

Government of Punjab
Department of Water Resources
(Project Branch)

NOTIFICATION

NO. E657467PJ-6/45

Dated 27/1/2024

In supersession of office order issued vide endst. no. 11/23/2015-PJ5/81 dated 08/01/2020, the Governor of Punjab is pleased to re-constitute Dam Safety Review Panel (DSRP) for the State of Punjab as per the latest guidelines of Central Water Commission, New Delhi to rehabilitate the Dams under the World Bank assisted Dam Rehabilitation & Improvement Project (DRIP Ph II & III) along with role and responsibility of the committee members given as under:-

Sr. No	Name of the Member	Designation
1.	Sh. A.K Bajaj (A-167 Defence Colony 3 rd Floor, New Delhi-110024	Chairman (Hydro-Mechanical expert)
2.	Chief Engineer/Vigilance	Member
3.	Chief Engineer/Dams	Member
4.	Chief Engineer/Canals	Member
5.	Sh. S.L Kapil (Flat No. 68, Sadhbhawna Apartment Plot No. 13, IP Extension New Delhi 110092	Member (Seismic expert)
6.	Sh. Pardeep Kumar Gupta (29 C Mansarovar Apartments sector 61 Noida Dist Gautam Budh Nagar PIN 201307	Member (Geologist expert)
7.	Sh. Ramesh Kumar Gupta (A-04, Vrindavan Apartment, Plot No.1, Sector 6, Dwarka, New Delhi-110075)	Member (Hydrologist expert)
8.	Sh. Rajesh Kumar Srivastava (# 174 , Mayur Nagar , Gwalior (M.P.) PIN : 474011	Member (Instrumentation expert)
9.	Sh. Chandra Shekar Mathur (C-8 , 2 nd Floor, Hauz Khas, New Delhi-110016.	Member (Design expert)

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The panel will also have the powers to co-opt any expert whose advice is considered necessary for assessing the problems.

2. Further, as per the guidelines issued by Central Water Commission, New Delhi vide their letter no. 3/19/NCDS/DSM/2013/32nd/Meeting/82-112 dated 23/1/2014, the details of remuneration admissible to members of Dam Safety Review Panel (excluding officer working under the Water Resources Department, Punjab) will be as given below:-

Remuneration as Sitting Fee	Rs. 7500/- per day for each of block visit undertaken by the DSRP team and period of journey
Air/Train Travel	a) Economy Class by any airlines for journey within 1000 Kms. b) Executive class by any airlines for Journey exceeding 1000 Kms. c) First Class AC for Train travel
Lodging, boarding and	As admissible to the Chief Engineer level officers of the State Government. Alternatively Hotel and boarding of not less than three star category.

3.0 Terms of Reference :

- a) Detailed on-site inspection of the dam and appurtenant structures, including changes made and the reasons for such changes. Review of hydraulic conditions given the mandatory review of design flood Review and any potential for developing unsafe conditions (e.g. unexpected foundation conditions, presence of seepage, indications of distress or movements, erosion, mechanical and electrical equipment malfunctioning, dam ageing, etc.).
- b) Site inspection and witnessing of testing of gates, hoists and valves that fulfil dam and reservoir safety functions (including their operating equipment, power supplies and control, protection and telecommunication systems). Testing may not be necessary if the Dam Owner has completed and documented recent tests that adequately satisfy the test requirements (both hydraulically and structurally; however, the operation and performance records for the tests should be reviewed in depth).
- c) Review all available relevant information, including databases/logbooks, past rehabilitation records, and surveillance records, to determine the exact cause of the problem.

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- d) Review/ Evaluation of the dam safety management system and operating, surveillance, maintenance, and testing procedures; and records; and providing clarifications on matters relating to dam safety to surveillance staff.
- e) Review previously identified dam safety issues, the adequacy of their resolution, or whether there are impediments preventing their resolution and suggestion thereof.
- f) General assessment of the seismic safety of the dam, especially if there is a change in the seismic zoning of the dam location or any old dam not designed for seismic loading.
- g) Evaluation of any other conditions that may threaten the structure's integrity.
- h) Review of emergency preparedness.

4.) Details to be provided to DSRP Members before scheduled inspection of a dam

4.0 The concerned dam authority shall prepare a memorandum for dam inspection, giving the dam's salient features, recommendations of earlier safety inspections and compliances, design flood revisions, understanding of present problems and anticipated remedial measures, and any difficulty(ies) encountered in dam operation and maintenance.

