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坝址渗水析出物及其潜在影响研究

Study on seepage colloidal educts of dam and its potential effects

中文关键词：坝址析出物　取样多手段测试　形成机理　潜在影响

英文关键词：colliods around dam-site　sampling and measurements　formation: potential effects on project

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中文摘要：

　　坝址渗水析出物对于大坝安全运行具有潜在的不利影响。采用现场调查、取样、多手段测试及资料分析等方法，对此问题开展研究。按照出露位置，可分为坝基及坝体析出物两类，其形成机理包括溶解-沉淀作用、还原-氧化-絮凝作用、浸析作用等。在一定阶段，坝基析出物可对岩体的渗透稳定性及帷幕体的防渗时效性产生影响，同时可对坝体结构的耐久性产生影响。不同成因的析出物具有不同程度的潜在影响：化学成因的多限于微观方面，而物理成因的则在一定阶段可显现在宏观方面。在实际工作中，应加强对具有物理成因或化学-物理双重成因析出物的监测。

英文摘要：

　　The colloidal educts permeated from large dam has potential unfavorable effect on the safety of dam. The in-situ investigation, sampling and measurements, were carried out to study this phenomenon. Acc-ording to the location, the colloid can be classified into two kinds：permeated from the dam foun-dation and from the dam body. The causes of the formation of this kind of material are disso-lution-precipitation, reduction-oxidation-cementing, physical erosion and others. It is considered that the colliod formed in dam foundation would potentially have the effects both on seepage stability of rock masses and on the anti-seep?age behavior of curtain, while the colloidal from the dam body has impacts on its durability. It is believed that the effect of the colliod produced by the chemical fo-rmation might be limited on the micro-aspects, whereas the one by the physical or chemico-physical formation might be identified on the macro-aspects.Therefore, it is stressed that the colliod's behavior belonging to the latter formation should be monitored from time to time.

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