated Committee -Ground Water and Related Investigations Sectional Committee, WRD 03. The Committee, in consultation with experts have developed BIS standard IS 15797:2008 for Roof Top Rainwater Harvesting - Guidelines (enclosed as Appendix-G). Same should be used for implementing RWH at elevated metro stations and elevated tracks.

**Reply: Noted for future metro projects.**

(vii) RWH system at medians/ greenbelt below the track may be maintained more frequently. In case of thefts/ breakage of downpipes/ chamber slabs, same may be replaced immediately. The environmental concerns far outweigh physical damages.

**Reply: Noted for future metro projects.**

(viii) Caution may be applied in the stretches with chances of oil/ grease mixing with rainwater. In such stretches, recharge may be avoided.

**Reply: Noted**

(ix) Native tree plantation should be encouraged near project areas/ on medians. This would help in the formation of macropores, thereby increasing recharging capacity of aquifers.

**Reply: Tree plantation of trees with substantial native species is planned at underground metro station sites and is under implementation.**

---

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

---

**From :** dpmetro@mailmmrda.maharashtra.gov.in

Wed, Dec 13, 2023 03:58 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

 5 attachments

**To :** Central Ground Water Authority <cgwa@nic.in>

**Cc :** dw@mailmmrda.maharashtra.gov.in, anil jamadar <anil.jamadar@mailmmrda.maharashtra.gov.in>

Sir,

Kindly find attached herewith Compliance to SOP for proper utilization of water and Rainwater Harvesting Management - Mumbai Metro.

**With Regards**

**Pramod Ahuja**  
**Director (Projects) Metro (A/C)**  
**Project Implementation Unit**  
**MMRDA**  
**Tel. +91-22-2659 4107**

---

From: Central Ground Water Authority ([cgwa@nic.in](mailto:cgwa@nic.in))

Date: 12/11/23 14:49

To: [mcmrda@gmail.com](mailto:mcmrda@gmail.com), [dpmetro@mailmmrda.maharashtra.gov.in](mailto:dpmetro@mailmmrda.maharashtra.gov.in), [dw@mailmmrda.maharashtra.gov.in](mailto:dw@mailmmrda.maharashtra.gov.in), [mumbaimetro3@mmrcl.com](mailto:mumbaimetro3@mmrcl.com)

Cc: anil jamadar ([anil.jamadar@mailmmrda.maharashtra.gov.in](mailto:anil.jamadar@mailmmrda.maharashtra.gov.in)), shantaram dalvi ([shantaram.dalvi@mmrcl.com](mailto:shantaram.dalvi@mmrcl.com)), N Varadaraj ([rdcr-cgwb@nic.in](mailto:rdcr-cgwb@nic.in)), MCGWA ([mogwa-cgwb@gov.in](mailto:mogwa-cgwb@gov.in))

Subject: **Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**REMINDER**

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble

NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that no response has been received** from your side.

Regards,  
Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [mcmrda@gmail.com](mailto:mcmrda@gmail.com), [dpmetro@mailmmrda.maharashtra.gov.in](mailto:dpmetro@mailmmrda.maharashtra.gov.in),  
[dw@mailmmrda.maharashtra.gov.in](mailto:dw@mailmmrda.maharashtra.gov.in), [mumbaimetro3@mmrcl.com](mailto:mumbaimetro3@mmrcl.com)

**Cc:** "anil jamadar" <[anil.jamadar@mailmmrda.maharashtra.gov.in](mailto:anil.jamadar@mailmmrda.maharashtra.gov.in)>, "shantaram dalvi" <[shantaram.dalvi@mmrcl.com](mailto:shantaram.dalvi@mmrcl.com)>

**Sent:** Monday, December 4, 2023 12:44:25 PM

**Subject:** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir

Please find attached this office letters on the subject and also the **e-mail dated 01.08.2023** vide which SOP for Proper Water Utilization in Metro Projects was circulated to metro projects. Hon'ble NGT Order dated 06.10.2023 in the matter is also attached for ready reference. It appears that due to inadvertent oversight, the SOP was not sent earlier to correct e-mail IDs of MMRDA and MMRC.

It is requested to please provide your feedback on SOP as directed by Hon'ble NGT by 06.12.2023 so as to enable this office to submit fresh ATR to Hon'ble NGT.

Regards

Dr Vikas Ranjan  
Sc D

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>  
**To:** [contactus@mahametro.org](mailto:contactus@mahametro.org)  
**Cc:** "ce mmrda" <[ce.mmrda@gmail.com](mailto:ce.mmrda@gmail.com)>, "N Varadaraj" <[rdcr-cgwb@nic.in](mailto:rdcr-cgwb@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>, "RD, CGWA" <[rdocgwa-cgwb@nic.in](mailto:rdocgwa-cgwb@nic.in)>, "MCGWA" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "Vinayak Bhat" <[dirgw-mowr@nic.in](mailto:dirgw-mowr@nic.in)>  
**Sent:** Wednesday, November 22, 2023 4:12:57 PM  
**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>  
**To:** [contactus@mahametro.org](mailto:contactus@mahametro.org)  
**Cc:** "sec ud2" <[sec.ud2@maharashtra.gov.in](mailto:sec.ud2@maharashtra.gov.in)>, "ce mmrda" <[ce.mmrda@gmail.com](mailto:ce.mmrda@gmail.com)>, "N Varadaraj" <[rdcr-cgwb@nic.in](mailto:rdcr-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>, "RD, CGWA" <[rdocgwa-cgwb@nic.in](mailto:rdocgwa-cgwb@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>  
**Sent:** Tuesday, August 1, 2023 12:58:53 PM  
**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: cgwa@nic.in



---

 **Annexure 01 - Water Requirement for Mumbai Metro Rail Project.docx**

6 MB

 **Annexure 01 - Water Requirement for Mumbai Metro Rail Project.pdf**

2 MB

 **Compliance to SOP for proper utilization of water.docx**

20 KB

 **Compliance to SOP for proper utilization of water.pdf**

484 KB

---

**Table 1 – Compliance to SOP for proper utilization of water and Rainwater Harvesting Management – Mumbai Metro**

Sr. No.	Reference from SOP	Action Taken Report
A.	<b>Water Management during Construction Phase</b>	
A-I.	For Underground construction (Stations/Tunnels)	Inputs required from Metro Line 3
A-II	<b>Elevated Construction</b>	
(i)	Estimation of Freshwater requirements for construction/curing to avoid wastage	Complied, See Annexure -01, Table 3.
(ii)	Gainful utilization of groundwater (if GW Table is encountered) resource during construction	The groundwater extracted from construction pits is discharged in to nearby piling boreholes. Excess water is discharged into the nearby stormwater drains.
(iii)	Provision of RWH system in Metro stations and viaduct	Complied, See Annexure -01, Section no. 5.
B.	<b>Water Management during Operation Phase</b>	
(i)	<b><u>For underground sections:</u></b> Continuous monitoring of GW data generated by Piezometers. Studies to be undertaken by professional agencies/academic institutions for assessment of ground water conditions.	Shall be complied
(ii)	Metro corporation to obtain NOC from authorities in case of use of groundwater for construction/operation	Noted.
(iii)	Channelization of wastewater for re-use in large facilities like depot	Noted. Please see Annexure 01, Section 3d for compliance in case of Depot of ML 2B.
(iv)	Measures for reduction in freshwater demand during construction and operation of Metro	Noted. Please see Annexure 01, section 3C for compliance in ML 07.
(v)	Stormwater Management from other developments of Metro Projects such as Multimodal Integration facilities	Noted.
(vi)	Adequate implementation of BIS guidelines during design and execution of RWH for stations and viaduct	Noted

