

# **CHECKLIST FOR SUBMISSION AND SCRUTINY OF DPR**

## **(WATER SUPPLY)**



**MINISTRY OF URBAN DEVELOPMENT**  
**GOVERNMENT OF INDIA**

**March 2012**

**<http://urbanindia.nic.in>**

## Index of Contents

<b>S. No.</b>	<b>Particulars</b>	<b>Page No.</b>
<b>1.0</b>	<b>Instructions</b>	<b>1</b>
<b>2.0</b>	<b>Certificate issued by the Competent Authority</b>	<b>1</b>
<b>3.0</b>	<b>General Components</b>	<b>2</b>
3.1.	Name of the Scheme with Geographic Details	2
3.2.	Appraisal report by State Level Nodal Agency (SLNA)	2
3.3.	Administrative approval of the scheme	2
3.4.	Project formulation justification	3
3.5.	Linkage of the schemes with other on-going schemes	3
3.6.	Maps of administrative and political jurisdiction of the project area	3
3.7.	Land use pattern as per approved Master Plan	3
3.8.	Technical and financial verification certificate by the State Govt.	3
3.9.	Clearance for setting up of WTP by the State Pollution Control Board	3
3.10.	Intra-departmental clearance certificate	4
3.11.	Agreement between electricity department and Urban Local Bodies (ULBs) for separate electric feeder	4
3.12.	Commitment from electricity department for uninterrupted power supply	4
3.13.	Topographic map of the project area	4
3.14.	Soil investigation report in a grid of 1km x 1km	4
3.15.	Contour map of the project area	4
3.16.	Resolution from ULBs for implementation of proposed tariff structure	4
3.17.	Existing and proposed source of water	5

<b>4.0</b>	<b>Engineering Components</b>	<b>5</b>
4.1.	Existing and projected population and their distribution in the project area	5
4.2.	Existing details of water supply system	7
4.3.	Details of water demand and their availability	9
4.4.	Details of existing water supply infrastructure	10
4.5.	Proposed project components and their estimated cost	12
4.6.	Design Details of Proposed Water Supply Infrastructure	12
4.7.	House Service Connection	18
4.8.	Proposal for Supervisory Control and Data Acquisition (SCADA) system	18
4.9.	Modular approach for WTP	18
4.10.	Computer Aided Design & simulation of water supply infrastructure	18
4.11.	Raw water quality certificate by the competent authority	19
4.12.	Conformation to BIS:10500 for treated water	19
4.13.	Surge analysis report for transmission main	19
4.14.	Hydraulic flow diagram and layout plan for WTP	19
4.15.	Maps of proposed distribution system and L-section of pumping main and transmission main	19
4.16.	Allocation of site for WTP as per Master Plan	19
4.17.	Provision for land acquisition for water supply infrastructure	19
4.18.	Bill of quantities and cost estimates of individual components by latest schedule of rates	21
4.19.	Detailed drawings and cost estimates for ancillary works	21
4.20.	Provision for road restoration	21
4.21.	Proposed PERT / CPM network	21
4.22.	Internal Rate of Return (IRR) / Economic Rate of Return (ERR)	21

4.23.	Traffic diversion / control management plan	21
4.24.	Institutional and financial status of project executing agency	22
4.25.	Operation & maintenance cost and revenue generation for existing and proposed infrastructure	21
4.26.	Project implementation period	23
4.27.	Service level benchmarking of the system	23
4.28.	Environmental and social problems	23
4.29.	Action Plan for Capacity Building Programme	23
4.30.	Public Private Partnership (PPP) involvement	24
4.31.	Rehabilitation and resettlement plan	24
4.32.	Hard and soft copies of the DPR	24
4.33.	Proposed completion period of project	24

<b>5.0</b>	<b>Verification by the Ministry of Urban Development</b>	<b>25</b>
------------	--	-----------

**CHECKLIST FOR SUBMISSION AND SCRUTINY OF DPR**  
**(WATER SUPPLY)**

*(to be filled in and certified by the highest city –level Officials, both technical and administrative, such as Chief Engineer/City Engineer/ Municipal Commissioner)*

**Instructions:**

1. The DPR shall be formulated as per the Manual on Water Supply and treatment published by the Ministry and as per the Department procedures.
2. DPR shall be technically sanctioned by the Competent Authority the State Govt./ULB before forwarding it to the Ministry.
3. Each and every page has to be signed at the bottom by the officials.
4. Each field has to be filled in appropriately as 'yes', 'no', 'not required', 'not done', 'not used' etc. No field has to be left blank. Give explanatory comments wherever 'no' is indicated.
5. Non- definite entries such as 'will be done later', 'will be furnished later' etc. will not be accepted.

