

Appendix A: MSCA-ETN REDMUD Flow Sheet

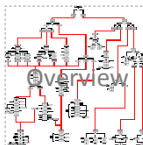
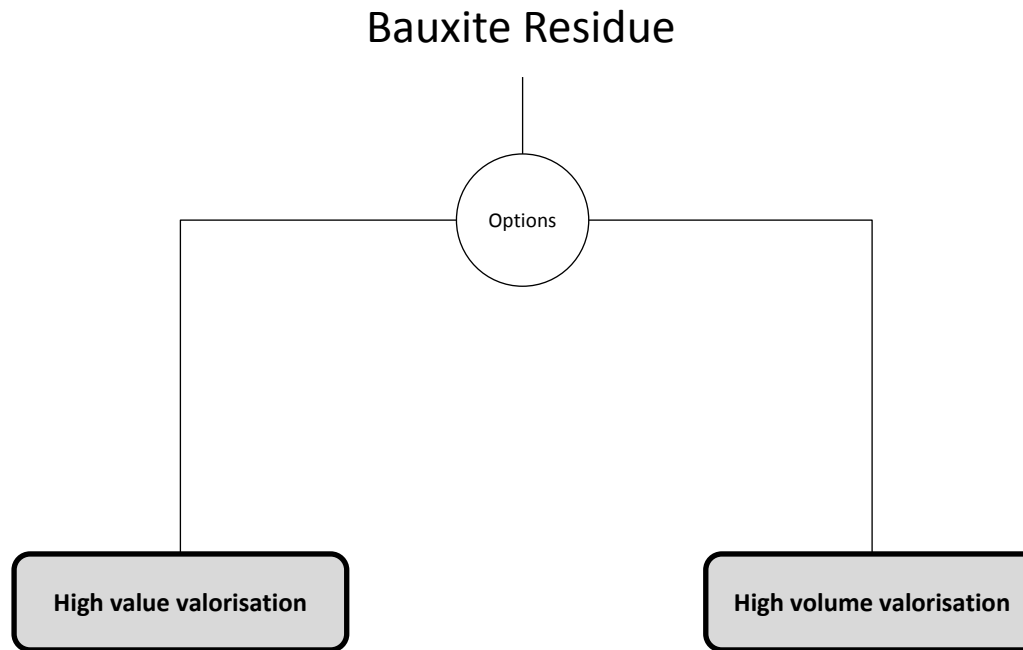
This document is a compilation of initial flow sheets provided by researchers in the MSCA-ETN REDMUD project.

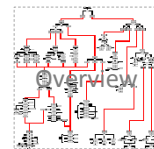
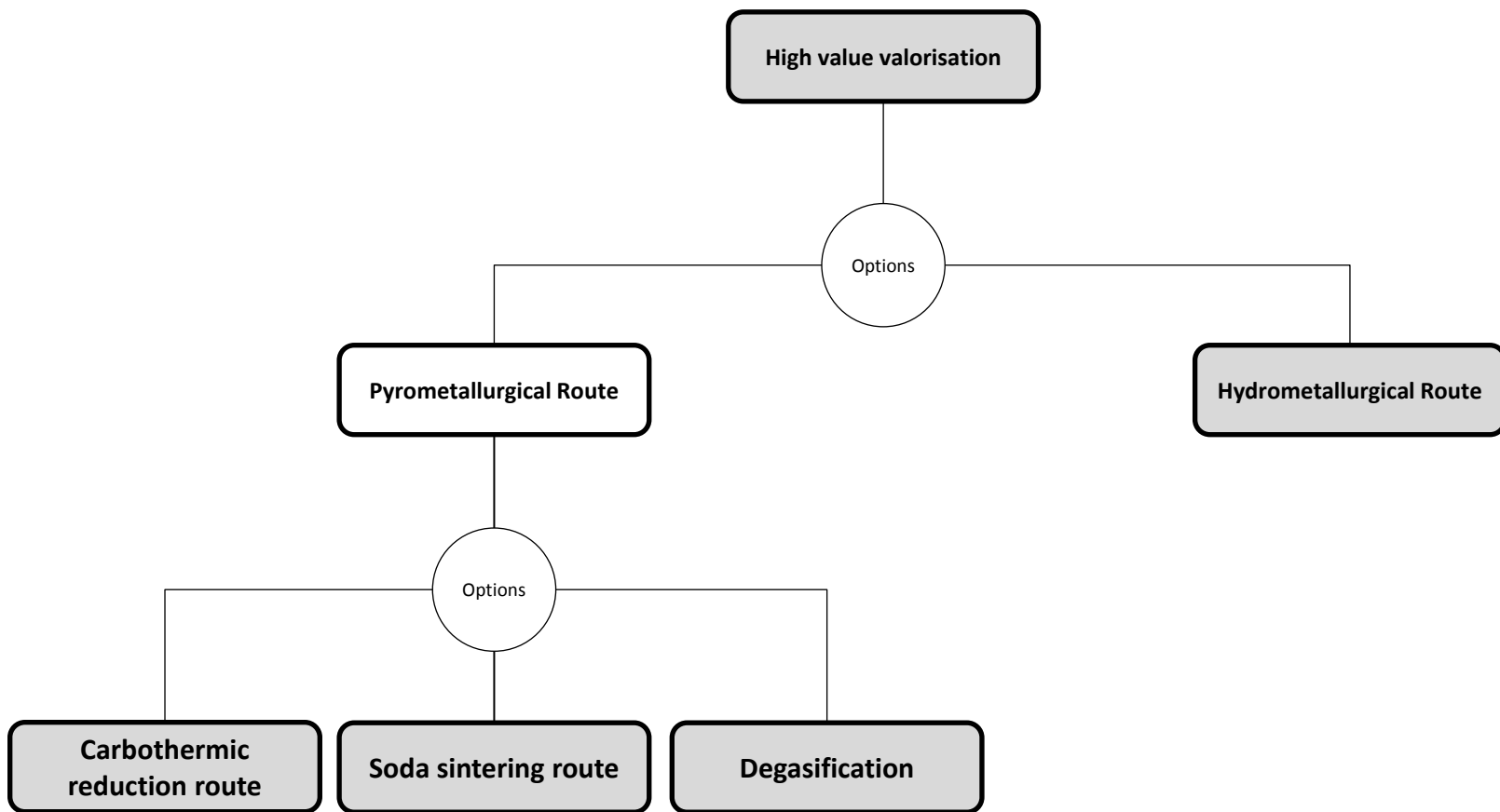
Note on using this document:

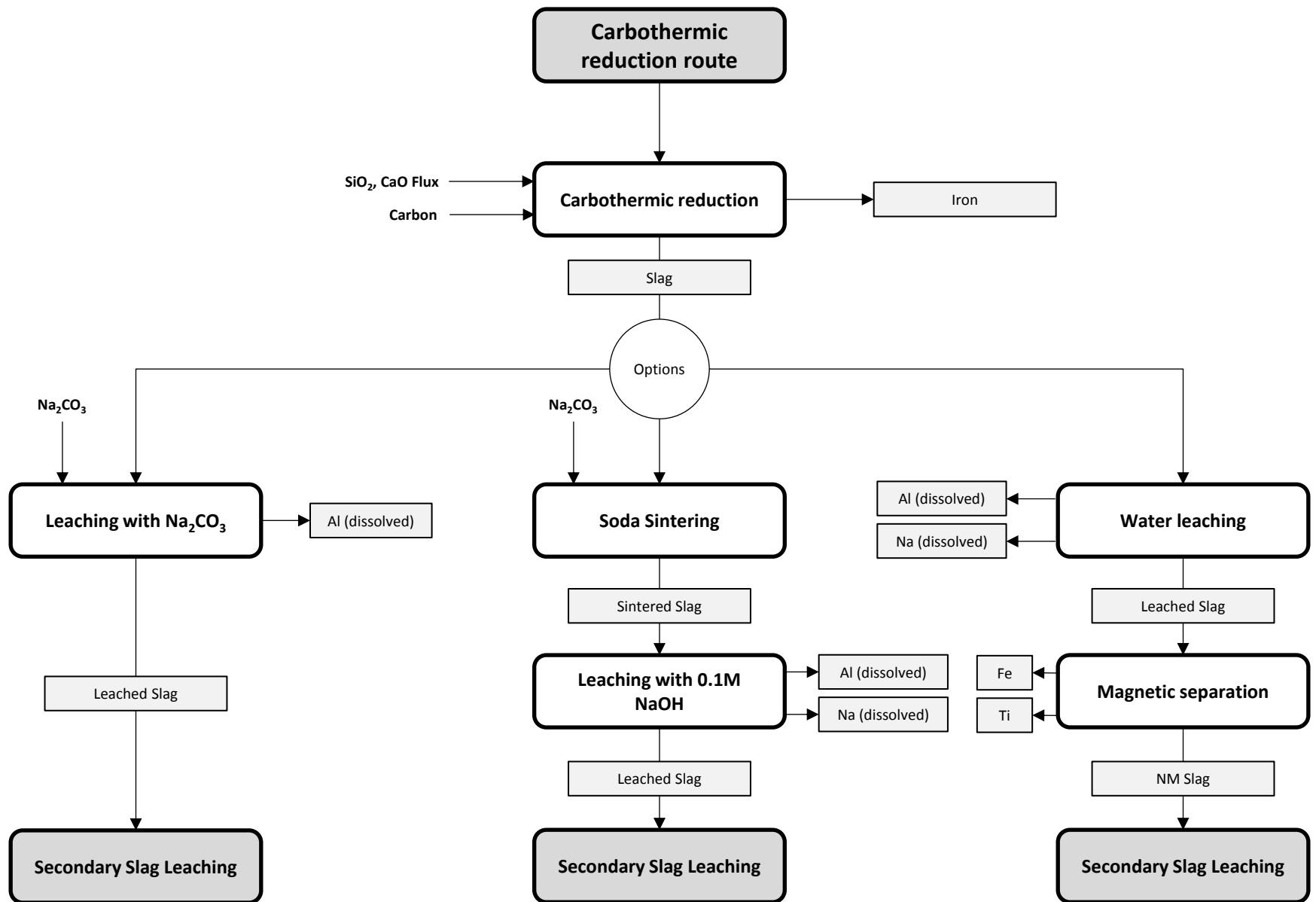
Grey boxes  are links to the next stage in the flowsheet.

