

# **DLI #1 VERIFICATION PROTOCOL**

## **2<sup>nd</sup> ROUND OF VERIFICATION**

# DLI #1: VERIFICATION PROTOCOL

## (2nd round of verification)

### 1.0 Background:

Quality Council of India (QCI), as Third Party Government Verification Agency (TPGVA) for Atal Bhujal Yojana has conducted two rounds of verification for DLI#1. The 1<sup>st</sup> round was conducted in December 2020 and 2<sup>nd</sup> round was conducted in October 2021. A comprehensive verification protocol was developed for both the rounds and was followed during the desktop as well as the field verification by QCI.

The final report of the Verification submitted by QCI was accepted by DoWR, Rd & GR, MoJS and the same has been shared with IAs along with the protocol.

The protocol for verification of achievements against DLI#1, as elaborated in the Program Guidelines Ver.1.1 as well as the Program Appraisal Document of the World Bank is as below:

*Table 1: Verification protocol for DLI #1*

<b>Description of DLI-1</b>	A State is verified to have achieved the DLI if the monitoring and disclosure of ground water-related data has improved.
<b>Scalability of Disbursements (Yes/No)</b>	Yes
<b>Data Source/Agency</b>	State and Central (e.g., CGWB) Governments records and data verification
<b>Verification Entity</b>	TPGVA
<b>Procedure for Verification for DLI-1</b>	
<p>Only the selected states/blocks/GP will be considered for the DLI. For a given state/block/GP the achievement of the DLI will be measured using two sub-indicators on (a) groundwater monitoring and disclosure of data (b) disclosure of block-wise groundwater reports</p> <p><b>Groundwater monitoring and disclosure of data:</b> This sub-indicator is defined as (i) the number of observation wells for water levels measurement and water quality sampling locations for which water quality and quantity data are available and disclosed; and (ii) the number of wells equipped with functional meters for energy consumption or volumetric groundwater usage.</p> <p><b>Public availability of groundwater reports:</b> This sub-indicator is defined as the number of block-level groundwater quality and quantity monitoring reports made publicly available online.</p> <p>A state/Block/GP can qualify for this DLI in multiple years.</p>	

- For the 1<sup>st</sup> and 2<sup>nd</sup> round of verification of DLI#1, a separate verification protocol was developed and was shared with the IAs (also forms part of the final report of the first and second round of verification of DLI#1)
- This round of verification would include year-on-year improvements on indicators verified in the previous rounds as well as other indicators viz. installation of Water/Energy meters, Accreditation of Water Quality Labs and Public Disclosure of data
- This has necessitated the formulation of a separate protocol for this round of verification as discussed below. However, this protocol shall be read in continuation of the protocol developed for previous rounds of verification of DLI#1

## **2.0 Protocol for Verification towards DLI-1 ( 3<sup>rd</sup> Round):**

**2.1** SPMU uploaded the data in respect of all the sub-indicators of DLI#1 on ‘DLI Verification module’ of Ataljal MIS (ataljal.mowr.gov.in) in prescribed formats on 30<sup>th</sup> September 2021, as directed by NPMU, DoWR, MoJS.

**2.2** The achievement of DLI #1 shall be verified with respect to year-on-year increase in the following sub-indicators:

- i. No. of observation wells in the program blocks for which water level data, monitored using a functional measuring device is available
- ii. No. of observation wells in the program blocks for which water quality data is available
- iii. No. of State-level accredited groundwater quality labs (non-disbursing)
- iv. No. of wells equipped with functional meters for measuring energy consumption or volumetric groundwater usage
- v. No. of program blocks for which ‘Hydrogeological Reports’ with information pertaining to groundwater level and water quality monitoring is available

For this round of verification for achievement of DLI -1, the criteria of disbursements with respect to each sub-indicator is as follows:

### **1. Water Level ( Format is provided in Annexure – I)**

#### **Qualifying Criteria for the State(s) for this round of DLI-1 Verification:**

Updation of water level data for pre and post-monsoon period of 2020 for at least 70% of observation wells disclosed on the MIS after the first round of verification shall be mandatory.

- (i) The observation wells which were shared by the State(s) for the first round of verification but were not disclosed on the MIS as they did not meet the criteria would be eligible for disbursements after their data is reconciled
- (ii) Existing observation wells with historical data from 2015 which were not shared by the State(s) for the previous rounds of verification, will be eligible for incentives during this round.

