

**NATIONAL HIGH MAGNETIC
FIELD LABORATORY**

NHMFL

FLORIDA STATE UNIVERSITY

SAFETY PROCEDURE

SP-2

TITLE: SAFETY CLEARANCE ADMINISTRATIVE DOCUMENTS

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**NHMFL
FLORIDA STATE UNIVERSITY
SAFETY PROCEDURE
OPSPRO SP-2**

1.0 PURPOSE

- 1.1 To properly implement a safety clearance, several administrative documents must be completed. These documents are the Safety Clearance Sheet, Safety Clearance, Summary Index, Letter of Transfer, Master Boundary Danger Tag, and utilized Danger Tags.
- 1.2 A "Clearance Sheet" will be used when issuing all clearances. This sheet carries with it a statement of the status of the equipment at the time of its issue and is a guarantee that this status will not be changed in any way without obtaining a clearance release from the clearance holder.
- 1.3 A "Safety Clearance Summary Index Sheet" will be generated to serve as an operator summary listing of active NHMFL safety clearances.
- 1.4 A "Letter of Transfer" will be generated, as required, to document the shift of maintenance safety clearance responsibility from a requester to another individual.
- 1.5 A "Master Danger Tag", possessing a unique serial number, will be placed on the major safety clearance isolation boundary for each job task to be completed. This tag represents the primary safety hazard found at the worksite. Additional "secondary" safety isolation boundary points will be affixed with standard danger tags.

2.0 SCOPE

These safety clearance administrative documents will be used in conjunction with the Safety Clearance Procedure SP-1.

3.0 CLEARANCE SHEET

- 3.1 The Clearance Sheet will include:
 - 3.1.1 Equipment and system isolation points of the clearance (breakers, valves, disconnect switches, fuses, etc.).
 - 3.1.2 Corresponding position of isolation points (open, closed, racked to disconnect, racked out, etc.)
 - 3.1.3 Corresponding switching tag number when applicable.

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- 3.1.4 Initials of the operator when the boundary tag is placed on or removed from the isolation points.
- 3.1.5 Description of all jobs being worked under the clearance.
- 3.2 All clearances will be issued and released by the Operations Supervisor or delegated authority.
- 3.3 Issuing Authority
 - 3.3.1 All references to Operations Supervisor shall mean Head of Magnet Operations or his designated representative. Designated representative shall be the Senior Control Room Operators.
 - 3.3.2 Issuing Authority shall be the Operations Supervisor or designated representative. The Issuing Authority shall have the ultimate responsibility for issuing safe clearance for systems and components within his jurisdiction.
- 3.4 All clearances will be issued only to authorized NHMFL personnel. In the case of outside contractors, the clearance will be issued to, by name, the NHMFL personnel in charge of the work.
 - 3.4.1 In cases of other outside contractors requesting that a clearance be issued to their supervisor or worker, another job will be entered on the clearance sheet in the contractor's name and a stub will be issued to him. This is in addition to the original job under the NHMFL persons name.
 - 3.4.2 The only exception is for COT personnel working on the transmission line. In this case a clearance may be issued directly to the COT supervisor in charge of the work.
- 3.5 All equipment will be considered operational unless properly tagged and a clearance issued which isolates that equipment or system or uses that equipment as an isolation point.
- 3.6 Boundary tags will be made out for the person requesting a clearance by the Issuing Authority. These tags will be hung on all isolation points as listed on the "Clearance Sheet".
- 3.7 All active "Clearance Sheets" shall be placed in the active Clearance Log Book, which will reside in the control room.
- 3.8 At the time of the safety clearance issue; the equipment being cleared, the clearance sheet number, and the name of the clearance holder (Requester) shall be entered in the station log book.
- 3.9 The clearance sheet number will be added onto the clearance tags that are associated with that clearance.
- 3.10 If personal grounds are included in the clearance the Personal Grounds Procedure SP-11 will be used and the Personal Grounds Checklist will be stapled to the clearance sheet. The use of personal grounds will be stated in the special conditions/remarks section of the clearance sheet.

4.0 ISSUING CLEARANCES

- 4.1 Operations Supervisor or delegate will generate clearance sheets per section 5.0 of this procedure.
- 4.2 Additional jobs may be worked under the same clearance sheet if boundaries are similar.
- 4.3 Boundaries may not be changed for a job once the clearance is issued. The job may be reentered on the clearance sheet as another job description with new boundaries and reissued. The old job may be released and tags not being used by any other job on the clearance sheet may be removed.
- 4.4 When the Control Room Operator signs "issued by" this signifies that boundary tags have been hung, equipment and systems have been realigned per the clearance sheet, and work is safe to begin.
- 4.5 When the Requester signs "accepted by" this signifies that the equipment has been properly cleared, an independent verification of isolation points has been completed by the Requester, and that clearance boundaries isolate all points of danger.
 - 4.5.1 Clearance boundaries will be listed on the back of a master boundary tag stub and on the clearance sheet.
 - 4.5.2 A clearance stub will be issued for each job being worked on under a clearance and an additional master boundary tag will be hung. Each Master Boundary Tag serial number will be documented on the Safety Clearance Sheet.
- 4.6 Once a Safety Clearance becomes active, the Control Room Operator will transcribe pertinent information from the Clearance Sheet to the Safety Clearance Summary Index Sheet in accordance with section 8.0 below.
- 4.7 After a Safety Clearance has been issued to a Requester, the Safety Clearance cannot be authorized for release by another individual unless the Requester who accepted the Safety Clearance has transferred responsibility to another individual. This transfer of Safety Clearance responsibility will be based on completing the Letter of Transfer form in accordance with section 9.0 below.