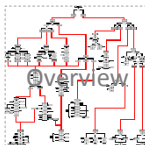
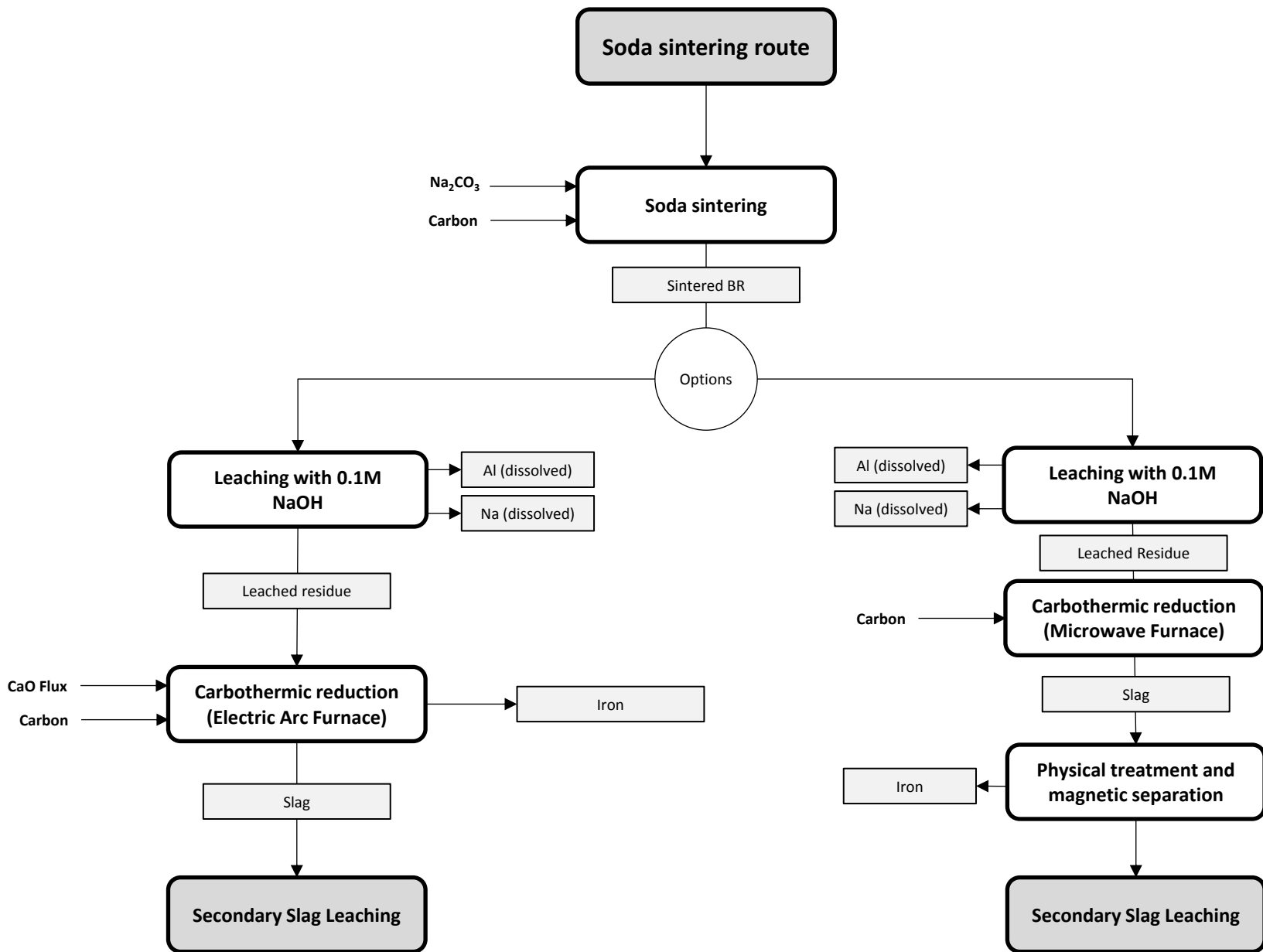
Click on these to navigate the overall flowsheet

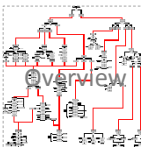
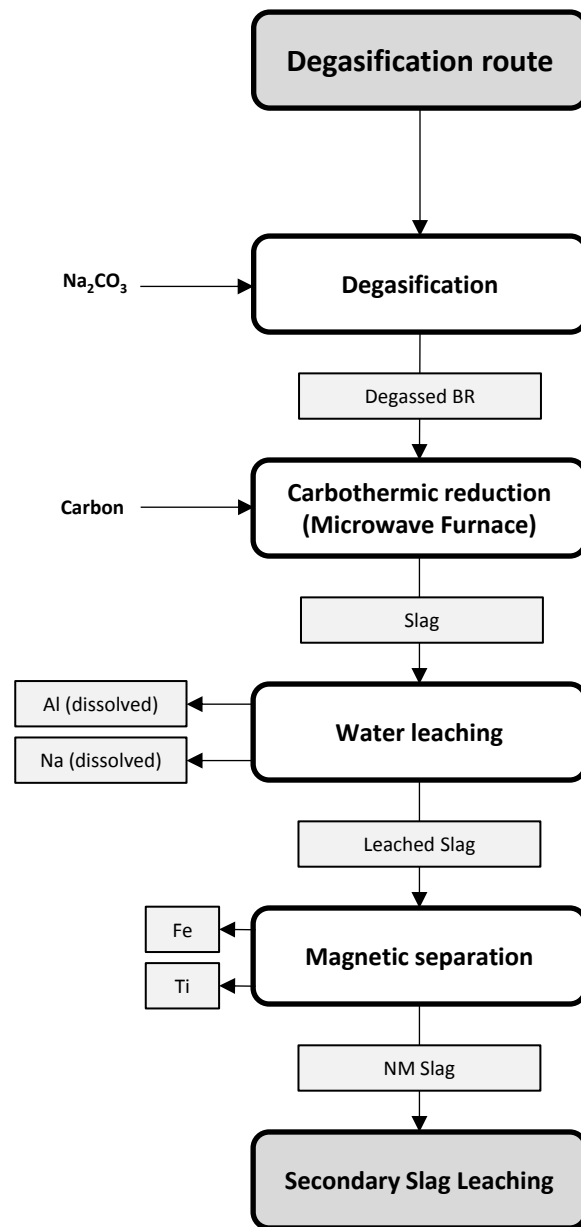
Click on the box in the bottom right hand corner to see an overview of the flow chart

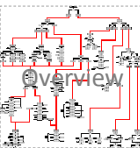
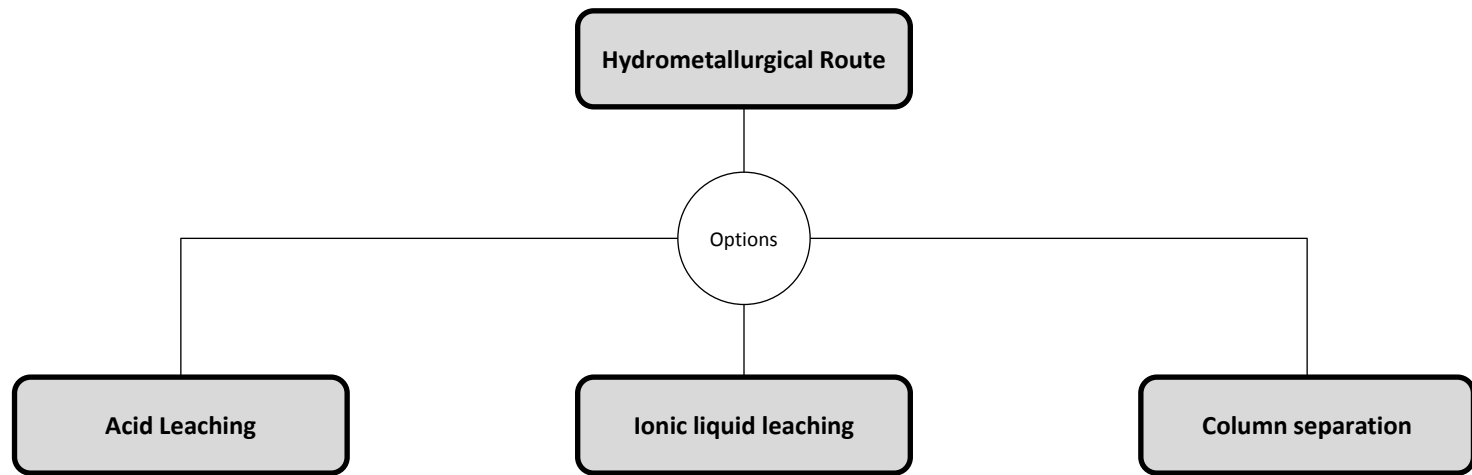


