

Abstract :

This document in the frame of CERN’s Open Days (OD) of the year 2019.

It aims to inform each site manager (designated as such in the context of this event) about the actions to be taken before the event from the Radiation Protection (RP) point of view.

1 VISITS IN RADIATION AREAS :

1.1 INFORMATION

Various facilities are open to the public during JPOs. Most of these visit points are unregulated zones in the sense of radiation protection. However, 13 facilities will remain classified as restricted area.

In accordance with the decisions taken at the 2013’s tripartite and as detailed in the memorandum of radiation protection¹, visitors will have the opportunity to visit classified areas provided that:

- The maximum dose that a visitor can get in the situation of an incident/accident is **10uSv**
- The minimum required age to access to these vivts is **12 years old**
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1.2 LISTE DES VISITES EN ZONE RÉGLEMENTÉE

Site	Building	Visit point
Meyrin	193	Antiproton - ELENA decelerator
	2008/2010	CLIC - CTF3
	400	LINAC4
	150	LINAC2
Prévessin and LHC points	888	COMPASS
	887	EHN1
	911	ECN3
	p1	ATLAS
	p2	ALICE + Machine
	p4	LHC RF + Machine
	p5	CMS
	p6	Machine
	p8	LHCb

1.3 CLASSIFICATION AND RESTRICTIONS FOR THE VISITS IN RADIATION AREAS

Th radiation areas allowed to be visited during the event are the supervised radiation area.



This panel will be displayed at the entrance of each concerned.

Food and beverage are strictly prohibited during the visit.

Volunteers must also be careful that visitors do not touch or remove equipment at these visit points.

2 ACTIONS AND INFORMATION BEFORE THE OD

2.1 TRAINING

Each volunteer on a supervised area visit path must follow and pass the following online training :

- Radiation Protection – Awareness
- Radiation Protection – Supervised Area

These courses are available on CERN’s learning hub : [Learning Hub](#)

2.2 DOSIMETRY

The validation of the radiation protection trainings will allow the volunteers to get a personal dosimeter (DIS, Passive) mandatory to access the supervised radiation area.

The escort of a group of visitors must have also an operational dosimeter (active, DMC)

2.3 GENERAL INFORMATION

A « RP FAQ » booklet (Frequently Asked Questions) is available on EDMS 2209307. This will help you answer the most common question asked by the visitors.

¹ Memorandum Radiation Protection requirements for Open Days 2019 visits in Radiation Areas EDMS 2110782

3 ACTION DURING THE OD

3.1 DOSIMETRY :

Wearing the **personal dosimeter** (passive, DIS) is **mandatory** for all **volunteers operating in a supervised area** (guides, crowd marshals,..).



Wearing the **operational dosimeter** (active, DMC) is **mandatory only for the guides** who supervise the visits.



The operational dosimeters will be activated with an IMPACT specific to the ODs and your installation.

At the entry and exit of the zone, the guide must transcribe the dose displayed on the dosimeter on the devices set up on the days concerned. (cf appendix 1)

/!\ WARNING :

The dose objectif is to keep it less than **1uSv**

If the displayed dose is greater than 1 uSv, the manager site calls RP coordination (cf appendix 2)

3.2 VISIT PATHS

Accelerators are shut down during the OD.

There will be no radioactive sources in the visit paths during the event.

The RP teams will proceed to some extensive checks for each visit path..

➔ The radiological risk is kept to its lower level

Some radiation monitors will be placed in "silent" mode to avoid alarms (sound and bright on the spot) that could be generated by people who have undergone medical treatment.

The RP Stand is located in the main building (500) and will be able to answer all the questions concerning the

radiations/radioactivity,... Please, don't hesitate to redirect the visitors to this activity.

In case of use of an emergency exit classified as radiological (supervised, simple controlled), thank you **to immediately inform the RP coordination.**

During the OD, RP patrols will be on site to ensure different missions, the "Site Managers" can contact the RP coordination in case of need or doubt.

4 ACTIONS AFTER THE OD

Once the OD finished, Please try to restore the operational dosimeters provided exceptionally for the event, as well as unused personal dosimeters at the RP coordination.

CONTACTS RP

Contact RP coordination: Meriem.Chniba@cern.ch

Annexe 1

Tableau de retranscription des doses :

EDMS 2225880		JOURNÉES PORTES OUVERTES 2019 - ENREGISTREMENT DES DOSES								
		Point de visite Campus:			Doses exprimées en μSv (telles que lues sur le dosimètre)					
					(*) Dose nette = (Dose en sortie) - (Dose à l'entrée)					
<p>Pour tout problème concernant ce formulaire, contacter meriem.chniba@cern.ch - Tél: 162433 En cas d'urgence, appeler les pompiers au 74444</p> <p>- Pour chaque visite, le guide doit indiquer son identifiant CERN, son prénom/nom, la date et les heures d'entrée et de sortie, ainsi que les doses affichées par le dosimètre opérationnel en début et en fin de visite. Les données peuvent être enregistrées sur support papier ou sur support informatique.</p> <p>- Les guides doivent apporter une attention particulière à ce que les visiteurs ne touchent ni aux accélérateurs ni aux détecteurs, ne retirent aucun matériel de régions visitées et ne mangent et ne boivent pas dans les zones surveillées.</p> <p>- Ces données devront être transmises à meriem.chniba@cern.ch peu de temps après les journées portes ouvertes.</p> <p>V 2.0 - Ajout du No de page en tête V2.1 - Adaptation 2019</p>		Prénom / Nom (Guide)	CERN ID	Date	Heure d'entrée	Dose à l'entrée	Heure de sortie	Dose à la sortie	Dose nette (*)	

Annexe 2

Contact RP – JPO

Open Days 2019 Contacts - Radiation Protection Group

Piquet	
1st/2nd line	A. Herve (74848, 163168), C. Tromel (163199)
Coordination	
Saturday	M. Chniba (162433), P. Carbonez (160009)
Sunday	P. Carbonez (160009), M. Chniba (162433)
Site patrols	
Meyrin	V. Tromel (160637)
Prévessin	C. Tromel (163199)
Visit point contacts	
AD	Claudia Ahdida (164145)
CTF3	Robert Froeschl (160058)
LEIR	Robert Froeschl (160058)
LINAC2	Robert Froeschl (160058)
LINAC4	Robert Froeschl (160058)
COMPASS/EHN2	Claudia Ahdida (164145)
EHN1	Claudia Ahdida (164145)
NA62/ECN3	Claudia Ahdida (164145)
ATLAS, ALICE, CMS & LHCb	Robert Froeschl (160058)
LHC P1, P2, P4, P6	Cristina Adorisio (165345)
Emergency team	
RP management	H. Vincke (165456), S. Roesler (164717)
OD coordination	M. Chniba (162433)
Dosimetry	P. Carbonez (160009)
Laboratory	N. Riggaz (162888), C. Theis (160884)
Radioactive Waste / ISR	L. Ulrici (160920), Y. Algoet(160499)
Senior Technical Engineers (2 out of 3 to be confirmed when Alex/Gerald are back from holidays)	C. Tromel (163199) G. Dumont (164758) A. Dorsival (160641)
Piquet	(see above)