

**Government of Jharkhand**  
**Water Resources Department**

Letter No.- 3/PMC/DSRP-372/2019-103

Date-04.02.2021

**Notice inviting application from experts for constitution of common pool of experts for DSRP**

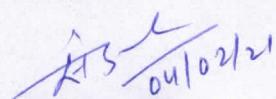
Water Resources Department, Government of Jharkhand is intending to constitute Dam Safety Review Panels (DSRPs) which will require domain experts from different allied fields to assist in course of inspection of dams etc.

2. For this, applications are invited from the experts in relevant fields retired from the Central Govt. or State Govt. or reputed institutions to constitute a common pool of 2-3 experts from each field to assist Dam Safety Review Panels (DSRP). The details regarding the requirement of experts in different fields and their qualification and experience are given below:

Sl. No.	Discipline	Minimum Qualification	Experience
1.	Dam Safety Expert	B.E./B.Tech. or equivalent degree in Civil / Mech. Engg. Preferably Master Degree in Geotechnical Engg. / Geological Engg. / Water Resources Engineering/ Hydrology or Master degree in Geology or Engineering Geology	<ul style="list-style-type: none"><li>➤ Experience in handling dam safety related issues of minimum of five large dam projects.</li><li>➤ Additional weightage in case candidate had been a member of team that investigated dam disasters at national and international level.</li><li>➤ Have at least 15 years of related experience in design, construction, safety inspection / evaluation, and/or operation of dams. Experience of rehabilitation of old dam structures would get additional weightage.</li><li>➤ Professional experience in instrumentation, emergency action planning etc. would get additional weightage.</li></ul>
2.	Design Expert	B.E./B. Tech. or equivalent degree in Civil / Mech Engg. Preferably Master Degree in Structural Engg./ Hydraulic Engg. / Water Resources Development	<ul style="list-style-type: none"><li>➤ Experience in planning and designs for minimum of five large dam projects.</li><li>➤ Have at least 15 years of related experience in planning and design of large dam projects.</li><li>➤ Experience of rehabilitation of old dam structures would get additional weightage.</li></ul>
3.	Construction Supervision Expert	B.E./B. Tech. or equivalent in Civil / Mech Engg. Preferably Master Degree in Structural Engg. / Hydraulic Engg. / Water Resources Development	<ul style="list-style-type: none"><li>➤ Experience of Construction, Work Supervision and Quality Assurance large dams for a minimum of 5years.</li><li>➤ Experience of rehabilitation of old dam structures would get additional weightage.</li><li>➤ Professional experience of at least 15 years in construction of dam projects.</li></ul>
4.	Geologist	Master Degree in Geology / Engineering Geology	<ul style="list-style-type: none"><li>➤ Experience of handling various geological aspects of minimum of 5 large dam projects.</li><li>➤ Professional experience of at least 15 years in dealing with engineering geological aspects of water resources projects.</li></ul>