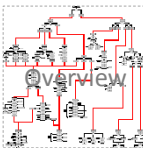
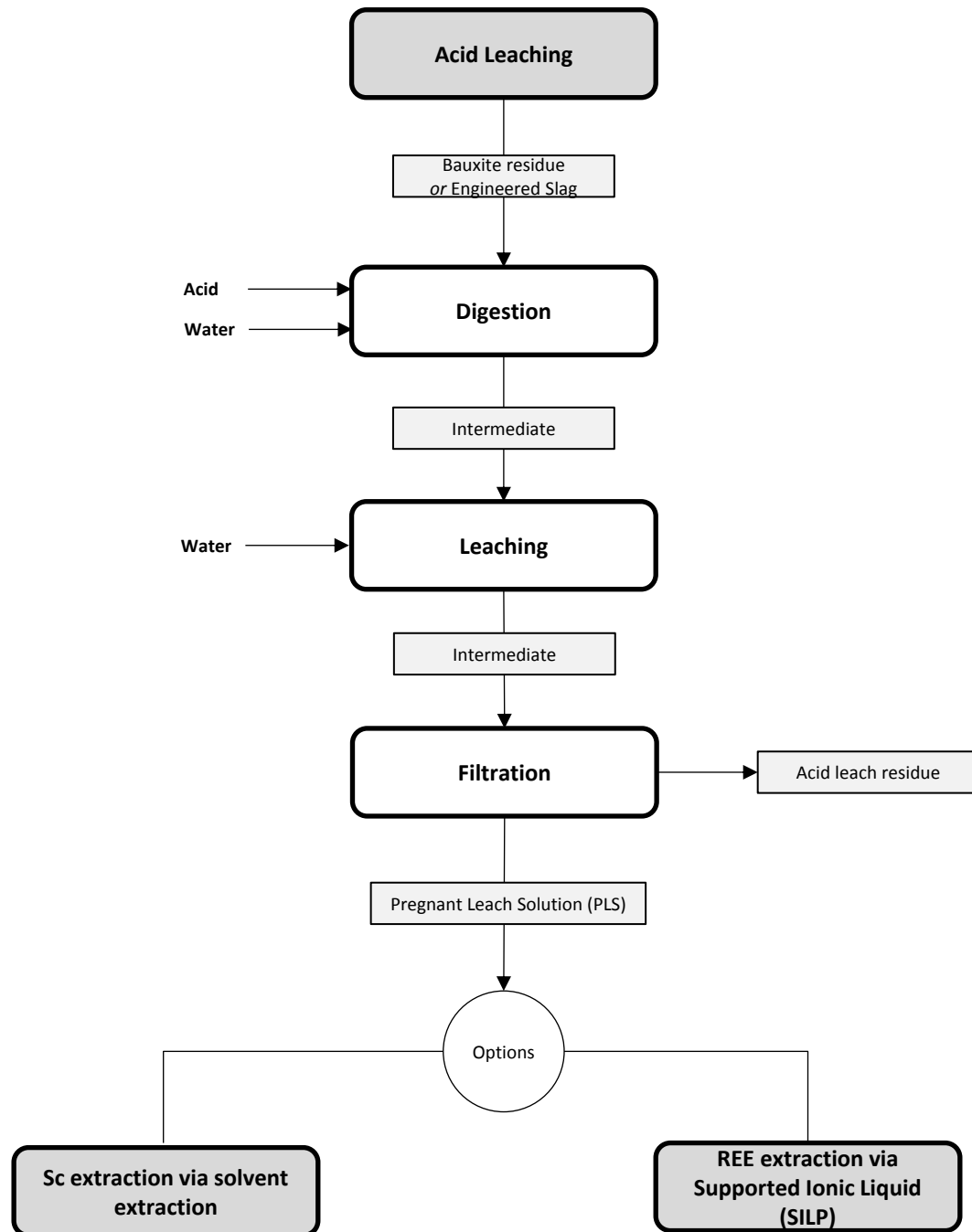


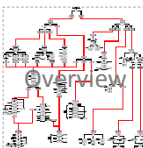
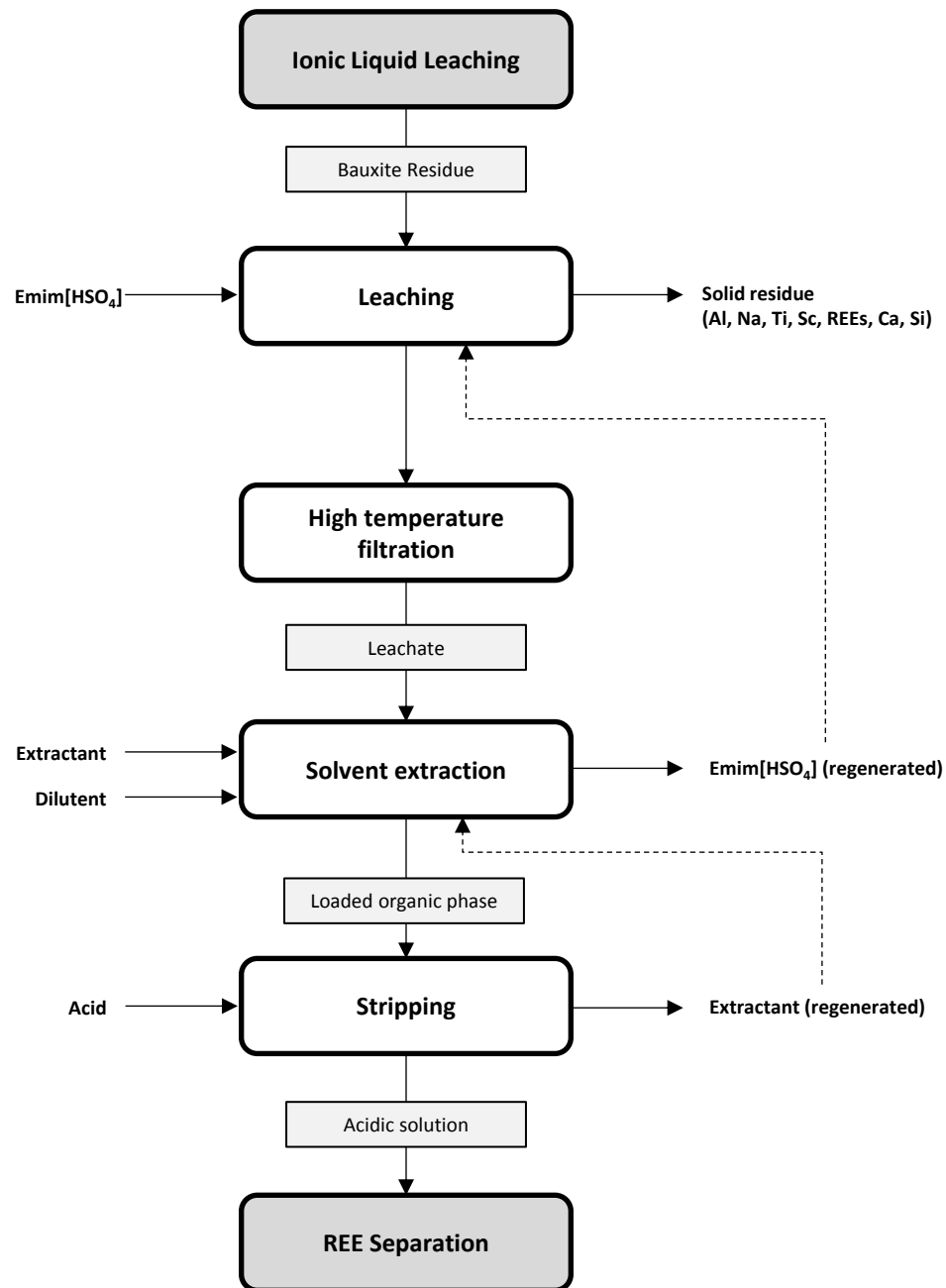


