

Supervised Access - Collision Hall

Revision Log

Version Number	Date Approved	Pages Affected	Description of Revisions
1.1	3/12/01	All	Initial Issue (interim version)
1.2	4/20/01	6-7	Modified visitor procedures
1.3	7/2/01	3-4	Require LOTO 1 for entry; Remove §4.4.1, "Persons lacking DØ authorization for entry"
1.4	11/26/01		Various clarifications, indicated by sidebars.

Approvals

_____	_____
DØ Run Coordinator	Date
_____	_____
Beams Division Operations, Head	Date
_____	_____
Beams Division RSO	Date
_____	_____
Particle Physics Division RSO	Date

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1 INTRODUCTION

1.1 Purpose

This procedure is to be followed when a supervised access to the DØ Collision Hall is requested.

1.2 Scope and Applicability

The DØ Shift Captain or trained designee distributes Collision Hall supervised access keys by following this procedure. Escorts for visitor groups also follow this procedure. This procedure DOES NOT cover controlled access or power-on access to the Collision Hall.

2 PRECAUTIONS AND LIMITATIONS

None

3 PREREQUISITE ACTIONS

3.1 Documents

Shift Captain and Visitor Escorts

[1] Review most recent radiation survey map.

3.2 Special equipment, tools, parts, and supplies

Shift Captain

[1] Obtain pocket dosimeter for tour groups.

3.3 Special approvals

Shift Captain

[1] IF visitors or tours are involved, THEN obtain permission of Run Coordinator and refer to section 4.4 of this procedure.

4 PROCEDURE

4.1 Preparing for supervised access

Shift Captain

- [1] Verify that:
- [a] the toroid and solenoid magnet power supplies are locked out with a DØ Operations lock. IF they are not, THEN contact the Operations Shifter to arrange the lockout.
 - [b] the Collision Hall interlocks are disabled.
 - [c] a Collision Hall radiation survey has been completed since the last time beam was introduced into the Collision Hall, and no dose rates above 20 mrads per hour are present. IF rates above 20 mrads per hour are present, THEN do not permit the access to proceed until authorized by the Beams Division RSO.
 - [d] a DØ Collision Hall controlled access key is locked in the DØ Control Room Supervised Access (SA) key storage panel. IF no controlled access key is in the SA key storage panel, THEN call the Main Control Room and request access to the Collision Hall key tree to remove an interlocked key and place it in the key storage panel, where it should remain until the Supervised Access period has ended.
 - [e] no restricted access notices are listed on the DØ Status Board.

4.2 Issuing keys

Shift Captain

- [1] Check that each person requesting access is qualified by using the computer based key logger. They must have the following current training:
- Radiological Worker (valid for two years)
 - DØ Hazard Awareness (valid for one year)
 - Lockout/Tagout Level 1 (valid indefinitely)
- and be deemed fit to enter the DØ Collision Hall.

4.2 Issuing keys (continued)

- [2] Verify that each person has a TLD badge.
- [3] Issue each qualified person a supervised access key using the computer-based key logger. Also instruct the person to record the SA key number and other required information on the key sign-out log sheet, as a backup.

4.3 Recovering keys

Shift Captain

- [1] Instruct each key holder to record the time returned for the key in the sign-out log.
- [2] Return the key to the supervised access key tree or drop box, and log its return in the key logger database.
- [3] Verify that all issued keys have been returned at the end of the supervised access period. IF some keys have not been returned to the DØ Control Room, THEN contact the persons who signed them out and request their return.

4.4 Persons on Visits, Inspections, or Tours

NOTE *This section applies to untrained persons who request entry into the Collision Hall. They are referred to as visitors in the following procedure.*

Shift Captain

- [1] Verify that the DØ Run Coordinator or designee has approved the access.
- [2] Verify that all visitors are 18 years of age or older.
- [3] IF dose rates exceeding 5 mrad per hour are present in the Collision Hall, THEN obtain Beams Division RSO approval.
- [4] Brief the visitors on the hazards by using the DØ Hazard Awareness handout.
- [5] Inform the visitors that they are entering a posted radiation area, inform them of the dose rates, if any, and give them the option of remaining behind.
- [6] Verify that the visitors are escorted by a worker who has the necessary training and qualifications to enter the Collision Hall.
- [7] Verify that there are a sufficient number of qualified escorts for the size of the group (typical ratio of at least one escort for every ten visitors).

4.2 Persons on Visits, Inspections, Or Tours (continued)

- [8] Instruct the escort(s) that the visitors are not to enter any of the muon trusses without the authorization of the Run Coordinator or designee.
- [9] Inform the escort of any hazards posted on the DØ Status Board.
- [10] Issue a "tour group" pocket dosimeter and card to the escort.

NOTE *Visitors are not required to wear TLD badges unless the potential dose is expected to be greater than 10 mrem for the duration of the tour.*

- [11] Issue a supervised access key to the tour group escort and instruct the escort to complete the key sign-out log with the required information, including the names of the visitors. Log the SA key into the keylogger database under the ID of the tour group escort.

NOTE *One supervised access key is issued per visitor group, held by the escort.*

- [12] Retrieve the key from the escort at the end of the visit, enter any required information on the key sign-out log sheet, and log the key back into the key logger database.

Visitor Escorts

- [1] Conduct the visit to the Collision Hall.
- [2] Record the dose received during the tour as measured on the tour group pocket dosimeter. Complete the dosimeter card after the tour and place it in the pocket dosimeter card folder near the shift captain's console. Include each visitor's name and ID/SSN on the card.
- [3] Check any items removed from the Collision Hall for contamination and radioactivity, if they could have been present during beam transport.
- [4] Retrieve any temporary TLD badges worn by the visitors and submit them for processing.
- [5] Return the supervised access key to the Shift Captain and enter the time returned on the key sign-out log sheet.

5 REFERENCES

- A. DØ status board
- B. Training database
- C. Dosimeter and temporary TLD badge cards
- D. DØ key sign-out log
- E. Radiation survey map

6 APPENDICES

None