**CERTIFICATE:**

This is to certify that that the undersigned have read the contents of the check list fully and have responsibly made the entries true to the best of knowledge and understanding. In case the information furnished in the check list enclosed is found to be incorrect for any reason, whatsoever, the undersigned may be held liable for disciplinary action as per applicable Government rules.

Certified that

- (i) The designs and drawings have been approved by the Competent Authority.
- (ii) The detailed estimates and cost estimates are as per the current schedule of rate and/or rate analysis and latest pro-forma invoices (current market rates).
- (iii) The DPR has been technically sanctioned by the Competent Authority in the State Govt./ULB.

Signed:

Name:

Designation:

Signed:

Name:

Designation:

**CHECKLIST FOR SUBMISSION AND SCRUTINY OF DPR**  
**(WATER SUPPLY)**

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		<b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof
<b>3. GENERAL COMPONENTS</b>		
3.1	Name of the town/city/District/State for which scheme has been formulated with name of the scheme (a) Name of the City/Town:  (b) Name of the District:  (c) Name of the State :  (d) Name of the Scheme:	
3.2	Date of DPR appraised by State Level Nodal Agency (SLNA) and whether a copy of appraisal report (duly authenticated by the competent authority) has been forwarded with DPR. (a) Date of appraisal:  (b) Name of the appraisal agency:  (c) Original Estimated cost:  (d) Appraised cost:  (e) Major comments/observations made by appraisal agency.	
3.3	Whether the commitment to launch the scheme immediately after approval of Govt. of India / Administrative approval of the scheme is appended in DPR. (Whether Administrative approval of State Government is obtained to implement the scheme immediately after approval of GOI and enclosed in DPR.)	

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If <b>Yes</b> , give Page No./DPR volume reference. If <b>No</b> , reasons thereof
3.4	(a) Whether Project formulation justification (need for the project) has been furnished in DPR. Please justify the need of the project. Justification: (b) Whether executive summary of the project is furnished in the DPR	
3.5	Whether linkages of this scheme have been established with other ongoing water supply schemes being funded by the Central/State Govt./other agencies, if any. Pl. Furnish relevant information.	
3.6	Whether the map showing administrative and political jurisdiction of the project area has been given in DPR.  Area within Municipal limit : ..... sq.km.  Extent of area considered in the DPR : .....sq.km.  Additional area (beyond Municipal limit) considered in the DPR: .....sq.km	
3.7	Whether the land use pattern of the city / town / project area as per the approved Master Plan has been given in DPR.	
3.8	Whether the DPR including the design, drawings, cost estimates, analysis of rates has been authenticated by Competent Authority of State Govt./ ULB and Quasi-Technical sanction of DPR / Technical & Financial Verification Certificate has been attached with DPR	
3.9	Whether the proposals for setting up WTP received clearance / consent from the State Pollution Control Board	

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If <b>Yes</b> , give Page No./DPR volume reference. If <b>No</b> , reasons thereof
3.10	In case proposed transmission main / water supply line is crossing Railway line/ Highway & their bridge (wherever applicable), whether the clearance from concerned authority such as State Pollution Control Board (SPCB), Highways, PWD, Railways has been obtained and copies of the permission and their estimate for the same has been provided in DPR. Please specify.  If not, the present status of action initiated may be furnished below.	
3.11	Whether the provision for separate electric feeder line to water treatment plant and service reservoir (to take care of frequent power failure and voltage fluctuation problem) from HT line and an agreement between Electricity Department and Urban Local Bodies (ULBs) has been furnished in the DPR	
3.12	Whether the commitment from Electricity Department for un-interrupted power supply is obtained	
3.13	Whether the Topographic map of the city/town/project area to the scale has been given in DPR/Zone wise maps to scale showing all streets.	
3.14	Whether soil investigation report – bore hole logs at least at a grid of 1 km x 1 km or Geological Survey Data has been appended with DPR.	
3.15	Whether Contour map of the project area has been annexed with the DPR.	
3.16	Whether resolution from the ULB for implementation of proposed tariff structure to ensure self-sustainability of the scheme is enclosed in DPR.	