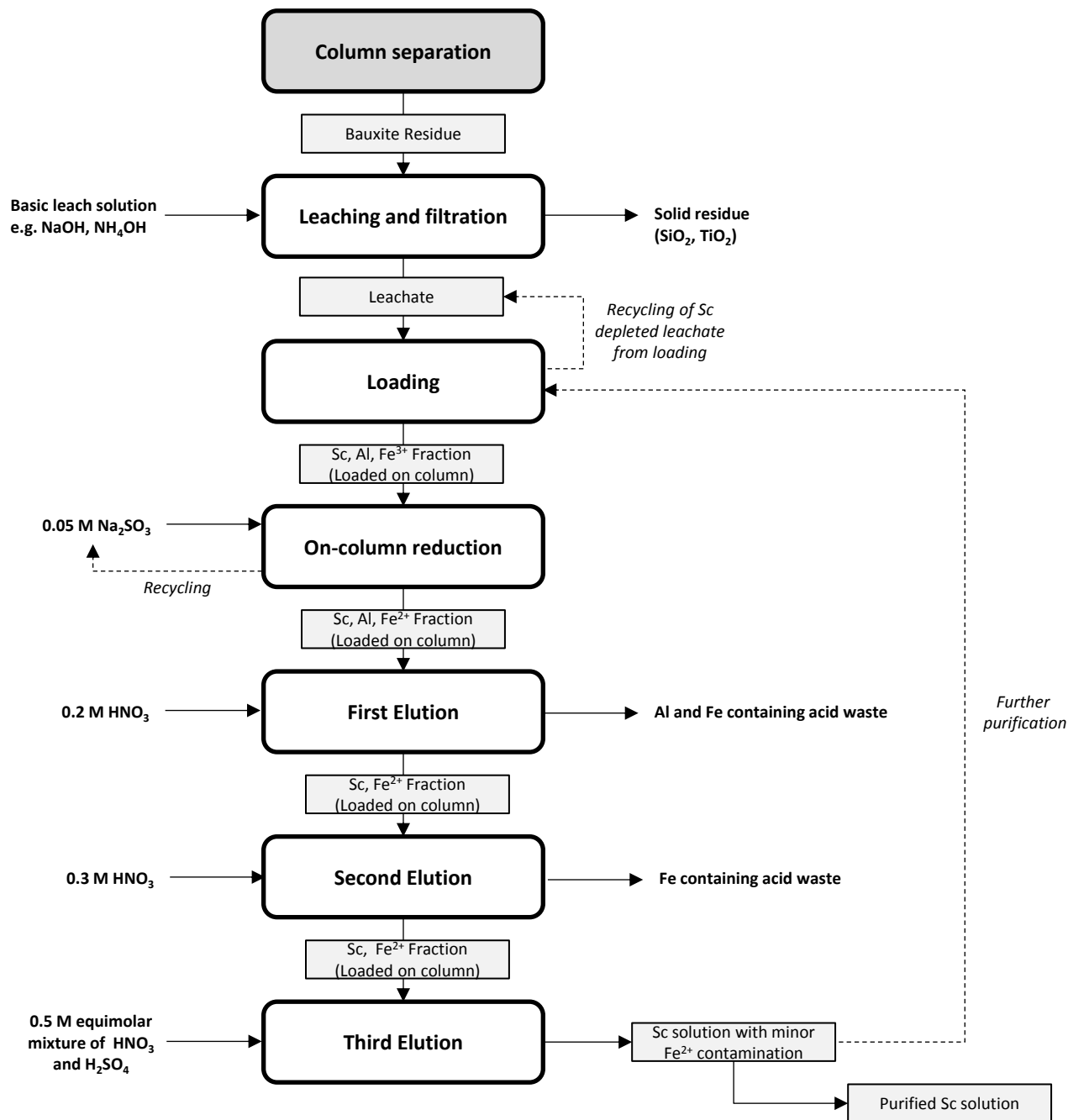






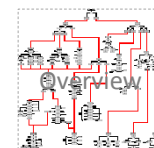


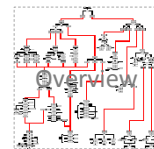
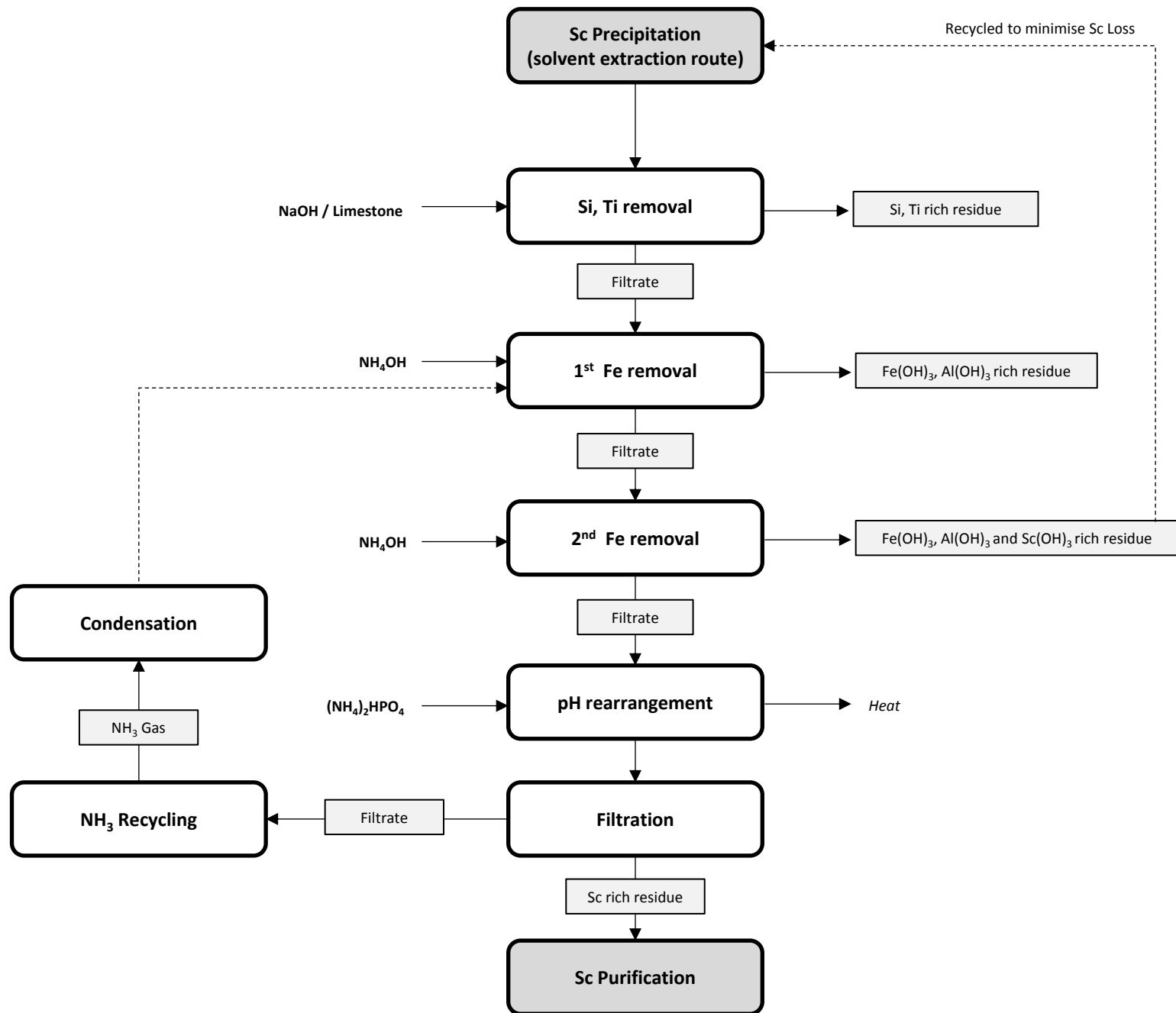