- (iii) New observation wells established after the first round of verification can also be disclosed for verification in this round along with both pre and post-monsoon data of 2020

\*\* To be eligible under (i) and (ii), observations wells should have a minimum of 8 data points (pre-and post-monsoon) for the period 2015-2019 and 2 data points (pre-and post-monsoon) for the year 2020.

## **2. Water Quality (Format is provided in Annexure-II)**

### **Qualifying Criteria for the State(s) for this round of DLI-1 Verification:**

Updation of water quality data of 2020 for at least 70% of observation wells disclosed on the MIS after the first round of verification shall be mandatory.

- (i) The observation wells which were shared by the State(s) for the 1<sup>st</sup> round of verification but were not disclosed on the MIS as they did not meet the criteria would be eligible for disbursements after their data is reconciled.
- (ii) Existing observation wells with historical data from 2015 which were not shared by the State(s) for the 1<sup>st</sup> round of verification can be submitted and will be eligible for incentives during the third round.
- (iii) New Observation wells established after first round of verification can also be disclosed for verification in the second round with data of pH, EC / TDS, Ca, Mg, Na, K, CO<sub>3</sub>, HCO<sub>3</sub>, Cl, SO<sub>4</sub>, NO<sub>3</sub> and F for the year 2020.

\*\* To be eligible under (i) and (ii), the observation wells should have at least 3 years data (EC/TDS together with at least 3 major cations/anions out of- Ca, Mg, Na, K, HCO<sub>3</sub>, Cl, SO<sub>4</sub>, NO<sub>3</sub>, F) for the period 2015 to 2019 and data inputs of pH, EC / TDS, Ca, Mg, Na, K, CO<sub>3</sub>, HCO<sub>3</sub>, Cl, SO<sub>4</sub>, NO<sub>3</sub> and F for the year 2020.

## **3. Water Quality Labs (Format is provided in Annexure – III)**

The number of Water Quality labs accredited and equipped with modern groundwater quality monitoring systems shall be recorded. The accreditation of National Accreditation Board for Laboratories (NABL) shall be validated through accreditation reports by NABL.

## **4. Wells with functional energy/water meter (Format is provided in Annexure – IV)**

As far as wells fitted with functional energy/water meters are concerned, eligibility is based on the number of such wells identified. Availability of proof of the existence of the meter(s) in the form of geotagged photographs shall be necessary for them to qualify for disbursement. In the case of wells with energy meters, proof in the form of electricity bills for the last 6 months shall be mandatory. In case of water meters, records of registers where the data is being recorded shall be collected as proof.

## 5. Hydrogeological Reports

For the reports that are disclosed, computation of incentives shall be done based on the following categorization:

*Table 2: Year-on-year categorization for public disclosure of reports*

S No	Sub-indicator of disbursement	Categorization based on wells qualified in the previous rounds of verification	Nature of component
1	No. of program blocks for which 'Hydrogeological Reports' with information pertaining to ground water level and water quality monitoring is available	Block-level reports qualified during the previous round of verification and are updated	Mandatory and non-disbursing
		New Block-level reports that are disclosed	Qualified for Incentive based on the number of new reports disclosed

For the purpose of this round of verification, the criteria for disbursements with respect to this sub-indicator is as follows:

- (a) Adherence to the template shared with the states shall be the basis for verification of block-wise hydrogeological reports with water level and water quality monitoring information. Each report submitted by the states shall be evaluated for i) completeness of basic information, ii) availability of six (6) maps (Location map, Hydrogeological map, location of observation wells for monitoring water levels and water quality, pre-and post-monsoon water level maps, map showing distribution of Specific Electrical Conductance. The map showing cross-section of sub surface regionalised aquifer groups is optional and may be included if available and iii) availability of three (3) Tables (Basic data of WL/WQ observation wells, ground water level data (2015-2020) and ground water quality data (2015-2020)). It may be ensured that the water level and water quality data in the Hydrogeological reports should be consistent with the data uploaded by the States in the MIS of Atal Jal.
- (b) The Hydrogeological reports already disclosed during the 1<sup>st</sup> round of verification are to be updated with water level and quality data for the year 2020 and uploaded on the MIS
- (c) The maps in the Hydrogeological reports should be updated for the pre and post monsoon for the period 2015-2020.

