|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Variable influence on process** | | | **Process influence on variables** | | |
| **Influence present? (Yes/No Description)** | **Time period/Climate domain** | **Handling of influence (How/If not - Why)** | **Influence present? (Yes/No Description)** | **Time period/Climate domain** | **Handling of influence (How/If not - Why)** |
| Temperature in bedrock | Yes | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Simplified and pessimistic assumption regarding the quantity of out-frozen salt (see Section 5.12.8). | Periglacial |
| Glacial | Glacial |
| Groundwater flow | No | Excavation/operation | — | Yes | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial | Included in a generic model of groundwater flow under permafrost, see Section 3.1. |
| Glacial | Glacial |
| Groundwater pressure | Yes | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Simplified and pessimistic assumption regarding the quantity of out-frozen salt (see Section 5.12.8). | Periglacial |
| Glacial | Glacial |
| Gas phase flow | No | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial |
| Glacial | Glacial |
| Repository geometry | No | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial |
| Glacial | Glacial |
| Fracture geometry | Yes | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Included in a generic model of groundwater flow under permafrost, see Section 3.1. | Periglacial |
| Glacial | Glacial |
| Rock stresses | No | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial |
| Glacial | Glacial |
| Matrix minerals | No | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial |
| Glacial | Glacial |
| Fracture minerals | No | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial |
| Glacial | Glacial |
| Groundwater composition | Yes | Excavation/operation | — | Yes | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Generic model of groundwater flow under permafrost assumes present day depth profile for salinity. | Periglacial | Groundwater salinities evaluated through a generic model of density-driven flow under permafrost, see Section 3.1. |
| Glacial | Glacial |
| Gas composition | No | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial |
| Glacial | Glacial |
| Structural and stray materials | No | Excavation/operation | — | Yes | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Periglacial | Degradation of grout not evaluated for permafrost conditions, see Section 5.8. |
| Glacial | Glacial |
| Saturation | Yes | Excavation/operation | — | No | Excavation/operation | — |
| Temperate | Temperate |
| Periglacial | Influence not considered; saturated conditions assumed. | Periglacial |
| Glacial | Glacial |