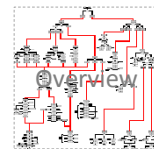
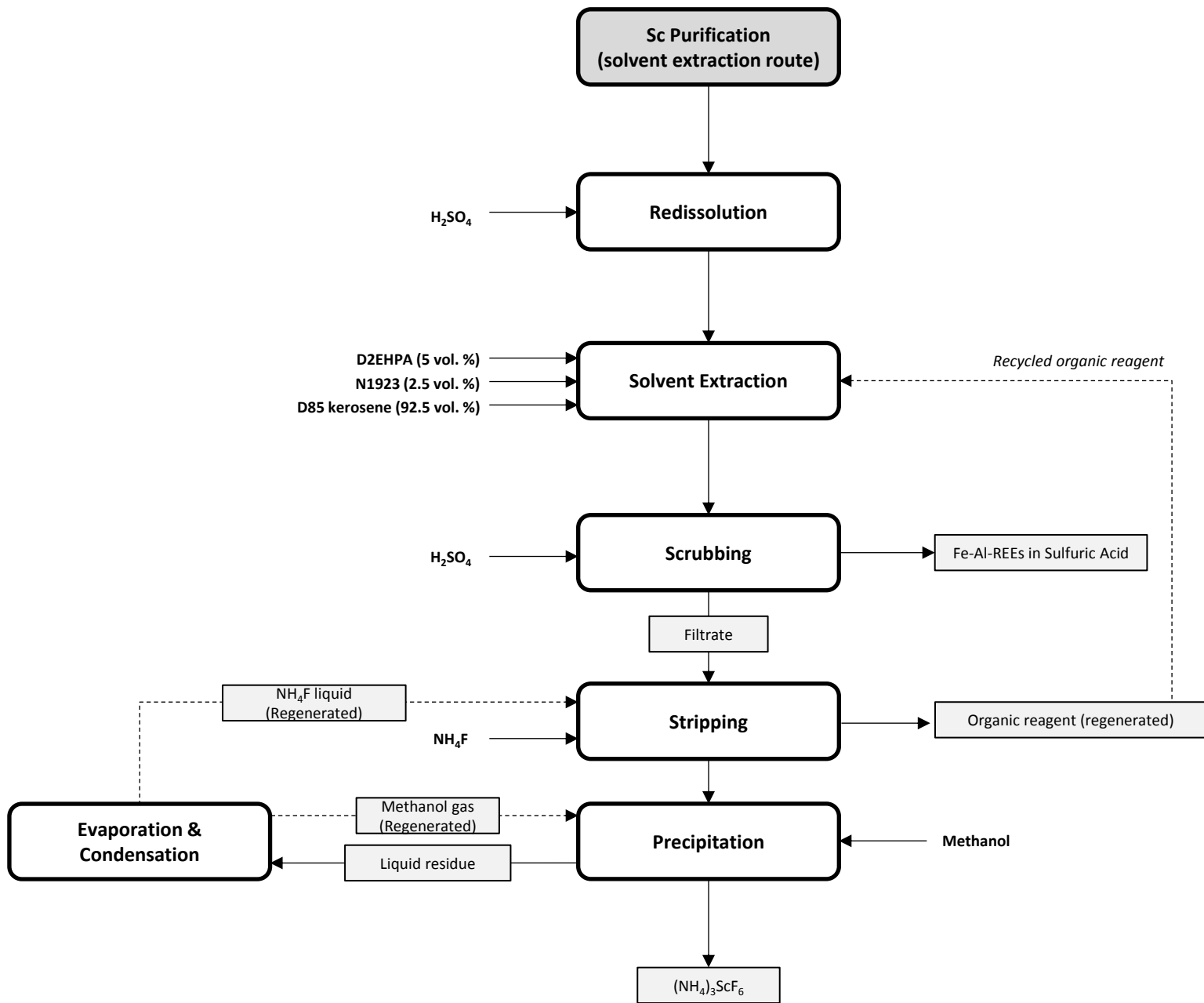


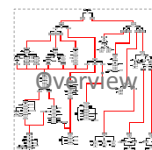
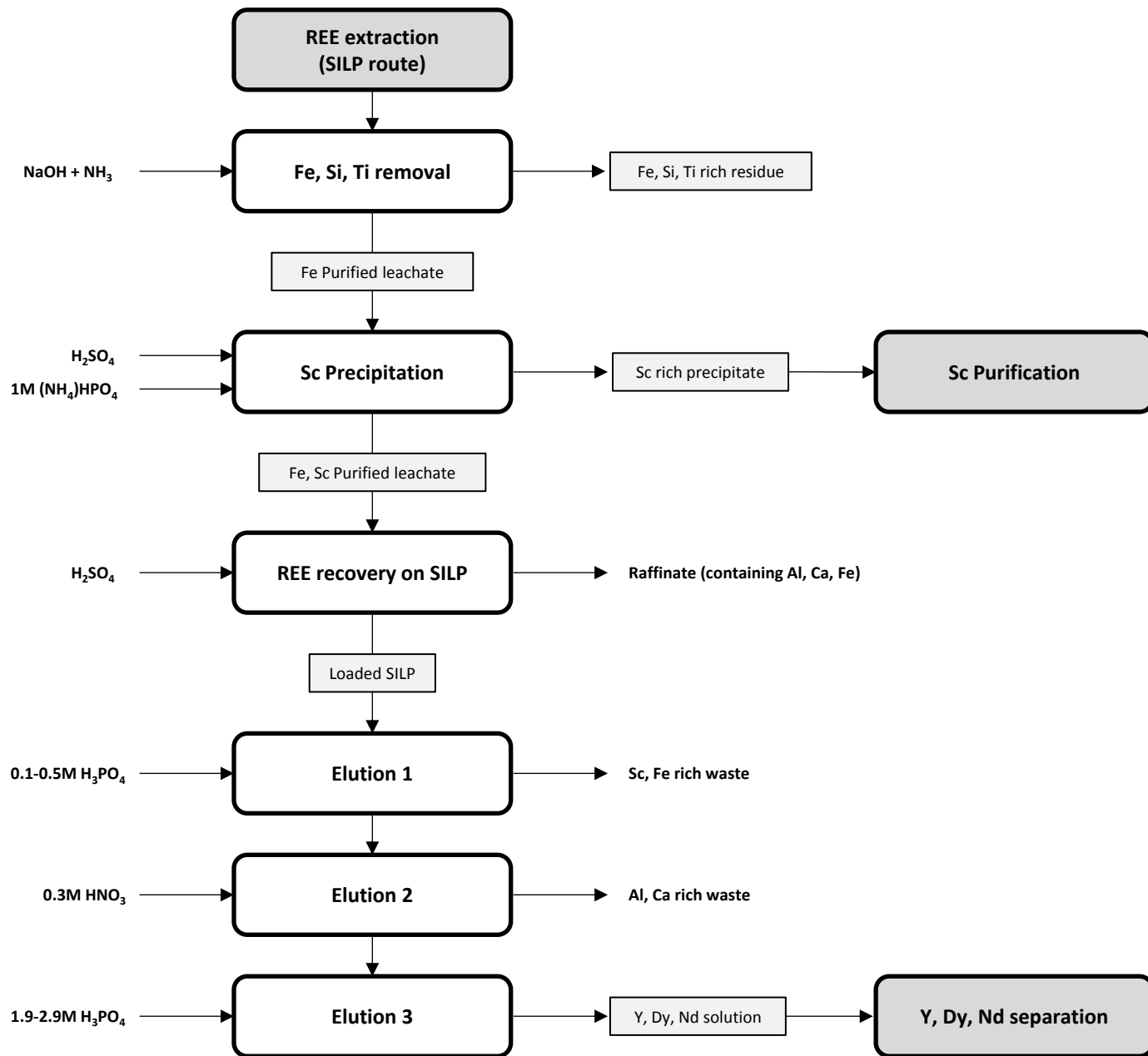
Reactions on MeP
ion exchange
column

Note: column is
regenerated after
third elution





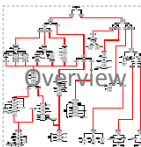
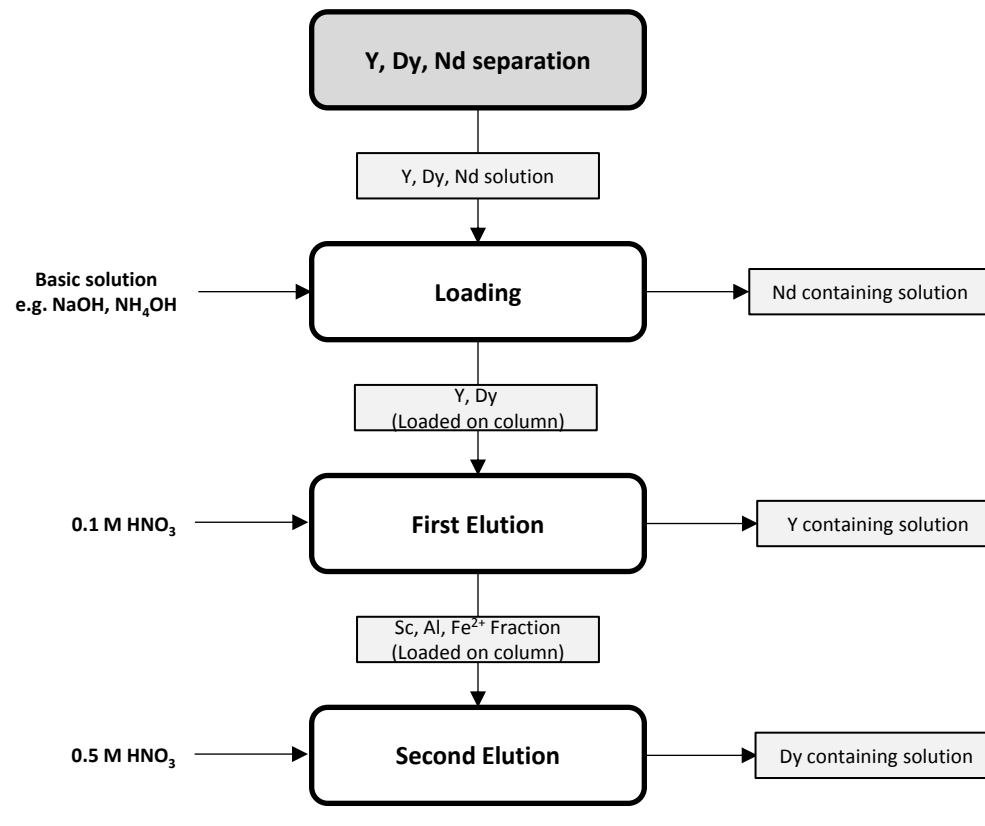