## 6. Public Disclosure

The data/reports which have been disclosed against DLI-1 and also verified by QCI in the 1<sup>st</sup> round is available in the Ataljal portal ('Data Disclosure' tab) and can be accessed/downloaded freely. For the benefit of the community, the data needs to be made public through various means such as placing on state web portals, putting notice boards with data at appropriate places including Panchyat office, posters, banners, printed booklets, pamphlets/leaflets, holding public meetings as well as using social media platforms.

Towards verifying the public disclosure of data, the following modes of disclosure are accepted for the disbursement of funds:

**Table 3: Acceptable modes of public disclosure under DLI #1**

S No	Mode of Public Disclosure	Details	Frequency of Disclosure	Verification Methodology
<b>Disbursing Indicators</b>				
1	Online Disclosure	<ul style="list-style-type: none"> <li>Atal Jal portal</li> <li>Web portals of states</li> </ul>	Semi-annual	Checking the disclosure semi-annually
2	Fixed Displays	<ul style="list-style-type: none"> <li>Gram Panchayat office notice boards</li> <li>Posters/Flexes</li> <li>Boards near observation wells on Water Levels and Water Quality. Boards to also indicate if water is potable or not.</li> </ul>	Semi-annual	Geotagged images
3	Print	<ul style="list-style-type: none"> <li>Pamphlets/Leaflets</li> </ul>	semi-annual	Images of pamphlets / leaflets
<b>Non-Disbursing Indicators</b>				
4	Social Media	<ul style="list-style-type: none"> <li>Creating GP specific channels on Facebook</li> <li>Channels on WhatsApp</li> </ul>		
5	Public meetings	<ul style="list-style-type: none"> <li>Gram Sabha meetings</li> </ul>		Social Listening of 15 individuals from GPs selected at random

### Template For Uploading Water Level Data of Observation Wells

WATER LEVEL DATA																									
S. No.	State	District	Block	GP	Village	Type	Source	Well ID	Site Name	Latitude	Longitude	Well Depth (m.bsl)	Aquifer type/ Pre_2015(May) (m.bsl)	Pst_2015 (Nov)	Pre_2016 (May)	Pst_2016 (Nov)	Pre_2017 (May)	Pst_2017 (Nov)	Pre_2018 (May)	Pst_2018 (Nov)	Pre_2019 (May)	Pst_2019 (Nov)	Pre_2020 (May)	Pst_2020 (Nov)	

### Template For Uploading Water Quality Data

State	District	Block	GP	Village	Site Name	Type of well	Source	Well ID	Latitude	Longitude	Well Depth (m bgl)	Aquifer type/ formation	Year	pH	EC (uS/cm)	TDS (mg/l)	Total Hardness (mg/l)	Calcium (mg/l)	Magnesium (mg/l)	Sodium (mg/l)	Potassium (mg/l)	Carbonate (mg/l)	Bicarbonate (mg/l)	Sulphate (mg/l)	Chloride (mg/l)	Fluoride (mg/l)	Nitrate (mg/l)		
													2019																
													2020																



## Template For Uploading Water Quality Testing Laboratories

WATER TESTING LAB									
State	Name of Accredited Water Testing Lab	Laboratory ID	Certificate No.	Lab Address	Ownership (CGWB/SGWD/Private/Other)	Name of the Accreditation Body	Date of Accreditation (dd/mm/yyyy)	Accreditation Valid up to (dd/mm/yyyy)	No. of samples analyzed annually

### Template For Uploading Data in Respect of Water / Energy Meters

OBSERVATION WELL WITH ENERGY / WATER METER													
Please note : All the photographs uploaded should have a unique ID with respect to Meter/Owner's name													
State	District	Block	GP	Village	Name of the Owner of the Well	Type of well {Energy Consumption Meter (energy meter) / Volumetric Groundwater usage meter (water meter)}	Latitude	Longitude	Type of Meter Installed {Energy Consumption Meter (energy meter) / Volumetric Groundwater usage meter (water meter)}	Energy/Water Meter Geotagged Photograph	Date of Installation (DD/MM/YY)	Photograph of Energy Consumption Meter (energy meter) Bill / Photograph of Volumetric Groundwater usage meter (water meter) Bill Reading (Photograph 1)	Photograph of Energy Consumption Meter (energy meter) Bill / Photograph of Volumetric Groundwater usage meter (water meter) Bill Reading (Photograph 2)