Sr. No.	Reference from SOP	Action Taken Report
(vii)	Increase in frequent of maintenance of RWH system in medians/greenbelt	Noted.
(viii)	Caution to be applied to prevent chances of oil/grease mixing in rainwater.	Complied. The effluent treatment plants in depots are designed with Oil and Grease removal unit process.
(ix)	Native tree plantation in medians	Complied.

Fresh Water Requirement and  
Conservation Measures for Mumbai Metro  
Rail Projects By MMRDA



Prepared by: MMRDA.

**May 2023**

### **Introduction of Mumbai Metro Rail Project**

The Mumbai Metro is a rapid transit (MRT) system serving the city of Mumbai and the wider Mumbai Metropolitan Region in Maharashtra, India. Mumbai Metropolitan Region Development Authority is the responsible authority for maintaining the metro system.

The system is designed to reduce traffic congestion in the city and supplement the overcrowded Mumbai Suburban Railway network. It is being built in phases with overall completion expected in 2031.

Mumbai Metro is operational metro network in India with operational length of 46.4 km (28.8 mi) as of January 2023. When completed, the core system will comprise fourteen high-capacity metro railway lines spanning a total of 337 kilometres (approx. 22% underground, the rest elevated, with a minuscule portion built at-grade), and serviced by over 225 stations. The Table below shows the brief present status of the project.

**Table 1- Brief present status of the project**

Line	Corridor	Length (Km)	Cost (Rs. Cr.)	Daily Ridership (Lakh) (2031)	Funding Agency (Rs. Cr.)	State Govt. Approval	Expected Completion Date	Status/Progress As on 31-March-2023
<b>Operational Metro Lines: -</b>								
Line 1	Versova-Andheri-Ghatkopar	11.4	2,356	8	-	19-Aug-04	-	Operational since 8 <sup>th</sup> June, 2014
Line 2A	Dahisar (E)-D.N. Nagar	18.6	6,410	9	2,803 (ADB+NDB)	17-Oct-15	-	Phase-I operational from 02.04.2022.
Line 7	Andheri (E) - Dahisar (E)	16.5	6,208	6.7	2,246 (ADB+NDB)	17-Oct-15	-	Phase-II operational from 19.01.2023.
<b>Under Construction Metro Lines: -</b>								
Line 2B	D. N. Nagar-Mandale	23.6	10,986	10.5	4,695 (ADB+NDB)	25-Oct-16	Jun-25	46.81% of Civil works completed.
Line 3	Colaba-SEEPZ	33.5	33,405	17	13,235 (JICA)	03-Mar-14	-	Under Construction through MMRCL
Line 4	Wadala-Kasarvadavali	32.3	14,549	12.1	3,916 (KFW)	25-Oct-16	Jun-25	51.47% of Civil works completed.
Line 4A	Kasarvadavali - Gaimukh	2.7	949	1.3	273.72 (KFW)	25-Jan-19	Jun-25	54.35% of Civil works completed.
Line 5	Thane-Bhiwandi-Kalyan	24.9	8,417	3.03	2,357.25 (AIIB+OFID)	21-Dec-17	Dec-25	78% of Civil works completed for Phase I (Thane-Bhiwandi).
Line 6	Swami Samarthnagar-Vikhroli	14.5	6,716	7.7	1,700 (NDB)	21-Dec-17	Dec-24	69.25% of Civil works completed.
Line 9 & 7A	Dahisar (E)-Mira Bhayander	13.5	6,607	11.12	2,165 (ADB+NDB)	02-Nov-18	L9: June-25	Line 9: 58.98%

Line	Corridor	Length (Km)	Cost (Rs. Cr.)	Daily Ridership (Lakh) (2031)	Funding Agency (Rs. Cr.)	State Govt. Approval	Expected Completion Date	Status/Progress As on 31-March-2023
	& Andheri (E)-CSMIA				Balance fund of line 2A, 2B, 7		L7A: Dec-25	Line 7A: 13.19%
								Overall, 36% of Civil works completed.
<b>Under Tendering Metro Lines: -</b>								
Line 10	Gaimukh-Shivaji Chowk (Mira Road)	9.2	4,476	3.4	2,818 (JICA)	06-Sep-19	Oct-25	General Consultant has been appointed. Forest clearance is in process.
Line 11	Wadala-CSMT	12.7	8,739	4.8	2,022 (JICA)	06-Sep-19	Oct-26	Project handed over to MMRCL.
Line 12	Kalyan-Taloja	20.7	5,865	2.62	3,077 (JICA)	06-Sep-19	Oct-25	General Consultant has been appointed and survey & Alignment drawing preparation is in progress. Tenders invited for Civil works.
<b>DPR Under Preparation: -</b>								
Line 8	Airport Metro (CSMIA-NMIA)	35	15,000	8.9	-	-	-	Draft DPR for CSMIA to Mandale received from DMRC.
Line 13	Shivaji Chowk (Mira Road)-Virar	23	6,900 (approx.)	4.8	-	-	-	DPR being finalized.
Line 14	Kanjurmarg-Badlapur	45	13,500 (approx.)	7.9	-	-	-	Draft DPR received from Milan Metro.
	<b>Total</b>	<b>337.1</b>	<b>1,51,083 (approx.)</b>	<b>118.87</b>	<b>41,308 -27.34%</b>			

The water requirement and conservation measures adopted during construction and operation phases of the project are described below.

### 1. Quantification of water requirement

Potable water is generally considered satisfactory for mixing concrete. Fresh water is required for concreting and curing works. The maximum permissible concentration of organic and inorganic solids for mixing of concrete is prescribed in IS 456:2000, is noted in Table 2 below.