S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof
3.17	<p>Existing Source : Ground Water/Surface Water Proposed Source: Ground Water/Surface Water</p> <p>Surface Water: Whether the proposed source of water has been identified. If yes, then a certificate from the concerned authority mentioning water availability/yield/ reservation etc. for next 30 years has been appended in the DPR. (Reliability of source based on flow measurement data for last 10-15 years need to be appended duly certified by Department responsible for allocation/water use of river/stream).</p> <p>Ground Water: Whether opinion of the SGWB/CGWB has been obtained with respect to quantity and quality of water and certificate/report furnished permitting extraction of Ground water.</p>	
<b>4 ENGINEERING COMPONENTS</b>		
4.1	<p>(i) Please furnish the details of city/project area,</p> <p>(a) Area of the town/city (municipal limit): .....Sq. km</p> <p>(b) Extent of the project area considered in the DPR: .....sq. km</p> <p>(c) Additional Area(beyond municipal limit) considered in the DPR:.....sq.km</p> <p>(d) No. of Households (as per 2001 and 2011 census):</p> <p>(ii) Whether population projection has been made as per CPHEEO Manual and given in DPR</p> <p>(a) City population</p> <p>As per 2001 Census :.....lakhs</p> <p>As per 2011 Census : .....lakhs</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof
	<p>Initial stage (year ..... ) : ..... lakhs + floating population (if any)-----lakh (Year in which project is likely to be commissioned)</p> <p>Intermediate stage (year ..... ) : ..... lakhs+ floating population (if any)-----lakh</p> <p>Ultimate stage (year ..... ) : ..... lakhs+ floating population (if any)-----lakh</p> <p>Population growth rate adopted: ..... %/ year (based on the past 5-6 decadal growth rate)</p> <p>Demographic Method adopted and justification :</p> <p>Whether any certificate for floating/tourist population has been obtained from Tourist Department and furnished in the DPR. Please justify.</p> <p>(b) Whether the population projection has been made in consonance with the Developmental Master Plan</p> <p>(c) Project Area (part of the city)</p> <p>Initial stage : ..... lakhs</p> <p>Intermediate stage : ..... lakhs</p> <p>Ultimate stage : ..... lakhs</p> <p>Population growth rate adopted: ..... %/ year (based on the past 5-6 decadal growth rate)</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof																																																							
	<p>( d ) Zone wise population (separately)</p> <table border="1"> <thead> <tr> <th>Zones</th> <th>Initial (lakhs)</th> <th>Intermediate (lakhs)</th> <th>Ultimate (lakhs)</th> <th>Population Density (Pop/hectare)</th> </tr> </thead> <tbody> <tr><td>Zone-I</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-II</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-III</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-IV</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-V</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-VI</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-VII</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-VIII</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-IX</td><td></td><td></td><td></td><td></td></tr> <tr><td>Zone-X..etc</td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <p>(f) No. of wards (within municipal limit) : .....</p> <p>(g) Total projected population to be accommodated in the existing municipal area : ..... lakhs ( should be in consonance with master plan and based on saturation density)</p> <p>(h) Remaining population to be accommodated in the area beyond municipal limit : ..... lakhs ( should be in consonance with master plan projection)</p> <p>(i) Whether population distribution in the municipal area and the area beyond municipal limit has been done in consultation with Town &amp; Country Planning Authority.</p> <p>(j) If yes, whether document is enclosed.</p>	Zones	Initial (lakhs)	Intermediate (lakhs)	Ultimate (lakhs)	Population Density (Pop/hectare)	Zone-I					Zone-II					Zone-III					Zone-IV					Zone-V					Zone-VI					Zone-VII					Zone-VIII					Zone-IX					Zone-X..etc					
Zones	Initial (lakhs)	Intermediate (lakhs)	Ultimate (lakhs)	Population Density (Pop/hectare)																																																					
Zone-I																																																									
Zone-II																																																									
Zone-III																																																									
Zone-IV																																																									
Zone-V																																																									
Zone-VI																																																									
Zone-VII																																																									
Zone-VIII																																																									
Zone-IX																																																									
Zone-X..etc																																																									
4.2	<p>Whether existing details of water supply for urban / urban agglomeration has been furnished in DPR. Please furnish the details.</p> <p>(a) Name of the sources &amp; No. of locations :</p> <p>(b) Total availability of water : .....MLD</p>																																																								

