

CDF Controlled Access Procedure

(this is a Safety Procedure)

This procedure details the steps to be followed in a Controlled Access into the CDF Collision Hall during Collider Runs.

Editorial Hand-Processed Changes Other Than Spelling Require CDF Operations Co-Heads Approval

HPC Number Date Section Number Initials

1. 1. Title page hand changes initialed by PS (3/25/2008)
2. 2.
3. 3.
4. 4.
5. 5.
6. 6.
7. 7.
8. 8.
9. 9.

Approvals:

CDF Operations Head _____ Date

Accelerator Division RSO _____ Date

1.0 Controlled Copies of this procedure

Four controlled copies of this (CDF-II – 8) procedure will exist.

One will be held in the CDF Operations Office Library.

One will be in the CDF Control Room.

One will be in the MCR.

The other will be on the CDF web page at

<http://www-cdf.fnal.gov/htbin/cdfproc/listProc>.

All other copies will be marked "INFORMATIONAL COPY ONLY."

2.0 The Controlled Access Procedure

The CDF Operations Manager or Safety Coordinator is responsible for proper execution of this procedure.

NOTE: A "Work Party" consists of a minimum of two people.

NOTE: CDF is limited to a total of 12 individuals in the Collision Hall during a Controlled Access. (One key must be left in the Key Tree for emergency access.)

NOTE: All individuals in working parties should have current Radiological Worker Training, LOTO I or II or Electrical Safety Orientation, CDF Supervised Access Training and Controlled Access Training. Visitors or untrained personnel may be escorted according to the rules in the Fermilab Controlled Access Handout.

NOTE: The general policy is that a Controlled Access should be "short". If more than 4 hours of access are anticipated, the CDF Operations Manager should contact the AD Run Coordinator for approval to secure a "Supervised Access."

The procedure steps begin on the next page.

1. The CDF Operations Manager must secure approval for the access from AD Run Coordinator.
 2. The CDF Operations Manager must approve all work parties and tasks.
 3. The CDF Operations Manager or Safety Coordinator must provide the MCR with a list of all individuals who will be making the Controlled Access.
 4. The Operations Manager or Safety Coordinator must confirm the start of the Controlled Access with the MCR.
 5. The CDF Operations Manager must decide if the Solenoid is to be turned off during the access. If the Solenoid is to be turned off, the Operations Manager must inform the Process Systems Tech. The Process Systems Tech will then power down the Solenoid. When the Solenoid is powered down, the Process Systems Tech will notify the Operations Manager.
 6. The Operations Manager or Safety Coordinator will ask the Process Systems Tech to turn the four recirculation fans in the Collision Hall to low.
 7. Work parties must report to the CDF Control Room. The Operations Manager or Safety Coordinator must
- check the Controlled Access Training status of all individuals who will be making the Controlled Access;
- check out an LSM to each work party;
- check that each individual has a dosimetry badge;
- caution each work party to follow all AD procedures for a controlled access;**

remind the work parties that they are responsible for

- a. the required beam off radiation survey in the area where their party is working,
- b. the proper observation of all safety regulations,
- c. informing their work party of the power state and associated magnetic hazards of the Solenoid,
- d. leaving the enclosure using the normal controlled access procedure and informing the MCR and CDF Operations Manager or the CDF Safety Coordinator if exposure rates exceeding 20 mR per hour are encountered during an access,
- e. checking items removed from the collision hall for radioactivity,
- f. frisking themselves upon leaving the collision hall;

and that the following are **NOT** permitted without an approved Radiation Work Permit for

- cutting, grinding, or welding
- work on beam line magnet interfaces or beam pipes
- work in posted contamination areas or high radiation areas.

8. Work parties proceed to the Controlled Access Key Tree and call MCR. A key is issued to each person making an access.
9. When work is completed, each individual returns his/her key to the Key Tree.
10. Work parties return to the CDF Control Room to return the LSM and to report the status of their work.
11. Repeat steps 7 through 10 as required for each additional work party.
12. When the last work party is finished, the Operations Manger checks to see if the Solenoid can be powered. If it can, he/she contacts the Process Systems Tech to power the Solenoid.
13. The Operations Manager or Safety Coordinator asks the Process Systems Tech to turn the recirculation fans in the Collision Hall to full.
14. The Operations Manager or Safety Coordinator contact the MCR to confirm the CDF Collision Hall Access is complete.

3.0 Checklists

No Checklist is required.

INFORMATIONAL COPY ONLY

4.0 Deviations

Minor deviations that do not effect safety are allowed with the approval of the CDF Operations Co-Heads.

4.1 Departure from Proper Procedure

If there is a departure from the controlled access procedure during the access (for example, someone has entered the collision hall without a key), THEN the CDF Operations Manager or CDF Safety Coordinator must

- a. drop the collision hall interlocks by opening the controlled access door,
- b. inform the following people:
 - Particle Physics Division Radiation Safety Officer
 - AD Radiation Safety Officer
 - Main Control Room Crew Chief,
- c. prepare a written account of the situation, and
- d. await instructions from the AD RSO.

NOTE: The AD RSO will discuss the situation with the AD and PPD Heads.

5.0 Required Training and Authorized Training Personnel

Prerequisite Training

All Controlled Access personnel must have

- a. Radiological Worker Safety Training,
- b. CDF Supervised Access Training,
- c. LOTO I or LOTO II Training or Electrical Safety Orientation, and
- d. Fermilab Controlled Access Training.

LIST OF AUTHORIZED INSTRUCTORS FOR CDF CONTROLLED ACCESS

This list will reside in the CDF Operations Group Library.

8.0 References and Supporting Documentation.

Fermilab Controlled Access Handout
Fermilab Controlled Access Video Course FN000311
Fermilab Controlled Access Quiz

INFORMATIONAL COPY ONLY