4.1 The technical memorandum shall consist of the following details:

- i. Scope of project
- ii. Basic data and salient features
- iii. Issues related to the safety of the dam.
- iv. Previous Inspection reports
- v. Emergency preparedness – Communications, Auxiliary Power, D/s Warning system, & site security.
- vi. Design Flood review duly approved by competent authority in State Govt. for SPF as design Floods and only for PMF as design Flood it shall be approved by CWC.
- vii. Spillway capacity at FRL & original MWL, Highest observed inflow flood
- viii. Bathymetry report/data, if any, to assess present gross and live storage of dam
- ix. Dam site geology, including geological reports.
- x. Quality and sufficiency of the geological investigations.
- xi. Special problems and their treatment
- xii. Reservoir competency as per geological report.

- xiii. Slope stability issues along the reservoir rim.
 - xiv. Instrumentation – analysis and interpretation of instrumentation data, including structural behavior reports.
 - xv. Post-construction material testing reports, if any.
 - xvi. Construction history
 - xvii. Dam incidents/failures, remedial measures/modifications undertaken
- b) Layout including Drawings:
- i. Dam (Cross-section, L-section and plan)
 - ii. Spillway
 - iii. Junction between Embankment & Concrete/Masonry dams
 - iv. River/Canal outlets
 - v. Instrumentation

5. Inspection Report: A separate report shall be prepared by DSRP for each inspected dam and shall include the following:

5.0 The outlines of the report should include these Chapters.

- (i) Salient Features
- (ii) Health Report: Assessment of the condition of the dam/structure based upon visual examination and available data on the design, construction, operation, maintenance, inflows, and performance of the structure/dam.
- (iii) Instrumentation data: Examination of and Evaluation,
- (iv) Risk Consequences,
- (v) Future Performance Monitoring,
- (vi) Key Records/Information/Reports,
- (vii) Recommendations shall include the following-
 - a) any emergency measures or actions, if required, to assure the immediate and long-term safety of the structure.
 - b) remedial measures and actions related to design, construction, operation, maintenance, monitoring and evaluation, and structure inspection, if required.
 - c) additional detailed studies, investigations and analyses, if required.
 - d) recommendations for improvements in routine maintenance and inspection of the dam, if required.
 - e) short-term and long-term risk reduction measures (structural as well as non-structural) and comments on a time frame for their implementation.

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Further, the recommendations shall be duly supported by the observations at the site, logical inference & reasoning, pictures, etc. The distress conditions observed should be elaborated/discussed in the report.

(viii) Duly filled in Inspection format as per these Guidelines for Safety Inspection of Dams-covering inspection items as brought out in Annexure-I.

(ix) Key Drawings-original and modified.

(x) Relevant photographs

6.0 Submission of Report- The report shall be prepared by the DSRP team jointly within a reasonable time after completing the visit, and every member of the DSRP team shall sign each report before its submission to the SPMU of the State.

Dated, Chandigarh

27-02-2024


Krishan Kumar, IAS
Principal Secretary to Govt. of Punjab
Department of Water Resource

Endst.No. E-657467/PJ-6/45

Dated, Chandigarh 27.02.2024

A copy of above is forwarded to the Controller, Printing and Stationary, Punjab, SAS Nagar with the request to publish this notification in official Gazette (Extra Ordinary) and supply 50 copies thereof to this department for official use.



Under Secretary, Water Resources

Endst.No. E-657467/PJ-6/45

Dated, Chandigarh 27.02.2024

A Copy of above is forwarded to the following for information and necessary action:-

1. Sh. A.K. Bajaj (A-167, Defence Colony, 3rd Floor, New Delhi-110024).
2. Chief Engineer/Vigilance, Department of Water Resources, Punjab.
3. Chief Engineer/Dams, Department of Water Resources, Punjab.
4. Chief Engineer/ Canals, Department of Water Resources, Punjab.
5. Sh. S.L. Kapil (Flat no. 68, Sadhbhawna Apartment, Plot no. 13, IP Extension, New Delhi-110092).
6. Sh. Pardeep Kumar Gupta (29 C, Mansarovar Apartments, Sector-61, Noida, Dist. Gautam Budh Nagar PIN 201307).
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8. Sh. Rajesh Kumar Srivastava (#174, Mayur Nagar, Gwalior, MP, PIN-474011).
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Under Secretary, Water Resources