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. <b>If No</b> , reasons thereof						
	<p>(c) Surface Water :.....MLD</p> <p>(d) Ground Water : .....MLD</p> <p>(e) Existing capacity of WTP &amp; nos. :.....MLD (.....nos)</p> <p>(f) Capacity Utilization :.....MLD</p> <p>(g) No. of tubewells &amp; total abstraction and yield of each tubewell : .....(nos), .....(MLD).....lpm (range)</p> <p>(h) Total supply in the town / city (capacity of WTP/tube well separately): Surface Water:.....MLD  Ground Water:-.....MLD</p> <p>(i) Total water supply in town (residential/commercial/institutions) : .....MLD</p> <p>(j) Total supply to the industries : .....MLD</p> <p>(k) % of population coverage of the town/city/% of area covered : ..... %/.....%</p> <p>(l) % of population coverage in project area /% of area covered : ..... % /.....%</p> <p>(m) % population coverage of various zones Zone-wise :</p> <table border="1" data-bbox="338 1246 1077 1378"> <thead> <tr> <th>Zones</th> <th>% coverage</th> </tr> </thead> <tbody> <tr> <td>Zone-I</td> <td></td> </tr> <tr> <td>Zone-II</td> <td></td> </tr> </tbody> </table>	Zones	% coverage	Zone-I		Zone-II		
Zones	% coverage							
Zone-I								
Zone-II								

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof										
	<table border="1" data-bbox="338 360 1077 544"> <tr><td>Zone-III</td><td></td></tr> <tr><td>Zone-IV</td><td></td></tr> <tr><td>Zone-V</td><td></td></tr> <tr><td>Zone-VI</td><td></td></tr> <tr><td>Zone-VII, ETC.</td><td></td></tr> </table> <p>(n) Average Per capita water supply level (existing) in city : ----- lpcd</p> <p>(o) Average Per capita water supply level (existing) in the project area : ----- lpcd</p> <p>(p) Existing UfW :.....%</p> <p>(Please specify any study was conducted.)</p> <p>(q) Existing no. of House service Connections: -----nos. (Residential/commercial)</p> <p>(r) Existing no. of HSCs with meters : .....nos</p>	Zone-III		Zone-IV		Zone-V		Zone-VI		Zone-VII, ETC.		
Zone-III												
Zone-IV												
Zone-V												
Zone-VI												
Zone-VII, ETC.												
4.3	<p>Design demand and availability of water</p> <p>(a) Proposed per capita water supply and system losses:</p> <p>(b) Gross water demand ( City / town)</p> <p style="text-align: right;">Initial stage : ..... MLD</p> <p style="text-align: right;">Intermediate stage : ..... MLD</p> <p style="text-align: right;">Ultimate stage : ..... MLD</p>											

