



Date: 13/8/2014

MEMORANDUM

To : Frederick Bordry (Complex Manager)

Cc : P. Collier, E. Cennini, B. Dehning, J. Etheridge, K. Foraz, S. Grishin, M. Jimenez,

S. Longo, T. Otto, E. Paulat, M. Tavlet, R. Trant, M. Walter.

From : Rhodri Jones (BE-BI)

Subject : Request for a derogation to allow access to cabling on the QRL side of

the arc for the repair of several remaining non-conformities on the LHC Beam Loss Monitoring system and to allow for the repair of non-

conformities found during the Radiation Source Checks.

Dear Freddy,

The radiation source checks for the LHC beam loss monitor (BLM) system are foreseen to start in sector 6-7 on Wednesday 13th August. These checks verify the integrity of the complete BLM system, a vital component for ensuring safe beam operation. In order to complete these tests successfully, several existing non-conformities in the cabling of the system need to be resolved, and any non-conformities found during the testing will need to be addressed. This requires access on the QRL side of the magnets in the LHC arcs. This procedure is foreseen as a final check of BLM system integrity in all sectors once they are stable at 1.9K. It will also involve checks on BLMs located close to the DFB and on stand-alone magnets in the LSS regions.

Following the decisions taken by the A&T director as a result of the Helium Spill tests, such access is no longer possible in sectors containing liquid Helium without derogation from the complex manager. I would therefore like to request such a derogation to allow this work to go ahead as planned.

The team involved will all be equipped with individual, portable ODH monitors and are highly experienced in performing such interventions in the vicinity of delicate equipment. The names of those concerned by this derogation are as follows:

CERN staff:

- Ewald Effinger
- Steve Sousa
- Raymond Tissier
- William Vigano
- Christos Zamantzas

Personnel from FSU09:

- Joel Adam
- Ion Savu
- Adrien Tambasco

BLM LS1 coordinator

• Viatcheslay Grishin

IHEP team up to 21.09.2014

- Anatoly Dukin
- Andrey Koshelev
- Andrei Markin
- Gennadii Voronin

IHEP team from 15.09.2014 to 20.12.2014

- Iurii Aleksandrov
- Victor Khlopkov
- Victor Panin
- Oleg Sumaneev

The location of these interventions can be anywhere along the BLM cabling paths, which are typically routed on the magnet cryostats. This therefore covers the majority of the arcs and most stand-alone magnets.

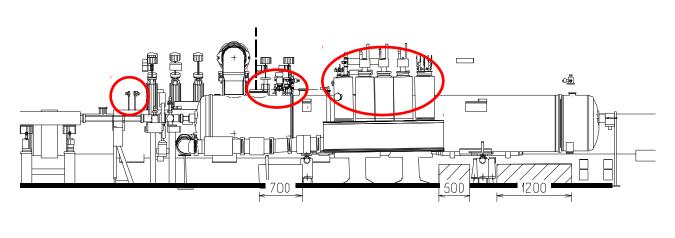
Yours sincerely,

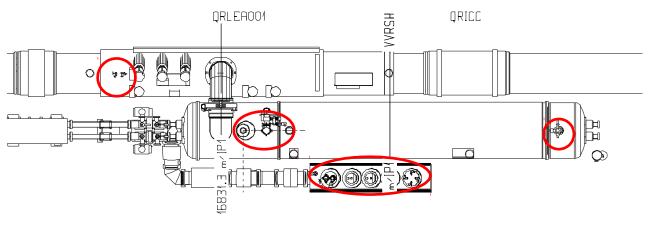
Rhodri Jones (BE-BI Group Leader)