**Table 2 – Permissible Limits for Solids in Water for Mixing Concrete as per IS 456: 2000**

Sl. No.	Type of Solids in Water	Permissible Limit, Max
1	Organic	200 mg/l
2	Inorganic	3000 mg/l
3	Sulphates (as SO <sub>3</sub> )	400 mg/l
4	Chlorides (as CL)	2000 mg/l for concrete not containing embedded
5	Suspended matter	2000 mg/l

The approximate quantification of water requirements based on experiential data in Mumbai Metro Rail is noted in the below.

**Table 3 – Fresh Water Requirement projections for under construction Metro Lines**

Item	Quantity
Total Length of under construction metro lines, Kms	145 Kms
Concrete Required for under construction metro Lines including foundation works, piers, stations, and viaduct in m <sup>3</sup>	23,71,620 Cubic Meter <sup>1</sup>
Water Required for concreting (M40 Grade Concrete, 430 Kg cement/m <sup>3</sup> @ 0.36 W/C Ratio)	3,67,127 m <sup>3</sup>
Water Required for curing @ 80 Litre/m <sup>3</sup> /day for 14 days (in m <sup>3</sup> )	26,56,214 m <sup>3</sup>
Total Water required for under construction Metro Lines, in m <sup>3</sup> over an approximate period of construction 03 years	30,23,341 m <sup>3</sup> for construction period of 3 years and 10,07,780 m <sup>3</sup> /Year
Approximated total Water required in m <sup>3</sup> /Km length, over an approximate period of construction 03 years	20,850 m <sup>3</sup>

### 2. Applicability of NOC for water abstraction

<sup>1</sup> Concrete requirement of Approx 16356 m<sup>3</sup>/km for metro project (it includes: sub-structure and super-structure works of viaduct, stations, station EE etc.)

In Mumbai Metro Rail Project, Water requirements for above purposes is fulfilled by procuring water from sources approved by Local Municipal Authority. As ground water is not abstracted during construction phase hence No Objection Certificate<sup>2</sup> is not required.

### 3. Water Conservation Measures

Freshwater is very important natural resource. It is important to minimize use of freshwater during construction and operation phases of project. At Mumbai Metro Rail Project following water conservation measures are implemented:

#### a. Use of curing compound for cement curing

Curing compounds are water based low viscosity wax emulsions which is applied as a spray on concrete surface. It helps in retaining moisture on concrete surface for effective curing. It is estimated that around 30-40% water requirements can be reduced by using curing compound as compared to business-as-usual situation.

Curing compounds which are non-hazardous and safe for environmental disposal confirmed as per applicable standards (ASTM C309) are used for effective curing. Non-hazardous nature of curing compounds is ensured through product specific material safety data sheets (MSDS) before permitting use in metro projects.

#### b. Use of Hessian Cloth for concrete curing

Hessian Cloth (jute fabric) is used for cement curing on construction sites. Use of hessian cloth and covering with plastic sheet prevents need of curing every hour right after pouring concrete. It is estimated that around 10-20% water requirements can be reduced by using hessian cloth for cement curing compound as compared to business-as-usual situation.

**Figure 1 - Cement Curing Using Hessian Cloth and Plastic Sheet**



<sup>2</sup> AS PER MINISTRY OF JAL SHAKTI (DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION) (CENTRAL GROUND WATER AUTHORITY) NOTIFICATION, S.O. 3289(E)



### c. Freshwater Demand Reduction measures

Considerable quantity of freshwater is required in Metro Train Depots during the operation phase. Freshwater is required for domestic as well as train maintenance purposes. It is important to reduce demand for freshwater. The demand for fresh water is reduced by adopting following measures.

- i. **Use of sanitary fixtures which operates at adequate pressure and flow rates specified by Indian Green Building Council/NBC.** This is important criteria to reduce freshwater demand by reducing the leakage and wastage. This criterion is fulfilled in metro stations and depots as it is a requirement of IGBC rating program, and all metro stations and depots are designed to comply with IGBC Rating programs to achieve the *Platinum* Rating.

In fact, the Metro Line 7 stations of Mumbai Metro have been awarded the coveted Platinum rating by IGBC.

**Figure 2 – IGBC Certificate and Plaque of Aarey Metro Station of Metro Line 7**



- ii. Use of native and adoptive trees and shrubs in landscaped area such that irrigation water requirement is reduced.
- iii. Effective treatment to sewage and wastewater generated in depots and re-using it for landscaping and toilet flushing.

It is estimated that, by adopting above measures around 30-35% freshwater demand is reduced annually compared to business-as-usual situation.

#### d. Recycle of Treated Sewage and Effluent Generated in Metro Train Depots

The sewage and effluent generated in Metro Train Depots is re-used for landscaping and toilet flushing purposes. Typically, in Metro Train Depots, it is estimated that 15-20% of total freshwater is required for domestic purposes whereas 45-50% of water is required for train maintenance purposes. In Mumbai Metro Train depots 100% of Sewage and Effluent generated is treated and re-used for landscaping and toilet flushing.

In Mandale Depot of Mumbai Metro, 50m<sup>3</sup>/day of sewage and 125m<sup>3</sup>/day of effluent (*generated from Auto coach wash and maintenance workshop*) will be treated to meet the standards specified by MoEF&CC Notification no., G.S.R. 1265(E) dated 13<sup>th</sup> October 2017 regarding Effluent Discharge Standards<sup>3</sup>. Provisions will be made to re-use 100 % of treated effluent and sewage for landscaping and toilet flushing.

Whereas it is estimated that the freshwater requirement of Mandale depot is 270 m<sup>3</sup>/day, the re-use of treated water from STP and ETP shall reduce the freshwater demand by up to 64%.

#### 4. Quality of Treated Sewage and Effluent

It is important that the generated sewage and effluent are treated in such a way that it can be re-used for landscaping and flushing purposes. The Effluent (ETP) and Sewage Treatment Plants (STP) of Mumbai Metro rail project are designed to ensure that the treated effluent can be re-used for irrigation and toilet flushing.

The treated effluent and sewage comply with the standard values specifies by MoEF&CC regarding Effluent Discharge Standards. The specified treated effluent standards for all modes of disposal are attached as Annexure 1.

The proposed treatment in STP and ETP entails tertiary level treatment with provisions for oil and grease removal and sludge reduction techniques. The proposed treatment schemes for Mandale Depot of Metro Line 2B are attached herewith as Figure 4 and Figure 5

#### 5. Rainwater Management

Groundwater table in Mumbai City and MMR region is shallow. Typically, it varies between 2.00 to 3.5 m below ground level. In such situation ground water recharge is not practicable.

<sup>3</sup> see Annexure 1 for specified values.