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If Yes, give Page No./DPR volume reference. If No, reasons thereof
	<p>(c) Gross water demand – project area</p> <p style="text-align: right;">Initial stage : ..... MLD</p> <p style="text-align: right;">Intermediate stage : ..... MLD</p> <p style="text-align: right;">Ultimate stage : ..... MLD</p> <p>(d) Existing water availability : .....MLD</p> <p>(e) Net Water demand – city / town</p> <p style="text-align: right;">Initial stage : ..... MLD</p> <p style="text-align: right;">Intermediate stage : ..... MLD</p> <p style="text-align: right;">Ultimate stage : ..... MLD</p> <p>(f) Net water demand – project area</p> <p style="text-align: right;">Initial stage : ..... MLD</p> <p style="text-align: right;">Intermediate stage : ..... MLD</p> <p style="text-align: right;">Ultimate stage : ..... MLD</p>	
4.4	<p>Whether the existing water supply infrastructure has been taken into consideration in DPR. Please furnish the details of various components of the existing system.</p> <p><b>I. Intake well &amp; Water Treatment Plant</b></p> <p>(a) Design capacity of Intake well : .....MLD</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof
	<p>(b) Design capacity of WTP :.....MLD</p> <p>(c) Quantity of water treated :.....MLD</p> <p>(d) No. of tubewells/ground water sources :.....MLD</p> <p>(e) Quantity of water abstracted from tubewells : ..... MLD</p> <p>(f) Total (c and e) :.....MLD</p> <p>(g) Shortfall in capacity : ..... MLD</p> <p>(h) Justification for upgradation, if any :</p> <p><b>II. Pumping main (Raw &amp; clear water)</b></p> <p>Size and length and material: .....mm, (.....Km) (GI/PVC/AC/PSC/MS/DI etc)</p> <p><b>III. Service Reservoir</b></p> <p>(a) Total No. of service reservoir and capacity : ..... (ML) (.....nos.)</p> <p>(b) Height of service reservoir (please specify Nos. and capacity and age)</p> <p>(c) Justification for upgradation, if any</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If Yes, give Page No./DPR volume reference. If No, reasons thereof
	<p><b>IV. Distribution System</b></p> <p>(a) Total length of road of city/town : .....KM</p> <p>(b) Total length of road in project area : .....KM</p> <p>(c) Total length of distribution network in the town : .....KM</p> <p>(d) Total length of distribution network in the project area : .....KM</p> <p>(e) Material and age of the existing pipe : (GI/PVC/AC/PSC/MS/DI etc) : .....AD</p> <p>(f) Size and length of material of existing pipes (size wise) : .....mm (dia), .....KM (length)</p> <p>(g) Pipe length to be retained in the system : .....KM</p> <p>(h) Pipe length to be replaced (to be discarded from the existing system)( with reason):..... KM</p>	
4.5	Please furnish the proposed Major components and Component-wise estimated cost.	
4.6	<p>Whether the design of Intake, WTP, Pumping main, Service Reservoir and distribution system of proposed water supply infrastructure has been provided in DPR. Please furnish the details.</p> <p><b>I. Intake structure with facilities</b></p> <p>(a) Design period (30 years as per CPHEEO Manual) : .....year</p> <p>(b) Capacity of Intake well : .....MLD</p> <p>(c) Total quantity of withdrawal of water : .....MLD</p>	