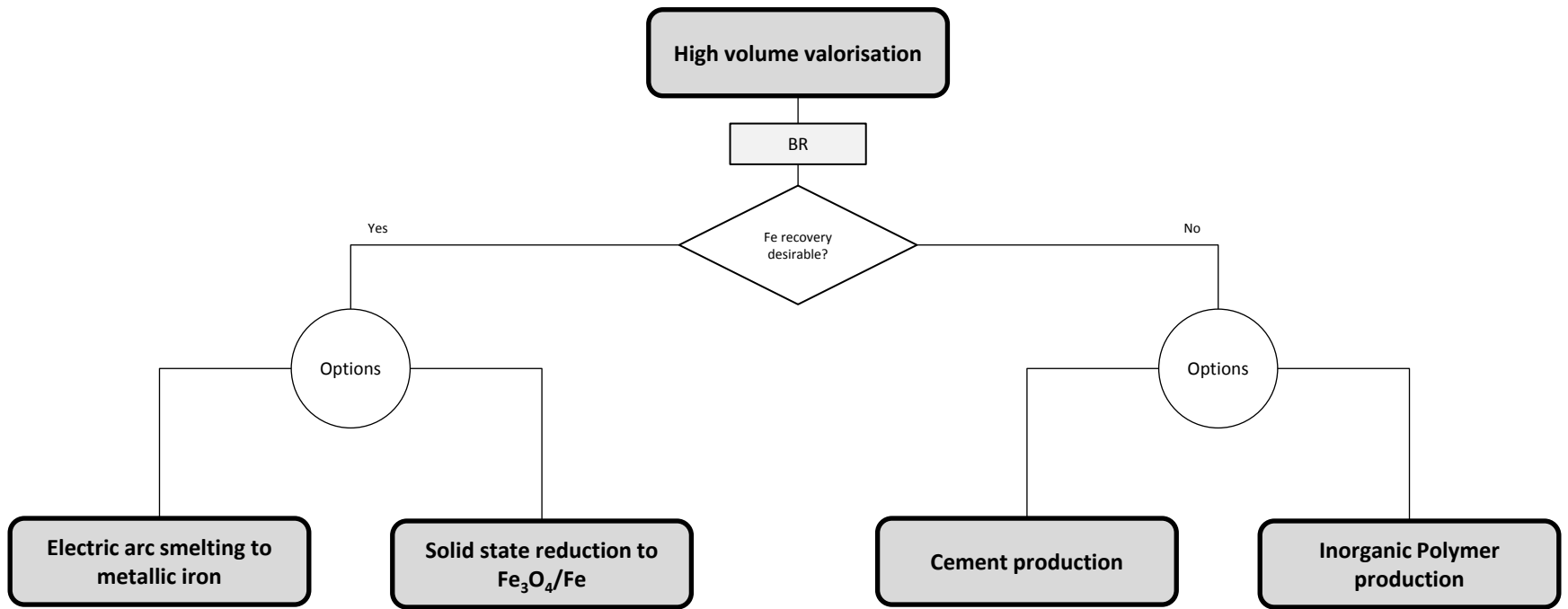


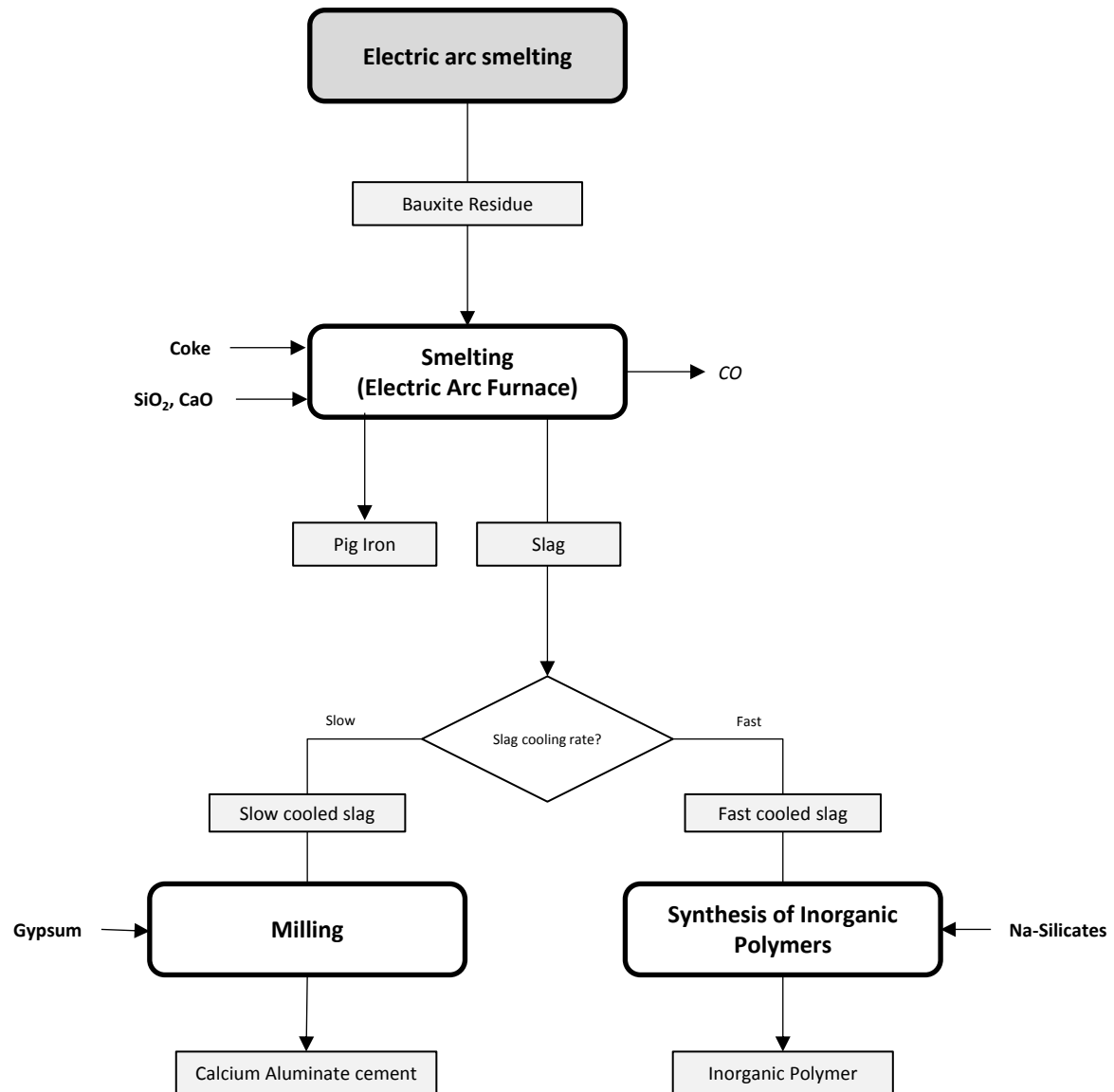
REE extraction (supported ionic liquid route)