For management of stormwater in depots, internal stormwater drains are laid which can collect 100% run-off generated at one day normal rainfall from roof and non-roof areas. The internal SWD network is connected to municipal stormwater network.

The run-off generated from station roofs and viaducts is channelized through “U” shaped channel and closed conduits. Wherever possible (*if alignment is on service road*) the run-off pipes are connected to existing stormwater drains otherwise (*if alignment is on road median*) run-off is diverted to median of alignments for irrigation of landscape works and overflow is let-off on roads.

**Figure 3 – Run-off Management**



## 6. Bi-annual compliance statement of the project

Various under-construction metro lines of Mumbai Metro Rail Project are partially funded by international funding agencies. It is mandatory for internationally funded projects that they comply with the environmental safeguard requirements stipulated by funding agencies.

The compliance to environmental safeguard conditions is presented to funding agencies through Bi-annual Environmental Compliance Reports by individual metro lines. These reports are audited by independent environmental auditors appointed by funding agencies.

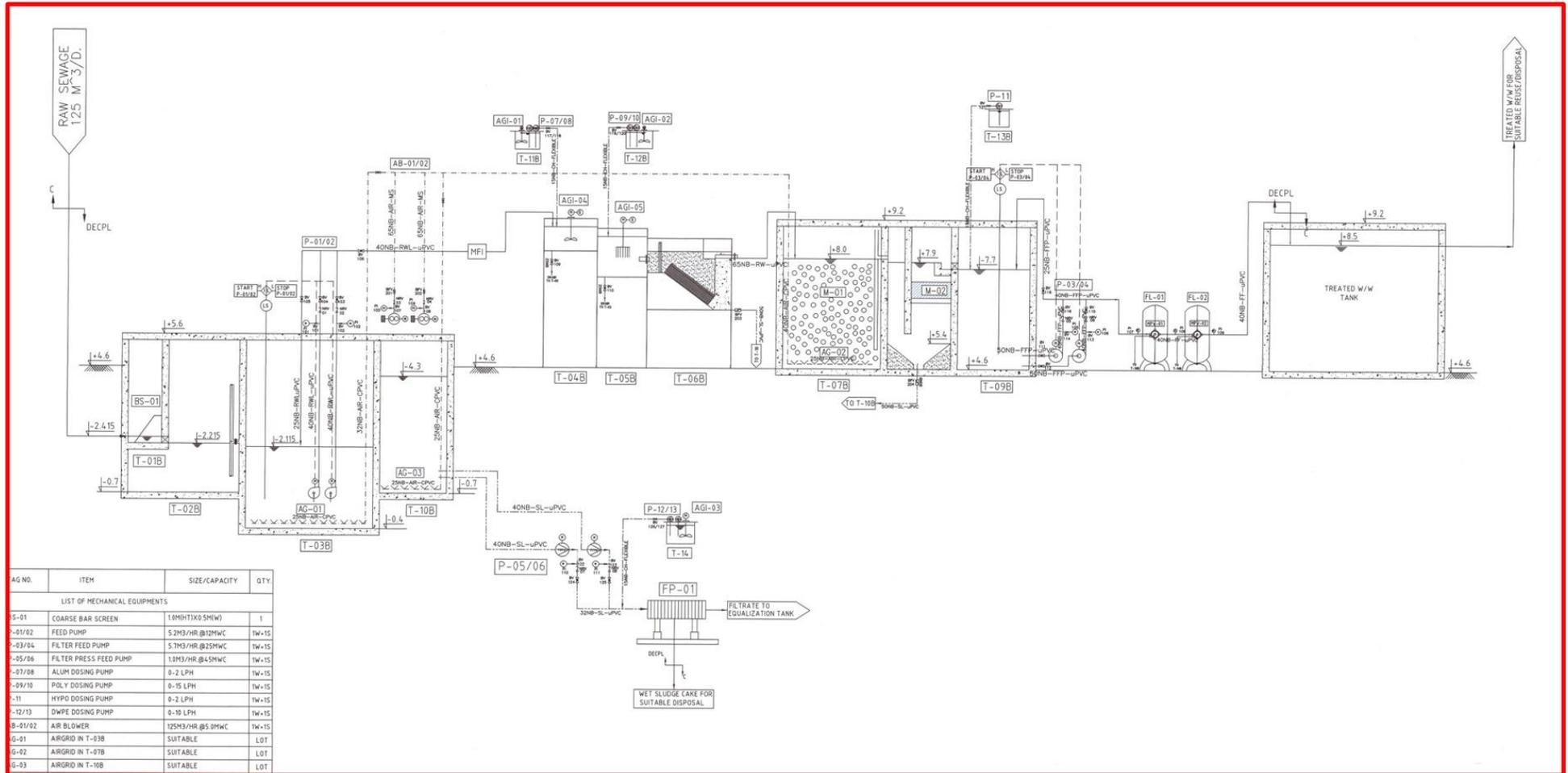
Metro Line 2B is partially funded by Asian Development Bank (ADB) and New Development Bank (NDB). Bi-annual Environmental Safeguard Reports are submitted to ADB and NDB. The link to download one of these reports submitted to ADB is given herewith.

<b>Environmental Monitoring Report Semi-annual Report (March 2021–August 2021)</b>	<a href="https://www.adb.org/sites/default/files/project-documents/49469/49469-007-emr-en_18.pdf">https://www.adb.org/sites/default/files/project-documents/49469/49469-007-emr-en_18.pdf</a>
--	---

7. Information Requested from Metro Projects for Preparation of Report in Hon'ble NGT Matter 198/2023

S. No.	Information Required from Metro Project Corporation	Status of requirement
01	Clearances required	NA
02	Are there general conditions/ riders with exemption as per Schedule of Exempted Project? Relevant provisions may be cited.	NA
03	Has feasibility study been carried out for water table intersection? If so, name of consultant agency/ institution and report thereof.	NA
04	Number of locations/ stretches where water Table was intersected/ is expected to be intersected (even if not intersecting what are the norms/ protocols in such cases for gainful utilization to reduce wastage of groundwater).	Since Ground Water Table is shallow, Water table is intersected at piling location.
05	General depth of intersection with water table for entire project (below ground level as well as mamsl).	02 to 03.5 meters below GL
06	Groundwater flow direction with respect to Metro Construction structures/ activities at each site/ stretch along with map.	Direction of flow is towards nearest surface water body.
07	Has NOC been obtained from CGWA or concerned Groundwater regulatory body (in case of Delhi)?	NA
08	Logbook for dewatering pump, quantity of water discharged during construction, <b>if any</b> .	NA
09	Water disposal plan – agreements etc.	Yes with local bodies
10	Mechanism(s) adopted for disposal of water after dewatering.	To nearby SWD/ discharge in nearest pile cap
11	Are Rainwater Harvesting/ Water Conservation plans incorporated in the Project?	Yes
12	Norms/ Protocols/ Directives, if any, for prevention of groundwater contamination	Yes.
13	Site-wise information for visited sites.	NA