5.	Hydrologist	B.E./B. Tech. or equivalent in Civil Engg, Preferably Master Degree in Hydrology / Hydraulic Engg. / Water Resources Development	<ul style="list-style-type: none"> <li>➤ Experience in dealing with hydrological planning of major dam projects especially design flood estimation, review of design flood, design storm inputs, sedimentation aspects etc. of at least 10 large dam projects.</li> <li>➤ Additional weightage for an expert having exposure to various relevant hydrological modeling tools, work done for dam break modeling, inundation mapping, development of emergency action plan and its implementation etc.</li> <li>➤ Professional experience of at least 15 years in dealing with hydrological aspects of water resources projects.</li> </ul>
6.	Hydro-Mechanical Expert	B.E./B. Tech. or equivalent in Civil / Mech. Engg. Preferably Master Degree in Structural Engg. / Water Resources Development	<ul style="list-style-type: none"> <li>➤ Experience in planning and design of Gates &amp; Hoists for a minimum of 5 large dam projects.</li> <li>➤ Experience in rehabilitation of spillway gates, undersluice gates, emergency gates, erection of H.M. works etc. during the last 10 years would get additional weightage.</li> <li>➤ Professional experience of at least 15 years in designs of HM Works of large dam projects and especially works done at detail engineering projects and rehabilitation HM works done.</li> </ul>
7.	Instrumentation Expert	B.E./B.Tech. or equivalent in Civil / Mech / Elec/ Electronic / Instt. Engg. Preferably Master Degree in Engg. / Water Resources Development, or Master Degree in Physics	<ul style="list-style-type: none"> <li>➤ Experience in planning and installation of all kinds of dam instruments for a minimum of three large dam projects during the last 10 years.</li> <li>➤ Experience of rehabilitation of old dam structures would get additional weightage.</li> <li>➤ Professional experience of at least 15 years in design and implementation of instrumentation of dam projects.</li> </ul>
8.	Seismic Expert	B.E./B. Tech. or equivalent in Civil / Mech Engg. Preferably Master Degree in Structural Engg. / Physics. / Water Resources Development or Master degree in Geology/ Engineering Geology	<ul style="list-style-type: none"> <li>➤ Experience in planning and designs for minimum of five large dam projects which have significant seismic loadings during the last 10 years prior to applying for empanelment. Exposure to time history series as well as seismic spectra, and work done for site specific seismic design parameters would be given additional weightage.</li> <li>➤ Experience of rehabilitation of old dam structures would get additional weightage.</li> <li>➤ Professional experience of at least 15 years in design of dam projects.</li> </ul>
9.	Architecture Planning and Landscaping Expert	B.Arch. degree in Architecture and Planning, preferably M. Arch degree in architecture	<ul style="list-style-type: none"> <li>➤ At least five years' experience in architectural planning, design and landscaping of Water Resources Projects during the last 10 years prior to applying for empanelment.</li> <li>➤ Additional weightage for any work related to tourism development done for any dam which may include planning, design, supervision during construction, and any other works related to it.</li> <li>➤ Professional experience of at least 15 years in activities related to Architecture planning and landscaping.</li> </ul>

3. The remuneration of the experts shall be as described in the Terms of Reference (ToR) annexed herewith as Annexure-1.
4. The experts selected from the common pool shall be included in the inspection team as per the needs and recommendation of DSRP.
5. The maximum permissible age of the experts as on 31.01.2021 shall not exceed 66 (Sixty Six) years.
6. The applicant experts are required to submit the application on or before 15.02.2021 till 5.00 PM (all working days from 10.00 AM to 5.00 PM except holidays) in the prescribed format available on the website : wrdjharkhand.nic.in under the link "**What's new!!**" .
7. The duly filled application form in prescribed format along with the self attested copies of the proof of age, qualification and experience should be sent through registered post / speed post / courier / by person to the **Chief Engineer, Design Master Planning & Hydrology, Jal Bhawan, Doranda, Ranchi-834002.**
8. A walk-in interview of the experts is scheduled to be held on 22.02.2021 starting at 11.00 AM in conference room, 1<sup>st</sup> Floor, Nepal House Secretariat, Doranda, Ranchi. A Link will be sent through mail to the candidates, desirous of appearing in the interview on virtual platform, on the same date after physical interview is over.
9. The list of finally selected candidates / experts shall be sent through email and uploaded on the website: **wrdjharkhand.nic.in.**
10. The cost of transport and logistics for submitting the form or attending interview shall not be born by Water Resources Department, GoJ.



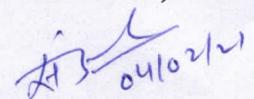
ATB  
01/02/21

Chief Engineer  
Design, Master Planning & Hydrology,  
Water Resources Department, Ranchi

**Date-04.02.2021**

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**Copy to- Web Manager, Water Resources Department, Ranchi for information and uploading in Website and publishing in two National and two State level daily newspapers (Jharkhand & Bihar).**



ATB  
01/02/21

Chief Engineer  
Design, Master Planning & Hydrology,  
Water Resources Department, Ranchi

**Government of Jharkhand  
Water Resources Department**

**(Application Form)**

**Field of specialization .....**

- 1. Full Name (in block letters)** :
- 2. Father's Name** :
- 3. Date of Birth** :
- 4. Address for correspondence :**

**PIN :**

**Mobile :**

**E-mail :**

- 5. Permanent address** :

**PIN:**

- 6. Gender (Male / Female)** :
- 7. Nationality** :
- 8. Languages known** :
- 9. Education Qualification** :

<b>Examination Passed</b>	<b>Name of the Institute / University</b>	<b>Subject Studied</b>	<b>Month &amp; Year of Passing</b>	<b>% of aggregate marks</b>

**10. Professional Qualification**

Examination Passed	Name of the Institute / University	Subject Studied	Month & Year of Passing	% of aggregate marks

**11. Particulars of experience**

Name of the Department / Organization served	Designation	Period of service		Experience		Nature of duties performed
		From	To	Years	Months	
<b>Total Experience</b>						

**12. Appearance Mode in Interview (Tick Out) : Physically  Virtually** 

NOTE – Enclose Attested Copies of:

- a] Proof of Age
- b] Education & Professional Qualifications Certificate
- c] Experience Certificate
- d] Other Certificate

I hereby declare that all statements made in this application are true, complete and correct to the best of my knowledge and belief. In the event of any information being found false or incorrect at any stage or not satisfying the eligibility criteria according to the requirement, my application may be summarily rejected. I am physically sound to discharge the duty to be assigned & undertake to abide by all the terms & conditions of the DSRP as decided by the competent authority.