Sector 67: Identification of sensitive areas for helium spill

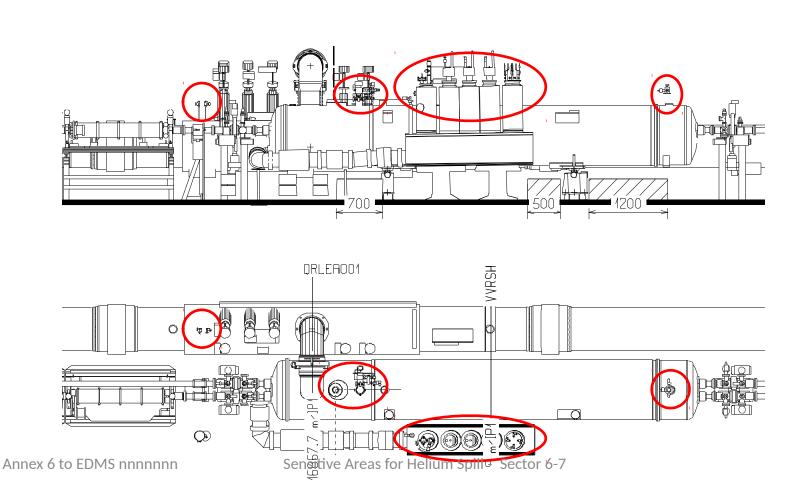
L. Tavian, 13 August 2014

Q4R6 DCUM 16831 m DFBMM_4

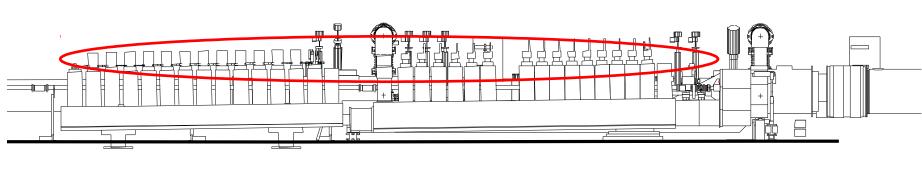


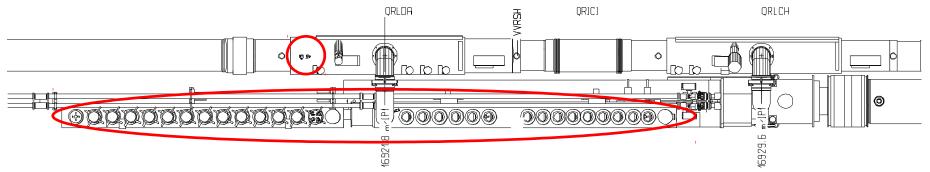


Q5R6 DCUM 16868 m DFBMM_5

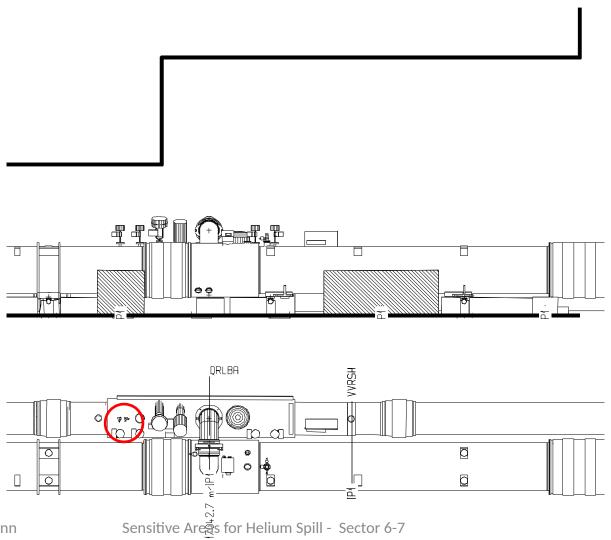


DFBAL R6 DCUM 16922 m

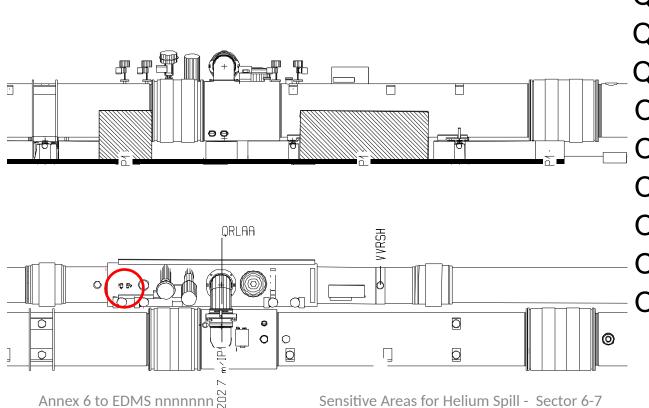




Q10R6 DCUM 17043 m