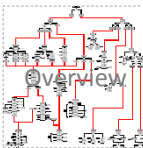
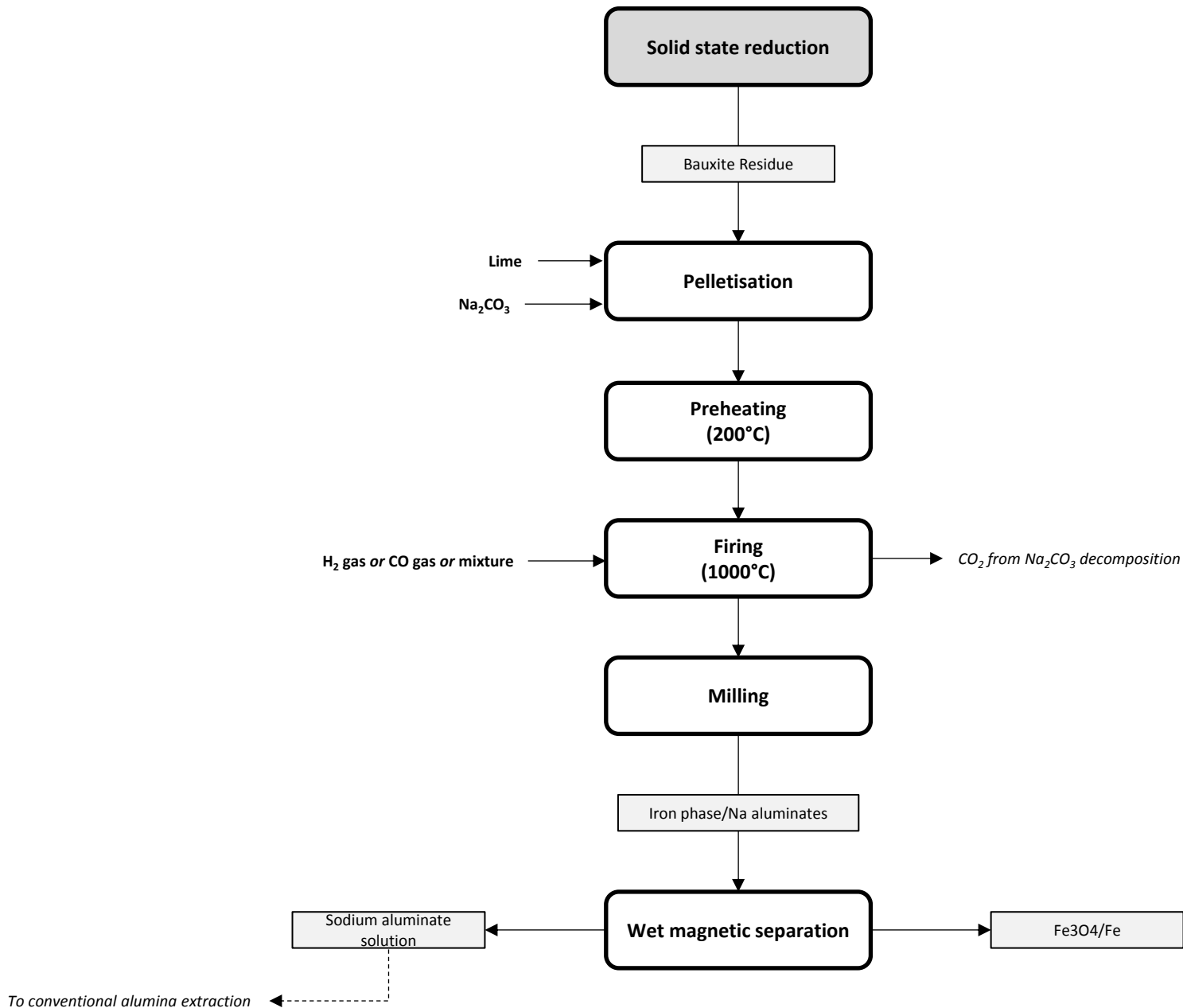
Reactions on
Hybrid MeP ion
exchange column

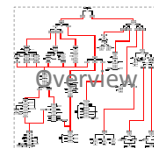
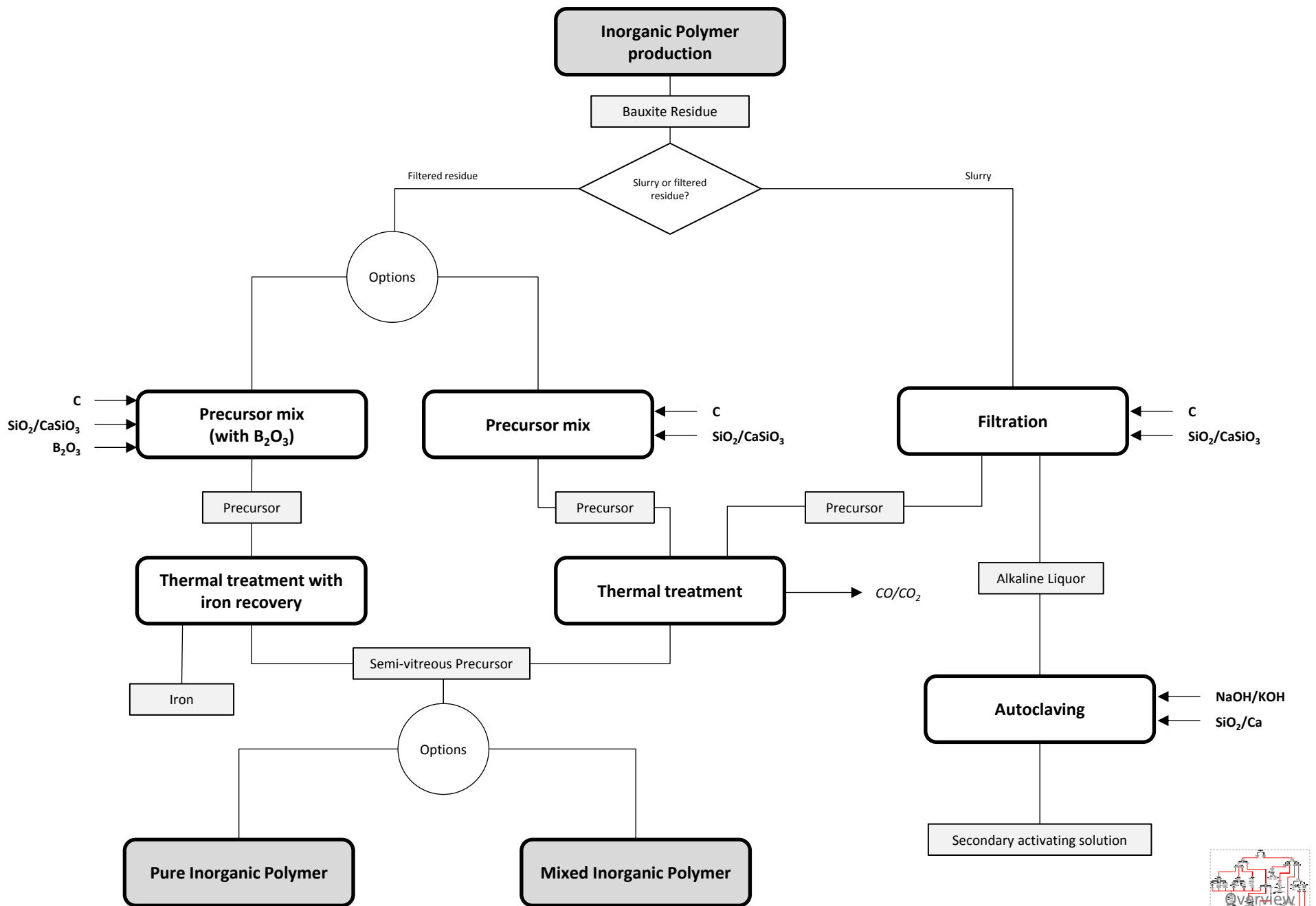
Note: column is
regenerated after
second elution

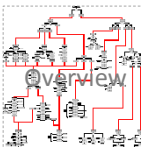
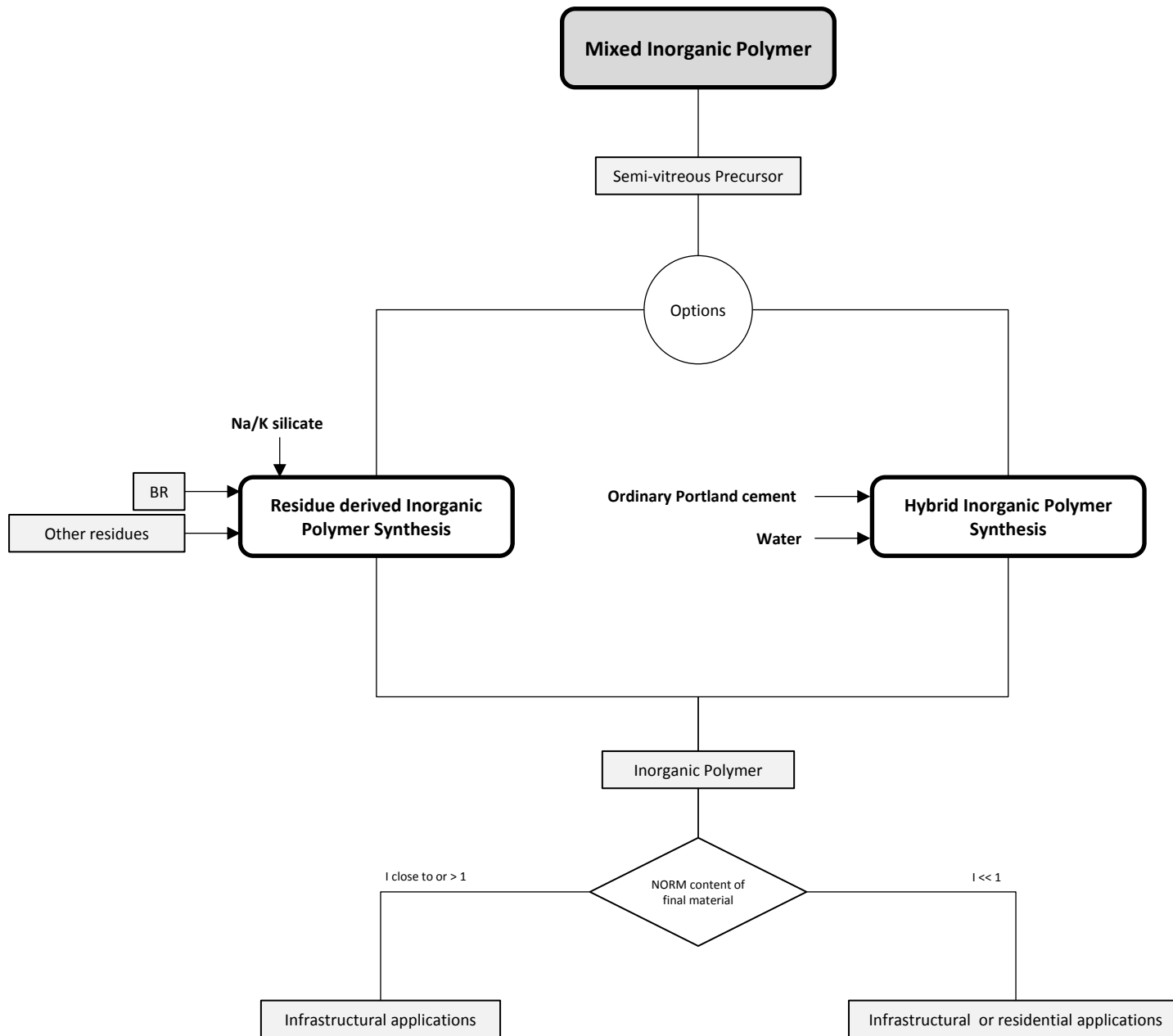