S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof
	<p><b>II. Water Treatment Plant</b></p> <p>(a) Design period (15 years as per Manual) : .....year</p> <p>(b) Capacity of WTP Existing: ..... MLD Proposed : ..... MLD</p> <p>(a) Shortfall in capacity, if any, to meet the intermediate demand : .....MLD</p> <p>(b) Whether Life-cycle cost assessment of treatment technologies has been furnished :</p> <p>(c) Whether a detailed note on performance of existing WTP (if considered in the proposal) has been furnished:</p> <p>(d) Whether temperature, elevation and location of the town has been taken into account while designing the process of the WTP, wherever required and furnished</p> <p>(e) Whether reasons for inadequate performance of existing WTP (if considered in the proposal) have been furnished</p> <p>(f) Whether provision has been made for sludge treatment facilities in WTP</p> <p><b>III. Total no. of Tube wells proposed and total drawl:</b> Existing: ..... MLD Proposed : ..... MLD</p> <p>Yield of each tubewell (new) : .....lpm</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof
	<p><b>IV. Pumping main/raising mains and feeder main:</b></p> <p><b>Pumping main/raising mains</b></p> <p>(a) Design period (30 years as per Manual) ..... years:</p> <p>(b) Whether design of economic size of pumping main has been done using computer software for the purpose(no manual design should be enclosed) :</p> <p>(c) Standby for pump sets (Please specify 50% or 100%) :</p> <p>(d) Total no. of pumping/raising mains :</p> <p>(e) Average flow considered in different pumping mains : ..... MLD</p> <p>(f) Availability of power supply : ..... kWh</p> <p>(g) Pumping hours considered (22 to 24 hrs) : ..... hrs</p> <p>(h) Pumping efficiency considered (60 to 80%) : ..... %</p> <p>(i) Capacity of pump sets proposed for various pumping mains :.....HP</p> <p>(j) Whether genset has been proposed (please specify nos. and capacity) :.....KVA</p> <p><b>Feeder mains</b></p> <p>(k) Design period (30 years as per Manual) (please specify the actual)</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If Yes, give Page No./DPR volume reference. If No, reasons thereof
	<p>(l) Whether design of economic size of pumping main has been done using computer software for the purpose (no manual design should be enclosed) :</p> <p>(m) Standby for pump sets (Please specify 50% or 100%) :</p> <p>(n) Total no. of feeder mains :</p> <p>(o) Average flow considered in different pumping mains : MLD</p> <p>(p) Availability of power supply : kWh</p> <p>(q) Pumping hours considered : hrs</p> <p>(r) Pumping efficiency considered : %</p> <p>(s) Capacity of pump sets proposed for various pumping mains :</p> <p>(t) Whether genset has been proposed (please specify nos. and capacity) :</p> <p><b>V. Service Reservoir</b></p> <p>(a) Design period (15 years as per Manual) : Year</p> <p>(b) Total No. of service reservoir and capacity: .....ML (...nos)</p> <p>(c) Height of service reservoir (please specify Nos. and capacity and age)</p> <p>(d) Justification for upgradation, if any</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. If <b>No</b> , reasons thereof
	<p>(e) No. of service reservoir to be utilised in the proposed system (please specify nos. and capacity)</p> <p>(f) Whether total proposed capacity is based on the 1/3<sup>rd</sup> requirement of intermediate demand (please specify the total capacity of service reservoirs and intermediate demand)</p> <p style="padding-left: 40px;">i. 1/3<sup>rd</sup> of intermediate demand : ..... ML</p> <p style="padding-left: 40px;">ii. Total capacity of reservoir : ..... ML</p> <p>(g) If not, please justify :</p> <p><b>VI. Distribution network</b></p> <p>(a) Design period (30 years as per Manual) : .....year</p> <p>(b) Total length of road of city/town : .....KM</p> <p>(c) Total length of road in project area : .....KM</p> <p>(d) Total length of distribution network : .....KM</p> <p>(e) Total length of distribution network in the project area : .....KM</p> <p>(f) Material of the proposed pipe : .....</p> <p>(g) Size of distribution network in the town : .....MM</p> <p>(h) Total length of proposed line accounted for : .....KM</p>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If Yes, give Page No./DPR volume reference. If No, reasons thereof
	(i) Additional length of pipe network proposed : .....KM (j) Peak factor adopted (2 to 3) as per Manual :..... (k) "C" Value of the proposed pipe material (100 to 145) as per Manual: ..... (l) "C" value of the existing pipe material & age of the pipe:..... ( .....years) (m) Residual head in distribution network (minimum residual head and range of available pressure) (7M, 12M, 17M & 22M) (to be adopted as per Manual depending on nature of town and its requirement) and justify the reasons : ..... M (n) Maximum velocity in distribution network : ..... m/s (<3 m/s) (o) Head loss considered in the design (m/s) : .....m / km (p) Total No. of layouts (networks) : ..... Nos. (q) Total No. of nodes & Links : .....Nos./.....nos. (r) Total length of distribution lines (zone wise) : .....KM (s) Proposed pipe sizes : .....mm (t) Peak flow from the outlet of service reservoirs as per the design (layout wise / DMA wise / zone wise) and Total Peak flow from all the service reservoirs:..... (Zone wises) and .....MLD(Total)	

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If <b>Yes</b> , give Page No./DPR volume reference. If <b>No</b> , reasons thereof
	<p>(u) Whether the average flow from all the service reservoirs is matching the ultimate demand of the city/town/project area (please specify the total average outflow from all the reservoirs and ultimate demand of the project area ) : .....MLD (average flow from all service reservoir)/.....MLD(ultimate demand)</p> <p>(v) Whether the provision thrust blocks, anchor blocks, expansion joints, scour / drain valves, air/vacuum releases valves and surge protection devices, wherever needed has been proposed</p> <p>(w) Whether distribution system has been designed with DMA concept to achieve 24x7 water supply</p> <p>(x) Whether the design of distribution system has been done based on convention approach</p> <p>(y) % of population coverage (including existing and proposed) :.....% (.....nos.)</p> <p>(z) % of area coverage (including existing and proposed): .....% (.....sq.km)</p>	
4.7	House service connection (please specify) :  Existing: ..... nos  Proposed : ..... nos	
4.8	Whether the proposed scheme envisages Supervisory Control and Data Acquisition (SCADA) arrangement	
4.9	Whether modular approach has been adopted to facilitate "addition" units to WTP at a future date, whenever required	
4.10	Whether computer Aided Design (both design & simulation) for Water Treatment Plant, pumping station, distribution network has been furnished in DPR	

