

REQUIRED ATTRIBUTES FOR SUPERVISING ENGINEERS

Attribute Group	Required skill sets
1. Dam and reservoirs engineering knowledge	<p>A. Demonstrate an understanding of issues affecting the safety of dams and reservoirs.</p> <p>B. Demonstrate an understanding of monitoring and surveillance practices that may be adopted to ensure ongoing safety of dams and reservoirs.</p> <p>C. Demonstrate an appreciation of the characteristics of all reservoirs to which current reservoirs legislation applies.</p> <p>D. Be able to provide appropriate technical advice and give directions and written recommendations, where appropriate, to Undertakers and Reservoir Managers.</p> <p>E. Demonstrate practical experience in dam and reservoir engineering in the UK. Recent experience must include one or more of the following activities: dam or reservoir design, supervision of construction or refurbishment or improvement works, and operation of reservoirs.</p>
2. Reservoirs legislation	<p>A. Demonstrate appropriate knowledge of the primary legislation in all territories in which the applicant wishes to practice.</p> <p>B. Demonstrate appropriate knowledge of the subordinate legislation that supports the primary legislation in those territories.</p>
3. Observational skills	<p>A. Be able to recognise symptoms that may give advance warning of a developing structural problem within a dam and its associated works.</p> <p>B. Be able to assemble evidence to form the basis for sound engineering decisions.</p> <p>C. Be able to search out and monitor changes in the condition of a reservoir that might affect its safety.</p>
4. Independent judgment	<p>A. Be able to identify and recognise the limits of personal knowledge and skills.</p> <p>B. Be able to identify and assess critical indicators in connection with the ongoing safe storage of water in a reservoir</p> <p>C. Be able to review information critically and to take decisions on actions necessary to ensure ongoing safety.</p>
5. Maturity of judgment	<p>A. Be able to judge the frequency at which visits should be made to reservoirs under their supervision.</p> <p>B. Be able to decide when to escalate a technical issue, such as seeking advice from an Inspecting Engineer or calling for a statutory inspection to be brought forward.</p> <p>C. Demonstrate an understanding as to when to make Directions or written recommendations to Undertakers and Reservoir Managers.</p>
6. Leadership & responsibility	<p>A. Be able to guide the Undertaker or Reservoir Manager on actions to be taken during a reservoir safety incident pending the arrival of an Inspecting Engineer.</p>
7. Health & safety hazards & risk management	<p>A. Demonstrate appropriate knowledge and application of legislation, hazards and safe systems of work relating to the operation and maintenance of reservoirs.</p> <p>B. Be able to produce appropriate risk assessments and method statements for all reservoir activities.</p>
8. Interpersonal skills & communication	<p>A. Be able to communicate well with Undertakers, Managers and non-technical staff involved in the management of reservoir safety.</p> <p>B. Be able to discuss ideas and technical issues affecting reservoir safety with other engineers and specialists.</p> <p>C. Be able to prepare written documents in a concise and succinct manner such that technical issues may be communicated effectively.</p> <p>D. Be able to explain the technical purpose and the reason why Directions or other advice has been recommended.</p>
9. Professional standards	<p>A. Be able to demonstrate that the applicant has kept up to date with advances in dam engineering and surveillance practice.</p> <p>B. Be able to demonstrate that the applicant has kept up to date with latest guidance in each region to which the application refers.</p> <p>C. Be able to demonstrate regular engagement in dams and reservoirs related CPD activities.</p>
10. Generic	<p>A. Incorporated Engineer¹.</p>

¹ (or equivalent status)