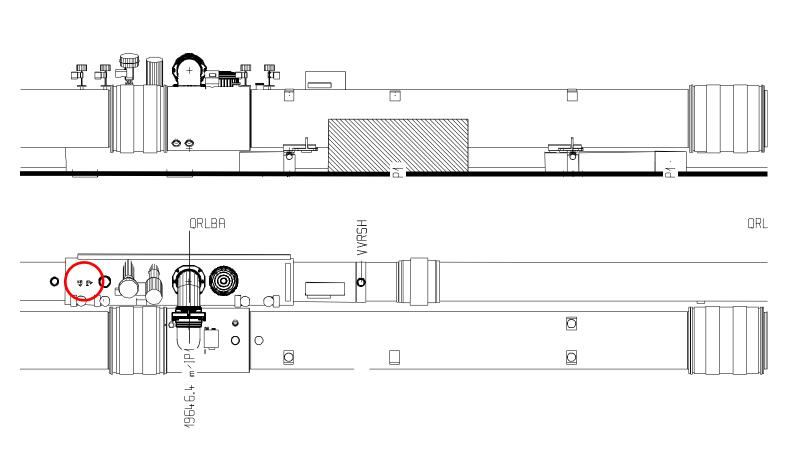


QRLAA service module in the Arc

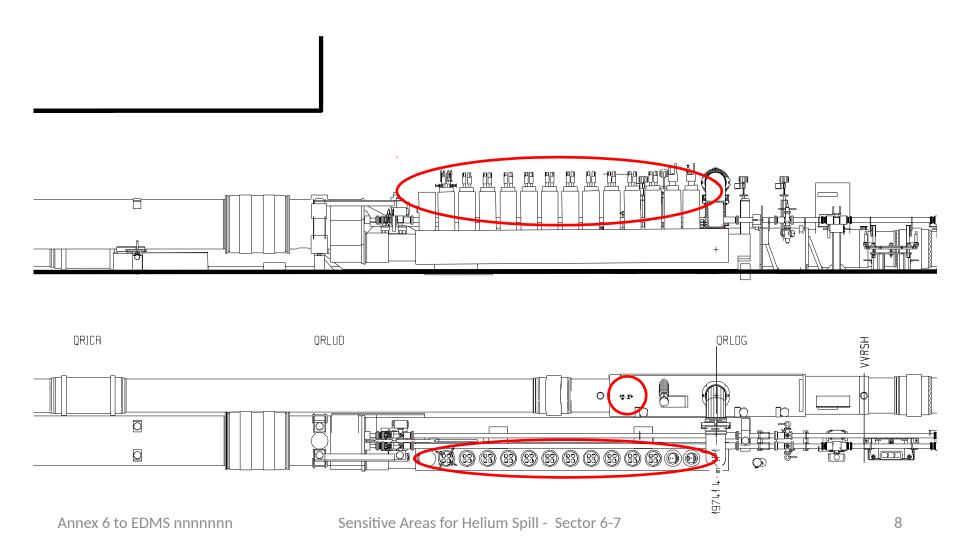


Q13R6 DCUM 17203 m Q17R6 DCUM 17416 m Q21R6 DCUM 17630 m Q25R6 DCUM 17844 m Q29R6 DCUM 18058 m Q33L7 DCUM 18379 m Q29L7 DCUM 18592 m Q25L7 DCUM 18806 m Q21L7 DCUM 19020 m Q17L7 DCUM 19234 m Q13L7 DCUM 19448 m

Q9L7 DCUM 19646 m



DFBAM L7 DCUM 19741 m



Q6L7 DCUM 19761 m DFBMH QRLID (return module)