Figure 4 - Approved Effluent Treatment Plant Scheme

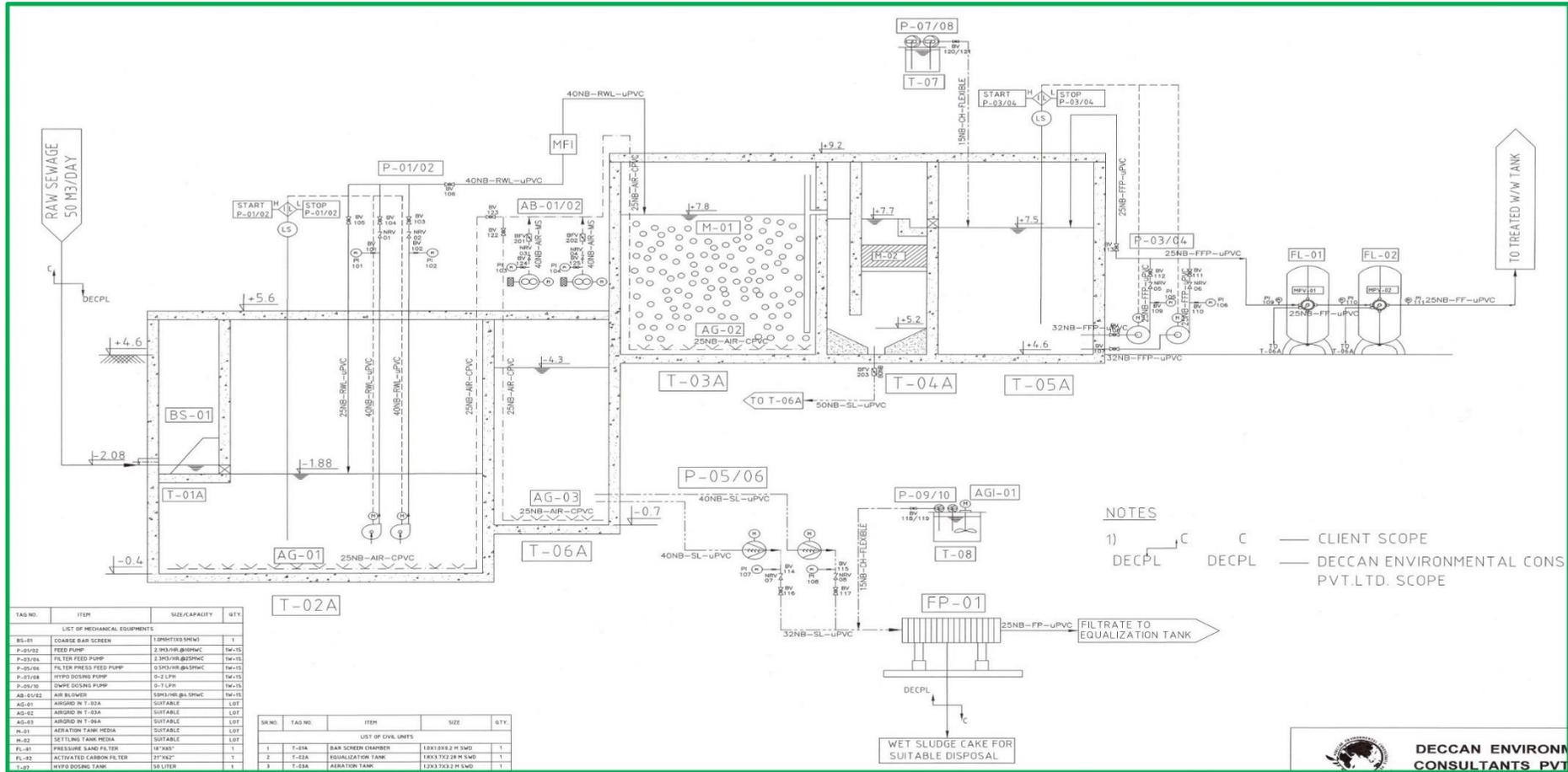


Designed Flow Rate – 125 m<sup>3</sup>/day

Effluent Parameters

BOD – less than 10 mg/l, COD – less than 50 mg/l, SS less than 10 mg/l, Oil & Grease – less than 5 mg/l

Figure 5 - Approved Sewage Treatment Plant Scheme



Designed Flow Rate – 50 m<sup>3</sup>/day.

Effluent Parameters

BOD – less than 10 mg/l, SS– less than 10 mg/l,

**Annexure 1**

Table: MoEF&amp;CC 2017 Standards for treated effluents for reuse.

Sl. No.	Industry	Parameters	Standards	
1	2	3	4	
		Effluent discharge standards (applicable to all mode of disposal)		
"105	Sewage Treatment Plants (STPs)		Location	
			Concentration not to exceed	
			(a)	
			(b)	
		pH	Anywhere in the country	6.5-9.0
		Bio-Chemical Oxygen Demand (BOD)	Metro Cities*, all State Capitals except in the State of Arunachal Pradesh, Assam, Manipur, Meghalaya Mizoram, Nagaland, Tripura Sikkim, Himachal Pradesh, Uttarakhand, Jammu and Kashmir, and Union territory of	20
			<u>Andaman and Nicobar Islands, Dadar and Nagar Haveli Daman and Diu and Lakshadweep</u>	
			Areas/regions other than mentioned above	30
	Total Suspended Solids (TSS)	Metro Cities*, all State Capitals except in the State of Arunachal Pradesh, Assam, Manipur, Meghalaya Mizoram, Nagaland, Tripura Sikkim, Himachal Pradesh, Uttarakhand, Jammu and Kashmir and Union territory of <u>Andaman and Nicobar Islands, Dadar and Nagar Haveli Daman and Diu and Lakshadweep</u>	<50	
		Areas/regions other than mentioned above	<100	
	Fecal Coliform (FC) (Most Probable Number per 100 milliliter, MPN/100ml)	Anywhere in the country	<1000	

\*Metro Cities are Mumbai, Delhi, Kolkata, Chennai, Bengaluru, Hyderabad, Ahmedabad, and Pune.

