



PREDIS

T 2.3 (WAC) connections to Geopolymers

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Waste acceptance system (as interpreted within T2.3)

Waste form qualification process

- **Allows incorporating a new waste form in the existing WAC system**

Waste acceptance criteria

- **A set of parameters to be checked while taking over waste form from the preceding step of RWM**
- **3 elements: a parameter, its value, a method for its determination**

Qualification process for new waste forms

- **Selection of characteristics to demonstrate that the WF is suitable for a particular disposal system**
- **They should address long term performance of the WF, e.g.**
 - **Long term leaching & immersion tests & freeze-thaw cycling,**
 - **Radiation, microbial, chemical, thermal stability,**
 - **Gas generation,**
 - **Mechanical stability, compressive strength, homogeneity,**
 - **Compatibility with the package material and repository engineered barriers, etc.**

Geopolymer vs. WAC issues

- **Geopolymer ≠ concrete**
 - ⇒ taking over WAC for concrete waste form is a **WRONG** approach
- **Each waste stream has different physical & chemical characteristics => respective WF needs to be qualified separately**
- **Missing info about RW disposal system ≠ obstacle for L-ILW, as repository design can be adopted accordingly**
- **T2.3 shall advise on the selection of parameters to be demonstrated => guidance for the WQ process**

Thank you for your attention

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