5.0 RELEASING CLEARANCES

- 5.1 It shall be the duty of each person holding a clearance to release his clearance as soon as his work is completed.
- 5.2 When a job is released after it has been reported clear, each clearance tag must be released and removed by the Issuing Authority. No tags may be released that are part of the common boundaries on any outstanding jobs being worked on under the clearance.
- 5.3 The issuing authority determines required position of tagged component upon boundary tag release and removal.

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- 5.4 The operator who removes the boundary tag will reposition the equipment to the required position and initial the clearance sheet signifying such. No tags may be removed unless the Operations Supervisor or the delegated authority signs the "Authorized for Release" block on the Clearance Sheet.
- 5.5 The released "Clearance Sheet" will be placed in the inactive station clearance sheet binder and kept 30 days. After thirty days have elapsed, the inactive clearances will be forwarded to the NHMFL library custodian.
- 5.6 If a clearance sheet remains active and exceeds a 30 day period, it will be brought to the attention of the clearance holder for a status update.
- 5.7 Once a Safety Clearance becomes inactive, the Control Room Operator will close out the Clearance Sheet entry on the Safety Clearance Summary Index Sheet in accordance with section 8.0 below.

6.0 CLEARANCE SHEET NUMBERING

- 6.1 For clearance numbering, the first two digits of the clearance sheet number are the numbers of the year the clearance is issued on.
- 6.2 The next digits of the station clearance sheet number are the numbers of the clearances issued in that year, listed in chronological order.
- 6.3 The clearance sheet number will also be written on the master boundary tag, the master boundary tag stub, and all other boundary tags for referencing.

7.0 PROCEDURE FOR COMPLETING THE CLEARANCE SHEET

Refer to page 9 for the following listed items.

7.1 Item A; Equipment

Enter the noun name of the equipment or system to be cleared.

7.2 Item B; Safety Clearance Number

Enter the safety clearance number as described in section 6.0.

7.3 Item C; Reason for Clearance

Enter a brief description of the work to be done, include all jobs to be performed under this clearance. Include procedure and work request numbers if applicable.

7.4 Item D; Special Conditions or Remarks

Enter other safety considerations for example, restrictions for entering confined spaces, orders for ensuring venting and draining of vessels or piping, toxic or combustible gas free engineering requirements, monitoring requirements and switching log numbers for any switching involved with a clearance.

7.5 Item E; Job Description

Enter component name and brief description of work for specific job.

7.6 Item F; Master Danger Tag Serial Number

Enter the job's master tag serial number on the clearance sheet.

7.7 Item G; Boundary Tag Numbers

List in sequential order all isolation boundaries for the clearance. Number all boundary tags with the Clearance number preceding the boundary tag number.

ex: 1 through 23 or
1-23 or
1-15,17-23, etc.

7.8 Items H, I, & J; Safety Clearance Issuance

H: Enter the date and time the clearance was issued.

I: The Operations Supervisor or delegated authority will sign the "issued by" block. This activates the safety clearance.

J: The Requester will sign the "accepted by" block after verifying that the isolation boundaries are proper for the job to be performed.

7.9 Items K, L, & M; Safety Clearance Release

K: The Requester will sign the "Released By" block once the job task has been completed.

L: The Operations Supervisor or designated representative will release the clearance by signing the "Authorized For Release" block.

M: The Operations Supervisor or designated representative will enter the date and time that the safety clearance was released.

7.10 Item N, O, P, & Q; Danger Tag Issuance

N: Enter the Danger Tag number, in sequential order, for each tag that will be hung.

O: Identify the item that will be tagged and describe it's location.

P: Enter the required clearance position. Open, shut, racked to disconnect, racked out, locked open, etc.

Q: The operator hanging the tag(s) will initial the clearance sheet once equipment positioning and tagging requirements are completed.

7.11 Item R, S, & T; Danger Tag Release

- R:** The Operations Supervisor or delegate will enter the clearance release position for the equipment which will be untagged.
- S:** The Operations Supervisor or delegate will sign the "Authorized to Release" block, signifying that the danger tag can be removed from the equipment.
- T:** The operator removing the tag(s) will initial the clearance sheet once equipment untagging and positioning requirements are completed.

8.0 PROCEDURE FOR COMPLETING THE SAFETY CLEARANCE SUMMARY INDEX

Refer to page 11 for the following listed items.

