

## Focus points of post-closure monitoring in geological disposal

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To understand geological-environment stability at the deep underground, it is important to understand the hydrochemical disturbance process and its recovery process due to construction, operation and closure of the underground facility. Monitoring after closure of underground facility is effective method to understand the EdZ recovery process, however few studies have been reported on post-closure monitoring. We considered about focus points of post-closure monitoring by using hydrochemical data of groundwater in/around Mizunami Underground Research Laboratory.

As the groundwater level declined due to the construction and operation of the Mizunami URL, mixing of deep high-salinity groundwater and shallow low-salinity groundwater occurred in the monitoring section of conglomerate layer. In this section, groundwater flow will change again as water pressure recovers after closure of the Mizunami URL. Therefore, we should extract hydrogeologically important sections such as the conglomerate layer and select it as the observation section of post-closure monitoring.

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