**Note:**

- (i) All values in mg/l except for pH and Fecal Coliform.
- (ii) These standards shall be applicable for discharge into water bodies as well as for land disposal/applications.
- (iii) The standards for Fecal Coliform shall not apply in respect of use of treated effluent for industrial purposes.
- (iv) These Standards shall apply to all STPs to be commissioned on or after the 1<sup>st</sup> June, 2019 and the old/existing STPs shall achieve these standards within a period of five years from date of publication of this notification in the Official Gazette.
- (v) In case of discharge of treated effluent into sea, it shall be through proper marine outfall and the existing shore discharge shall be converted to marine outfalls, and in cases where the marine outfall provides a minimum initial dilution of 150 times at the point of discharge and a minimum dilution of 1500 times at a point 100 meters away from discharge point, then, the existing norms shall apply as specified in the general discharge standards.
- (vi) Reuse/Recycling of treated effluent shall be encouraged and in cases where part of the treated effluent is reused and recycled involving possibility of human contact, standards as specified above shall apply.
- (vii) Central Pollution Control Board/State Pollution Control Boards/Pollution Control Committees may issue more stringent norms taking account to local condition under section 5 of the Environment (Protection) Act, 1986".

Email

Central Ground Water Authority

**RE: [EXTERNAL]:Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg**

**From :** PRAKASH RAHAMATKAR  
<PRAKASH.RAHAMATKAR@LTMETRO.COM>

Thu, Dec 14, 2023 01:31 PM



**Subject :** RE: [EXTERNAL]:Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg

1 attachment

**To :** Central Ground Water Authority <cgwa@nic.in>

**Cc :** J Siddhardha Kumar <rdsr-cgwb@nic.in>, MCGWA <mcgwa-cgwb@gov.in>, sudheermarsetty72@gmail.com, Sudhir chiplunkar <Sudhir.chiplunkar@ltmetro.com>, Rahul Burman <Rahul.Burman@ltmetro.com>, SN Tripathy <SN.Tripathy@ltmetro.com>

Dear Sir,

Please find attached the response to the SOP for proper utilization of water & rainwater management in metro projects from Hyderabad Metro Rail Project.

Thanks & Regards,

Prakash Rahamatkar

---

**From:** Central Ground Water Authority <[cgwa@nic.in](mailto:cgwa@nic.in)>

**Sent:** Monday, December 11, 2023 2:34 PM

**To:** Corporate Communications LTMRHL <[ccd@ltmetro.com](mailto:ccd@ltmetro.com)>; Customer Service <[CustomerService@ltmetro.com](mailto:CustomerService@ltmetro.com)>

**Cc:** J Siddhardha Kumar <[rdsr-cgwb@nic.in](mailto:rdsr-cgwb@nic.in)>; MCGWA <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>

**Subject:** [EXTERNAL]:Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg

**CAUTION:** External email. If unknown sender, **DO NOT** reply /open attachment /click link.

## REMINDER

Sir,

In reference to the trailing mails, it is once again requested to provide your feedback on SOP as was directed by Hon'ble NGT in order dated 06.12.2023. The reply may be sent positively by **14.12.2023** so as to enable this office to submit fresh ATR to Hon'ble NGT.

In case no feedback is received by 14.12.2023, the **ATR will be filed, stating that**

## COMPLIANCE TO SOP FOR PROPER UTILIZATION OF WATER AND RAINWATER MANAGEMENT IN METRO PROJECTS

SN	SOP Section Ref	Requirements	LTMRHL Response	
1	A	WATER MANAGEMENT DURING CONSTRUCTION PHASE	Not Applicable.	
	B	WATER MANAGEMENT DURING OPERATIONAL PHASE		
2	B (i)	Along underground sections, water level data being received from installed piezometers must be continuously and religiously monitored. Metro Corporations are required to get regular studies conducted by professional agencies/ academic institutions. In the event undesirable effect on groundwater regime - such as build-up of groundwater column against the construction - is noticed, and the cause is established as Metro construction, mitigation measures like pumping out groundwater and its gainful utilization may be adopted. Metro Corporations may seek technical advice from Universities/ Professional Consultants/ Central Ground Water Board/ WAPCOS/ State GW Department in such situations.	Not Applicable. Hyderabad Metro is not having any underground section in the project.	
3	B (ii)	In case of use of groundwater/ construction of tubewells by the Metro Corporation for operation/ maintenance of stations, groundwater NOC must be obtained from CGWA/ respective SGWA as mandated by Ministry of Jal Shakti Guidelines for infrastructure projects (available on CGWA website <a href="https://cgwa-noc.gov.in">https://cgwa-noc.gov.in</a> ).	Not Applicable. Hyderabad Metro is not extracting ground water for its any of the facility and is having Munciple Water connections through which water demand is being fulfilled for operation.	
4	B (iii)	Channelization of wastewater for reuse may be considered in large facilities like car depots.	Complied. 100% of Sewage and Effluent generated in both the depots is treated and re-used for landscaping and toilet flushing.	
	B (iv)	Metro Projects should make all efforts to reduce fresh water usage for operation/ maintenance of Depots/ Metro Stations and also to minimize wastage.	Complied. Hyderabad Metro is having Environment management system is in place and water conservations practices are being implemented as per guideline of CGWA.	
	B (v)	Metro projects create additional constructions, which can lead to some increased surface runoff during rainfall events. Proper stormwater management techniques can help mitigate the impact of stormwater runoff, reduce erosion, and prevent flooding.	Complied. Both Depots are having stormwater drainage system designed considering peak hourly rainfall to prevent flooding and erosion.	
	B (vi)	Bureau of Indian Standards (BIS) has a dedicated Committee – Ground Water and Related Investigations Sectional Committee, WRD 03. The Committee, in consultation with experts have developed BIS standard IS 15797:2008 for Roof Top Rainwater Harvesting - Guidelines (enclosed as Appendix-G). Same should be used for implementing RWH at elevated metro stations and elevated tracks.	Noted. 2 nos of Rainwater Harvesting (RWH) recharge shaft in each metro station & 25 RWH recharge shaft in each car depot are implemented as per the BIS standard guidelines.	
	B (vii)	RWH system at medians/ greenbelt below the track may be maintained more frequently. In case of thefts/ breakage of downpipes/ chamber slabs, same may be replaced immediately. The environmental concerns far outweigh physical damages.	Yearly Maintenance of RWH facilities in Depots and stations are being done and maintained.	
	B (viii)	Caution may be applied in the stretches with chances of oil/ grease mixing with rainwater. In such stretches, recharge may be avoided.	complied. Both car depots facilities are designed and maintained with spillage free maintenance mechanism.	
	B (ix)	Native tree plantation should be encouraged near project areas/ on medians. This would help in formation of macropores, thereby increasing recharging capacity of aquifers.	Tree plantation in available spaces of car depot facility and stations are being done to develop green belt and are maintained.	
	B (x)	Metro projects should always aim at coveted rating such as Gold or Platinum rating by IGBC or equivalent standard awards.	Hyderabad Metro is already recived IGBC platinum award for 23 stations.	