Place:

Date :

**Signature of the Candidate**

**Terms of Reference**

1. The Dam Safety Review Panel (DSRP) is required to carry out following functions under its scope of works.
  - a) The primary purpose of DSRP during DRIP implementation is to review and advise the State Government on complicated design and construction matters related to dam safety and other critical aspects of the dam, its appurtenant structures, the catchment area, the area surrounding the reservoir and downstream areas.
  - b) Dam inspection shall be carried out by DSRP as per CWC's Guidelines for Safety Inspection of dams covering inspection items as described in Appendix-A and focusing on features, events and evidence as provided in Appendix-B.
  - c) Inspection of the dam shall involve :
    - i) Review and analysis of available data on the design, construction, operation, maintenance and performance of the structures.
    - ii) General assessment of hydrologic and hydraulic conditions in view of the mandatory review of design floods.
    - iii) General assessment of seismic safety of dam, especially if there is a change in the seismic zoning of the dam location.
    - iv) Evaluation of the operation, maintenance and inspection procedures.
    - v) Evaluation of any other conditions which constitute or could constitute a hazard to the integrity of the structure.
2. Planning, Secretarial assistance and co-ordination of a visit of DSRP team for inspection of identified dam shall be done by Chief Engineer, Design, Master Planning and Hydrology, WRD, Ranchi. Sufficient time (block period of visit) shall be allocated for inspection of each dam (minimum one day for each dam) and for finalization of inspection reports (Minimum two days).
3. A memorandum for dam inspection shall be prepared by the concerned Executive Engineer covering particulars of dam features, recommendations of earlier inspections if any and compliances, design flood revisions, understanding of present problems and anticipated remedial measures and any difficulties being encountered in operation and maintenance of dams. The memorandum shall be made available to each member of DSRP team of examination at least 15 days ahead of proposed inspection.
4. All pertinent records (including design records, construction record alongwith as built drawings, recent operation and maintenance records alongwith instrumentation data) shall be made available at dam site by the concerned Executive Engineer for examination by the DSRP team.

### **Reporting Procedure**

1. Separate report shall be prepared by DSRP for each inspected dam and shall include but not be limited to :
  - i) Assessment of the condition of the structure based on the visual observations and available data on the design, hydrology, construction, operation, maintenance and performance of the structure.
  - ii) Recommendations for any emergency measures or actions, if required, to assure the immediate safety of the structures.
  - iii) Recommendations for remedial measures and actions related to design, construction, operation, maintenance and inspection of the structure, if required.
  - iv) Recommendation for additional detailed studies, investigations and analyses if required.
  - v) Recommendation for improvements in routine maintenance and inspection of dam, if required.
2. The report shall be prepared by DSRP team jointly within the block period of a visit and each report shall be duly signed by every member of the DSRP team before its submission to the Chief Engineer, Design, Master Planning and Hydrology, WRD, Ranchi.

### **Remuneration :**

1. Journey days of the team member (restricted to one day before and one day after the block period of visit) shall be added to the block period of visit for remuneration purpose.
2. The remunerations as proposed below shall be paid to the Chairman as well as other members of the DSRP :

Remuneration on sitting fee:	Rs. 7500/- per day for each day of block visit under taken by the DSRP team and period of journey (as clarified in Sl. No.-1)
Air / Train travel :	<p>(a) Economy Class by any airlines for journey within 1000 kms.</p> <p>(b) Executive class by any airlines for journeys exceeding 1000 kms.</p> <p>(c) First class AC for Train travel.</p>
Lodging, boarding and local transportation during period of block visit.	For the stay of the DSRP team members, the Department may arrange IBs / Guest House etc. or it shall be paid as admissible to the Chief Engineer level officers of the State Government; alternatively Hotel accommodation including lodging and boarding of not less than three star category.