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If <b>Yes</b> , give Page No./DPR volume reference. If <b>No</b> , reasons thereof
4.11	Whether the raw water characteristics of source have been tested by State Public Health Engineering Dept./Pollution Control Board/ MOEF authorized laboratory/ State Govt. authorized laboratory and furnished in DPR	
4.12	Whether treated water shall conform to the standards drinking water as per BIS: 10500 and its latest amendments?	
4.13	Whether surge analysis using computer software for transmission main has been done and furnished in the DPR	
4.14	Whether Hydraulic Flow Diagram (HFD) with head loss calculation for WTP and layout plan of WTP with other components has been furnished in DPR	
4.15	(i) Whether maps of proposed distribution system indicating RL, Node no, Link nos, available head etc for all the zones (project area ) are enclosed with the DPR.  (ii) Whether L Sections of the proposed pumping main/ transmission main, have been furnished in DPR	
4.16	Whether the site of the proposed WTP has been located as per that earmarked in the Master Plan of the town	
4.17	Whether the provision of the land for land acquisition for the water treatment plant, service reservoirs, water supply network, if any, has been made as per 30 years requirement and future expansion in the DPR?  (a) Total requirement of land for: <div style="text-align: right; margin-right: 100px;">WTP : ..... Hectares Tubewell : ..... Hectares</div>	

S. No.	Description	Write 'Yes' or 'No' etc in the column below <b>If Yes, give</b> Page No./DPR volume reference. <b>If No</b> , reasons thereof
	<div style="text-align: right; margin-bottom: 10px;"> OHSR/GLR : ..... Hectares  Laying pumping mains : ..... Hectares  Distribution mains : ..... Hectares  Transmission mains : ..... Hectares  <hr style="width: 100px; margin: 5px auto;"/> Total : ..... Hectares  <hr style="width: 100px; margin: 5px auto;"/> </div> <p>(b) Whether land in possession with Implementing Agency : .....Hectares</p> <p>(c) Whether Govt. land is yet to be transferred to the Implementing Agency and specify time required for transfer : .....Hectare, ..... months</p> <p>(d) Whether private land under acquisition and time required for acquisition: .....Hectare, ..... months</p> <p>(e) Status of action initiated for transfer of Govt. land and acquisition of private land (please specify) :</p>	



S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If <b>Yes</b> , give Page No./DPR volume reference. If <b>No</b> , reasons thereof
4.18	<p>Whether Bill of Qualities (BOQ) and cost estimates of individual components of water supply system prepared as per latest SOR and copy of latest Schedule of Rates (SOR) and Pro-forma invoices have been annexed with DPR.</p> <p>(a) Schedule of Rates adopted (please specify the year)</p> <p>(b) In case the SOR adopted is old, please specify the cost index</p> <p>(c) Any price escalation proposed in cost estimates (no escalation shall be proposed in the DPR)</p> <p>(d) Whether analysis of rate has been worked out for all the items and appended with DPR</p> <p>(e) Whether Bill of Quantities of individual component has been furnished in DPR</p> <p>(f) Whether lumpsum provision for any item has been proposed, please specify the maximum amount</p>	
4.19	Whether detailed drawing, estimation & detailed BOQ for ancillary works such as boundary wall / fencing, approach & internal road, external electrification, buildings, water supply & drainage, site development / landscaping etc. has been provided in the DPR	
4.20	Whether provision for road restoration, if any has been made as per CPWD/ State PWD/ Urban Local Body norms	
4.21	Whether detailed PERT/CPM network showing implementation schedule has been furnished in DPR	
4.22	Whether Internal Rate of Return (IRR) / Economic Rate of Return (ERR) has been furnished in DPR	
4.23	Whether traffic diversion/ control management for public and workers' safety, arising out of construction phase of water supply works have been furnished in the DPR	
4.24	Whether Institutional and financial status of Project Executing Agency (PEA) has been reported in DPR	
4.25	Whether Operation & Maintenance cost and revenue generation details (O & M Framework – existing & proposed) has been furnished in DPR	

S. No.	Description	Write 'Yes' or 'No' etc in the column below					
		If <b>Yes</b> , give Page No./DPR volume reference. If <b>No</b> , reasons thereof					
	(a) Existing water tariff / cess / charges (in Rs.) Residential -- Commercial -- Institutions -- Industries -- (b) Proposed water tariff/cess/charges(in Rs.) Residential -- Commercial -- Institutions -- Industries --						
	(c) Annual O & M cost (Rs. in lakhs)	(i) Existing (last 5 years)	1	2	3	4	5
		(ii) Proposed					
	(d) Annual Revenue ( Rs. in lakhs)	(i) Existing (last 5 years)	1	2	3	4	5
(ii) Proposed							