**Compliance of Hon'ble NGT Order dt.17.10.2023 in Harpal Singh Rana and Anr. Vs State of Uttarakhand & others (OA No.198/2023) w.r.t proper utilisation of water and rain water management in Metro projects****From :** narayanahegde@bmrc.co.in

Fri, Dec 15, 2023 02:13 PM

**Subject :** Compliance of Hon'ble NGT Order dt.17.10.2023 in Harpal Singh Rana and Anr. Vs State of Uttarakhand & others (OA No.198/2023) w.r.t proper utilisation of water and rain water management in Metro projects

📎 1 attachment

**To :** Central Ground Water Authority <cgwa@nic.in>**Attention of Mr T B N Sigh, Member-Secretary, Department of Water Resources, RD & GR, Central Ground Water Authority, Ministry of Jal Shakti, Govt.of India, New Delhi-110011**

Respected Sir,

With reference to your letter dated 21.11.2023 under File No.CGWA-21/31/2020-CGWA-Part-(2)-630 addressed to the Managing Director, Bangalore Metro Rail Corporation Ltd (BMRCL), on the above subject, the following reply is furnished as approved by Managing Director, BMRCL.

Date: 14.12.2023.

**Bangalore Metro Rail Corporation Limited****Reply to Member Secretary, Ministry of Jal Shakti, Department of Water Resources, RD & GR, Government of India**

Sub: Action taken report for standard operating procedures for proper utilization of water and rainwater management in metro projects.

\*\*\*\*\*

Bangalore Metro Rail Corporation is adopting provisions in the SOP for proper utilization of water and rainwater management in metro projects. The following Arrangements are being made for drainage of water from roof top of metro stations and depot buildings:

- The rain water from the roof of the Stations is collected and taken down through HDPE pipes at different locations. The water is further collected at few locations and directed to ground water discharge pits. Additional water is directed to the plantation provided at all 4 corners of the Station.
- Water collected from the Depot buildings and Workshop sheds is directed to the ground water recharge pits and further to the plantation done in the Depot. Also channelization of wastewater has been led to filtration tank from their it is used for car wash. After car wash the water has been lead to effluence treatment plant were the water has been treated and recycled.
- Rain water from viaduct Drainage spouts are provided on the viaduct at every 3m to collect the water and the same is brought down through HDPE pipe provided within the box section of the segments. The pipes are taken down along the piers and discharged on to the median and it is directed to the plantation provided along the median of the viaduct and excess water flows on to the road and due the road camber, water flows on to the drain at the end of the

road which help to mitigate the impact of storm water runoff, reduce erosion and prevent flooding.

The approved reply by MD, BMRCL, is attached herewith for your kind perusal.

**Regards**

**Narayana V Hegde**

**GM(Law-Litigation-II)**



**Reply to Member-Secretary on Action Taken Report.pdf**

60 KB

---

Date: 14.12.2023.

**Bangalore Metro Rail Corporation Limited**

**Reply to Member Secretary, Ministry of Jal Shakthi, Department of Water Resources,  
RD & GR, Government of India**

Sub: Action taken report for standard operating procedures for proper utilization of water and rainwater management in metro projects.

\*\*\*\*\*

Bangalore Metro Rail Corporation is adopting provisions in the SOP for proper utilization of water and rainwater management in metro projects. The following Arrangements are being made for drainage of water from roof top of metro stations and depot buildings:

- The rain water from the roof of the Stations is collected and taken down through HDPE pipes at different locations. The water is further collected at few locations and directed to ground water discharge pits. Additional water is directed to the plantation provided at all 4 corners of the Station.
- Water collected from the Depot buildings and Workshop sheds is directed to the ground water recharge pits and further to the plantation done in the Depot. Also channelization of wastewater has been led to filtration tank from their it is used for car wash. After car wash the water has been lead to effluence treatment plant were the water has been treated and recycled.
- Rain water from viaduct Drainage spouts are provided on the viaduct at every 3m to collect the water and the same is brought down through HDPE pipe provided within the box section of the segments. The pipes are taken down along the piers and discharged on to the median and it is directed to the plantation provided along the median of the viaduct and excess water flows on to the road and due the road camber, water flows on to the drain at the end of the road. Which help in mitigate the impact of storm water runoff, reduce erosion and prevent flooding.



CE(PM)

Bangalore Metro Rail Corporation Limited

**Dr. M. Srinivas**  
Chief Engineer(Project Monitoring)  
Bangalore Metro Rail Corporation Ltd.  
Annexe - I, 4th Floor, TTMC 'A' Block  
K.H. Road,Shanthinagar, Bengaluru - 560 077

Email

Central Ground Water Authority

**Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

**From :** osdlucknowmetro@gmail.com

Mon, Dec 18, 2023 03:55 PM

**Subject :** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

📎 2 attachments

**To :** Central Ground Water Authority <cgwa@nic.in>

**Cc :** feedback@lmrcl.com, cedesign upmrc <cedesign.upmrc@gmail.com>, akash trivedi <akash.trivedi@upmrc.co.in>

Sir,

Please find herewith attached letter from MD, UPMRC on said subject for kind perusal.

On Fri, Nov 24, 2023 at 1:23 PM Feedback LMRCL <[feedback@lmrcl.com](mailto:feedback@lmrcl.com)> wrote:

**Forwarded Conversation**

**Subject: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.**

From: **Central Ground Water Authority** <[cgwa@nic.in](mailto:cgwa@nic.in)>

Date: Tue, 1 Aug 2023 at 12:52

To: <[feedback@lmrcl.com](mailto:feedback@lmrcl.com)>

Cc: secyud up <[secyud.up@gmail.com](mailto:secyud.up@gmail.com)>, RD CGWB NR Lucknow <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>, upgwd in <[upgwd.in@gmail.com](mailto:upgwd.in@gmail.com)>, Groundwater Desk <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, RD, CGWA <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, A.K.Agrawal <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, VIKAS RANJAN <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>

Sir,

PFA herewith the letter on the above mentioned subject along with all the necessary enclosures. This is for your kind perusal and further necessary action.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)



-----  
From: **Central Ground Water Authority** <[cgwa@nic.in](mailto:cgwa@nic.in)>

Date: Wed, 22 Nov 2023 at 16:11

To: <[feedback@lmrcl.com](mailto:feedback@lmrcl.com)>

Cc: RD CGWB NR Lucknow <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>, Groundwater Desk <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, RD, CGWA <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, MCGWA <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, VIKAS RANJAN <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>

Sir,

PFA herewith the letter on the above mentioned subject. This is a time bound matter and a reply may please be provided timely.

