



Safety requirements for TCLD exchange

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Outline

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- Safety requirements in case of exchange during runs
- Installation during LS2

Foreword

- A global risk assessment to evaluate the risks during: installation, bake-out, regular maintenance and **exceptional TCLD exchange during run periods** is being done by N. Grada.
- The conclusions of this Failure Mode Effect Analysis method (FMEA) are documented on EDMS 1969909.
- A technical presentation is available on Indico (<https://indico.cern.ch/event/735110/>)

Safety constraints in case of exceptional exchange during run periods

The incidental situation is a mechanical hit that would damage the surrounding cryo equipment and create a He release.

	Point 2 and Point 7 left	Point 7 right
Relevant arc sectors and cryo bypass	emptied from LHe and heated up to 20K before TCLD exchange	
QRL	n/a	emptied from LHe and heated up to 20K before TCLD exchange

- ✓ If transport can demonstrate that their handling procedure guarantees the highest safety level, the constraint on the arc warm up can be re-considered.

Installation during LS2

- With the present schedule (v. 4.6), no specific safety constraints apply if the installation is done as planned i.e. with the sectors warm.
- In case of change of schedule, a safety assessment shall be performed.



***Thank you for your attention.
Any questions?***