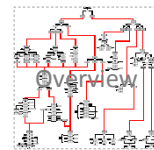
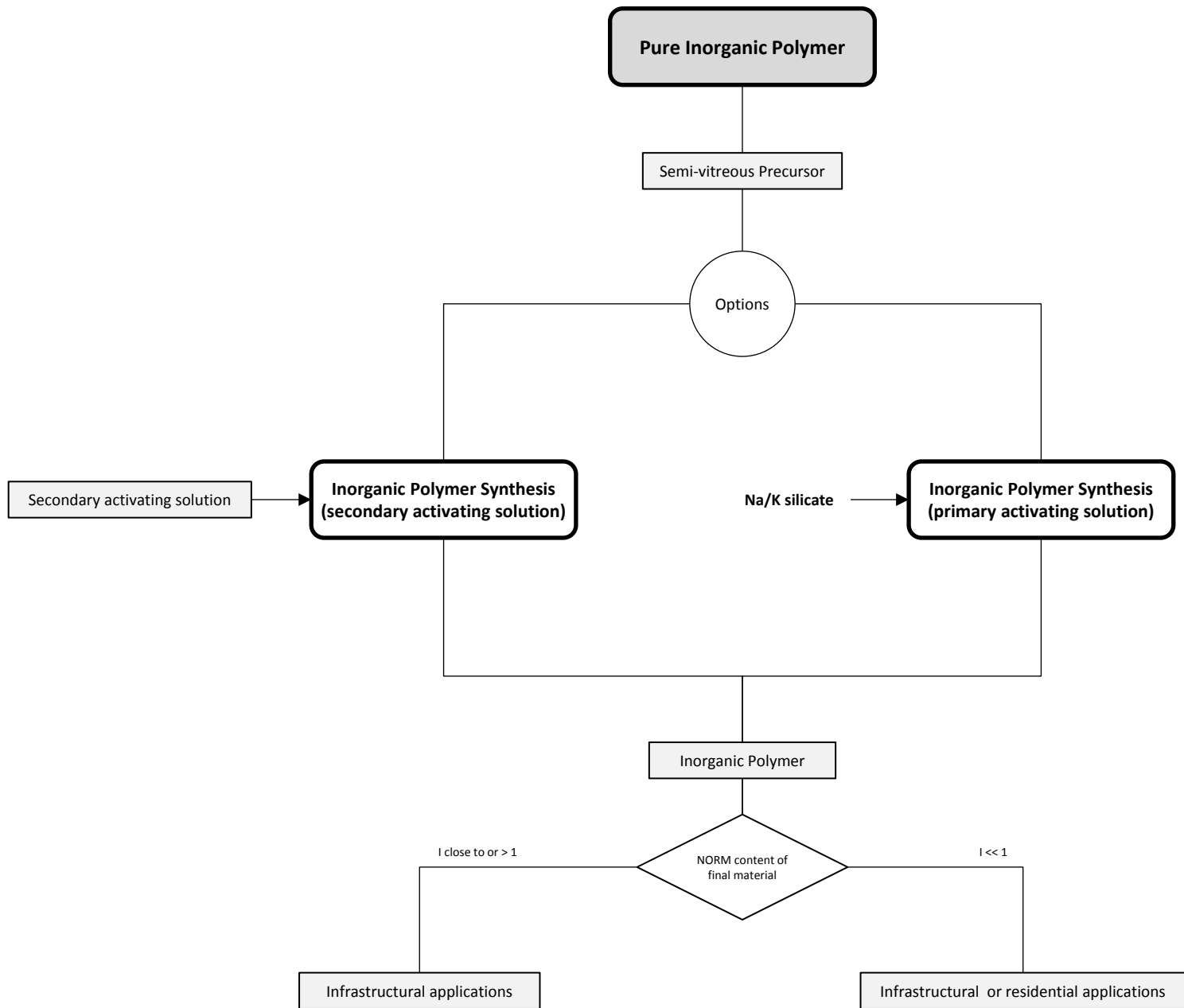












Cement production

Options

Addition to OPC clinker

T = 1450°C
CaO source
SiO₂ source

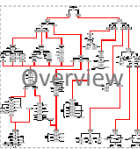
Clinker

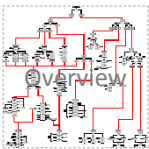
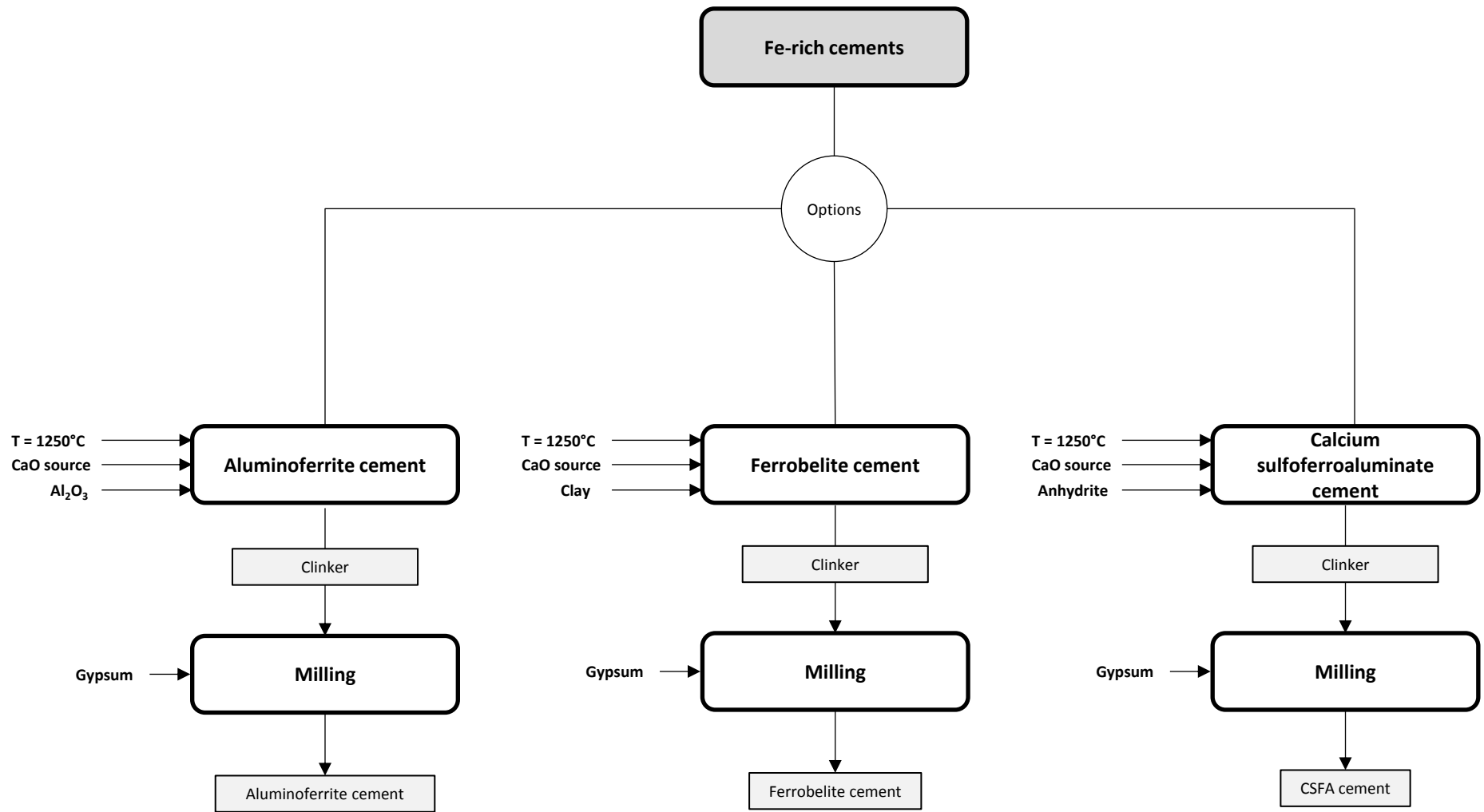
Milling

Gypsum

Ordinary Portland cement

Fe-rich cements





Overview