Regards,

**O/o सदस्य सचिव Member Secretary,**

**केंद्रीय भूजल प्राधिकरण Central Ground Water Authority**

जल शक्ति मंत्रालय, भारत सरकार Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली-110011

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph- (011) 23383824; Fax- (011) 23382051; e-mail: [cgwa@nic.in](mailto:cgwa@nic.in)

---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>  
**To:** [feedback@lmrcl.com](mailto:feedback@lmrcl.com)  
**Cc:** "secyud up" <[secyud.up@gmail.com](mailto:secyud.up@gmail.com)>, "RD CGWB NR Lucknow" <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>, "upgwd in" <[upgwd.in@gmail.com](mailto:upgwd.in@gmail.com)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "A.K.Agrawal" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>  
**Sent:** Tuesday, August 1, 2023 12:51:38 PM  
**Subject:** Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

-----  
From: **JAGDAMBA PRASAD** <[jprasad-cgwb@gov.in](mailto:jprasad-cgwb@gov.in)>  
Date: Thu, 23 Nov 2023 at 15:37  
To: <[feedback@lmrcl.com](mailto:feedback@lmrcl.com)>, upgwd in <[upgwd.in@mail.in](mailto:upgwd.in@mail.in)>  
Cc: MCGWA <[mcgwa-cgwb@nic.in](mailto:mcgwa-cgwb@nic.in)>, Central Ground Water Authority <[cgwa@nic.in](mailto:cgwa@nic.in)>, VINOD KUMAR <[yk.dhaundiyal-cgwb@gov.in](mailto:yk.dhaundiyal-cgwb@gov.in)>, RD CGWB NR Lucknow <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>

Sir,

With reference to trailing mail , **Action Taken Report (ATR) may kindly be submitted latest by 24.11.2023** in compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects considering norms of SOP.

Regards  
Jagdamba Prasad  
Sc-D

---

**From:** "JAGDAMBA PRASAD" <[jprasad-cgwb@gov.in](mailto:jprasad-cgwb@gov.in)>  
**Sent:** Thursday, November 23, 2023 2:04:12 PM  
**Subject:** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

---

**From:** "JAGDAMBA PRASAD" <[jprasad-cgwb@gov.in](mailto:jprasad-cgwb@gov.in)>  
**To:** "RD CGWB NR Lucknow" <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>  
**Sent:** Thursday, November 23, 2023 11:01:28 AM  
**Subject:** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper

utilization of water and rainwater management in metro projects – reg.

Sir,

With reference to trailing mail, the proper utilization of water and rainwater management has to be implemented by in metro projects as per SOP in compliance to Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) .

In this regard concerned agency of Metro Rail/state can get technical guidance/ support, if any from Regional Director Offices of Central Ground Water Board (CGWB) . In case of UP state, LMRC has to submit the Action Taken Report by **24.11.2023** .

With Regards

Jagdamba Prasad

Sc-D

---

**From:** "RD CGWB NR Lucknow" <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>

**To:** "JAGDAMBA PRASAD" <[jprasad-cgwb@gov.in](mailto:jprasad-cgwb@gov.in)>

**Sent:** Wednesday, November 22, 2023 11:17:30 PM

**Subject:** Fwd: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.

Pl. put-up the note on the case, and discuss on 24th Nov'23.

R.D.

### Central Ground Water Board

Northern Region, Bhujal Bhawan

Sector-B, Sitapur Road Yojana, Aliganj

Lucknow - 226 021

Ph: **+91-522-2363812**

**E-mail:** [rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)

जल है तो कल है, **Save Water Save this Planet**

---

**From:** "Central Ground Water Authority" <[cgwa@nic.in](mailto:cgwa@nic.in)>

**To:** [feedback@lmrcl.com](mailto:feedback@lmrcl.com)

**Cc:** "RD CGWB NR Lucknow" <[rdnr-cgwb@nic.in](mailto:rdnr-cgwb@nic.in)>, "Groundwater Desk" <[gwdesk-mowr@nic.in](mailto:gwdesk-mowr@nic.in)>, "RD, CGWA" <[rdcgwa-cgwb@nic.in](mailto:rdcgwa-cgwb@nic.in)>, "MCGWA" <[mcgwa-cgwb@gov.in](mailto:mcgwa-cgwb@gov.in)>, "VIKAS RANJAN" <[vikasranjan-cgwb@gov.in](mailto:vikasranjan-cgwb@gov.in)>

**Sent:** Wednesday, November 22, 2023 4:09:17 PM

**Subject:** Re: Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and another Vs State of Uttarakhand & Ors. (O.A. NO. 198/2023) w.r.t. proper utilization of water and rainwater management in metro projects – reg.



Virus-free. [www.avg.com](http://www.avg.com)

--

***With Regards***

Puran Chandra  
OSD/MD

**Uttar Pradesh Metro Rail Corporation Ltd.**  
**(Formerly known as Lucknow Metro Rail Corporation Ltd.)**  
**(A Joint Venture of Govt. of India & Govt. of UP)**

Administrative Building  
Vipin Khand, Gomti Nagar  
Lucknow - 226010

**Phone: +91 7705004571**

**Tel- +91 522 2304011**

**Fax- +91 522 2304012**

In future please use our new official mail id: [osd-md@upmrcl.co.in](mailto:osd-md@upmrcl.co.in)



**Rain Water Management in UPMRCL.PDF**

295 KB

---



**UTTAR PRADESH METRO RAIL CORPORATION LTD.**  
**(Formerly known as Lucknow Metro Rail Corporation Limited)**

Administrative Building, Vipin Khand, Gomtinagar, Lucknow-226010

No. UPMRCL/ Design / Correspondence-1 / 2023/ 12001

Date: 13.12.2023

To,

Member Secretary  
Government of India  
Ministry of Jal Shakti  
Department of Water Resources, RD&GR  
Central Ground Water Authority  
18/11, Jamnagar House, Mansingh Road  
New Delhi-110011

**Kind Attn :** Sh T.B.N. Singh

**Sub:** Regarding Rain Water Management in UPMRCL Projects

**Ref: (i)** Letter No. CGWA-21/31/2020-CGWA-Part(2).621 from CGWA regarding – “ *Compliance of Hon'ble NGT Order dated 17.03.2023 in Harpal Singh Rana and Anr vs State of Uttrakhand & Ors ( OA No. 198/ 2023) wrt proper utilization of water and rainwater management in Metro Projects. “*

Sir,

This is to inform with reference to above cited letter that Rain Water Harvesting in UPMRCL Projects is being complied as per Clause 7.2.5- Recharge Wells- IS Code 15797: 2008. Also necessary steps are being taken to prevent contamination of ground water from rain water harvesting system.

Yours Sincerely ,

**Sushil Kumar**

(Managing Director)

**Encl :** Letter mentioned in Ref (i)