8.1 Item A, B, & C; Documenting an active clearance

- A:** Transcribe the clearance sheet serial number to this block.
- B:** Identify the equipment tagged per the associated clearance sheet serial number.
- C:** Record the time and date that the safety clearance became active.

8.2 Item D; Releasing a clearance

Record the time and date that the safety clearance was released.

9.0 PROCEDURE FOR COMPLETING THE LETTER OF TRANSFER

Refer to page 12 for the following listed items.

9.1 Item A; Clearance Number

Record the clearance number associated with the job that will transfer safety clearance responsibility to another individual.

9.2 Item B, C, & D; Relinquishing Requester

- B:** Record the name of the Requester who is transferring safety clearance responsibility.
- C:** Record the date that safety clearance responsibility was transferred to another individual.
- D:** Record the time that the safety clearance responsibility was transferred to another individual.

9.3 Item E, F, & G; Accepting Safety Clearance Responsibility

- E:** Record the name of the individual accepting responsibility for the safety clearance.

F: Record the date that the safety clearance responsibility was accepted.

G: Record the time that the safety clearance responsibility was accepted.

9.4 Item H; Job Description

Identify the job task related with the safety clearance responsibility transfer in this block.

10.0 PROCEDURE FOR COMPLETING DANGER TAGS

10.1 Master Danger Tags

On the front of the danger tag, the following information will be recorded on the tag and stub:

- A.** The safety clearance number as XXX-YYZZ

Where: XXX codes are as follows:

OPS (Operations)
GSA (General Science Building 'A')
GSB (General Science Building 'B')
GSC (General Science Building 'C')
NMR (Nuclear Magnetic Resonance Bldg.)

YY code represents the last two digit's of the year.

ZZ code represents safety clearance numerical sequence.

- B.** The signature of the individual hanging the tag on the equipment.
The tag is signed after it is hung on the equipment.
- C.** The date and time that the tag is hung on equipment.

On the rear of the danger tag, the following information will be recorded:

- A.** The nomenclature of the equipment which this tag will be hung on.
- B.** The physical position of the equipment at the time the tag is hung.
- C.** On the stub, the job's safety clearance number and isolation boundaries will be recorded. After the tags are hung, the Requester will obtain the Clearance Stub from the Control Room Operator and verify that the tagout is correct for the work to be performed. The Requester will keep the Clearance Stub in his possession while the job is in progress.

10.2 Boundary Danger Tags

On the front of the danger tag, the following information will be recorded:

- A.** The safety clearance number as XXX-YYZZ

Where: XXX codes are as follows:

OPS (Operations)
GSA (General Science Building 'A')
GSB (General Science Building 'B')
GSC (General Science Building 'C')
NMR (Nuclear Magnetic Resonance Bldg.)

YY code represents the last two digit's of the year.

ZZ code represents safety clearance numerical sequence

- B.** The nomenclature of the equipment which this tag will be hung on.
- C.** The physical position of the equipment at the time the tag is hung.
- D.** The signature of the individual hanging the tag on the equipment.
The tag is signed after it is hung on the equipment.
- E.** The date and time that the tag is hung on equipment.

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CLEARANCE SHEET
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SAFETY CLEARANCE NUMBER: B

EQUIPMENT: A

REASON FOR CLEARANCE: C

SPECIAL CONDITIONS OR REMARKS:
 D

	JOB DESCRIPTIONS	MASTER TAG NUM
1.	<u> E </u>	<u> F </u>
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

JOB	BOUNDARY TAG #'S	DATE/TIME ISSUED	ISSUED BY	ACCEPTED BY	RELEASED BY	AUTHORIZED FOR RELEASE	DATE RELEASED
1.	G	H	I	J	K	L	M
2.							
3.							
4.							
5.							

TAG #	BOUNDARY TAG LOCATION	POSITION	HUNG BY (INT.)	POSITION UPON REMOVAL	AUTHORIZED FOR RELEASE	REMOVED BY (INT.)
N	O	P	Q	R	S	

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LETTER OF TRANSFER
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CLEARANCE NUMBER: A

TRANSFERRED FROM	DATE	TIME	ACCEPTED BY	DATE	TIME	JOB DESCRIPTION
B	C	D	E	F	G	H

TRANSFERRED FROM	DATE	TIME	ACCEPTED BY	DATE	TIME	JOB DESCRIPTION

TRANSFERRED FROM	DATE	TIME	ACCEPTED BY	DATE	TIME	JOB DESCRIPTION

TRANSFERRED FROM	DATE	TIME	ACCEPTED BY	DATE	TIME	JOB DESCRIPTION

TRANSFERRED FROM	DATE	TIME	ACCEPTED BY	DATE	TIME	JOB DESCRIPTION

TRANSFERRED FROM	DATE	TIME	ACCEPTED BY	DATE	TIME	JOB DESCRIPTION

TRANSFERRED FROM	DATE	TIME	ACCEPTED BY	DATE	TIME	JOB DESCRIPTION