S. No.	Description	Write 'Yes' or 'No' etc in the column below																														
		If Yes, give Page No./DPR volume reference. If No, reasons thereof																														
4.26	Whether project implementation period of project has been furnished in DPR Specify the implementation period:.....year																															
4.27	Whether Service Level Benchmarking has been furnished in DPR. Please furnish SLBs. <table border="1"> <thead> <tr> <th>Indicator</th><th>Benchmark</th><th>After implementation of the proposed project</th></tr> </thead> <tbody> <tr> <td>Coverage of Water Supply connections</td><td>100%</td><td></td></tr> <tr> <td>Per Capita Supply of Water</td><td>135 lpcd</td><td></td></tr> <tr> <td>Extent of Non-revenue Water</td><td>15%</td><td></td></tr> <tr> <td>Extent of Metering</td><td>100%</td><td></td></tr> <tr> <td>Continuity of Water supplied</td><td>24 Hours</td><td></td></tr> <tr> <td>Efficiency in redressal of customer complaints</td><td>80%</td><td></td></tr> <tr> <td>Quality of Water Supplied</td><td>100%</td><td></td></tr> <tr> <td>Cost Recovery</td><td>100%</td><td></td></tr> <tr> <td>Efficiency in Collection of Water Charges</td><td>90%</td><td></td></tr> </tbody> </table>	Indicator	Benchmark	After implementation of the proposed project	Coverage of Water Supply connections	100%		Per Capita Supply of Water	135 lpcd		Extent of Non-revenue Water	15%		Extent of Metering	100%		Continuity of Water supplied	24 Hours		Efficiency in redressal of customer complaints	80%		Quality of Water Supplied	100%		Cost Recovery	100%		Efficiency in Collection of Water Charges	90%		
Indicator	Benchmark	After implementation of the proposed project																														
Coverage of Water Supply connections	100%																															
Per Capita Supply of Water	135 lpcd																															
Extent of Non-revenue Water	15%																															
Extent of Metering	100%																															
Continuity of Water supplied	24 Hours																															
Efficiency in redressal of customer complaints	80%																															
Quality of Water Supplied	100%																															
Cost Recovery	100%																															
Efficiency in Collection of Water Charges	90%																															
4.28	Whether Environmental and social problem (if applicable) has been furnished in DPR																															
4.29	Whether provision has been made @ 0.5% of the project cost in the DPR for capacity building of ULBs for further O&M of the scheme after taking over the scheme from implementing agency. Please furnish the action plan for conducting capacity building programme. The action plan must specify specific actions such as the number of officials to be deployed in the project post commissioning, their designations, qualifications and training proposed to be given.																															

S. No.	Description	Write 'Yes' or 'No' etc in the column below
		If <b>Yes</b> , give Page No./DPR volume reference. If <b>No</b> , reasons thereof
4.30	Whether PPP involved in the projects. Please specify the PPP Components and funding pattern by the Govt. and Private sector.	
4.31	Whether Rehabilitation and Resettlement plan (if applicable) has been given in DPR	
4.32	Whether all the hard copies of the DPR furnished along with soft copies	
4.33	Period of completion of the project	

Signed:  
Name:  
Designation:

Signed:  
Name:  
Designation:

This part to be filled-in by the Ministry		
Sl. No	Description	Remarks
1	Details of project area (State/District/City/Town)	
2	Whether the SLNA/SLSC recommendation is attached with DPR	
3	Project cost recommended by SLNA/SLSC	
4	Period of project implementation	
5	Date of receipt of first DPR	
6	Date of final acceptance of DPR	
7	Date of checklist confirmation	
8	Date of first information sent to the State Govt. on scrutiny of check list	
9	Date of receipt of DPR after reformulation (revision), if applicable	
10	Date of DPR sent to the Appraisal Agency (CPHEEO)	
11	Date of Comments / appraisal report of appraisal agency	
12	Date of comments conveyed by the Admn. Division to the State Govts. & ULBs for revision of DPR, if any	
13	Date of Receipt of Revised DPR for appraisal	

**(Signature of Verifying Officer)**

**NOTE:** The DPR should be forwarded to the Ministry along with the complete checklist duly filled in without which DPR shall not be processed and shall be returned to the State Government.