

Operational Safety Procedure Form

(See [ES&H Manual Chapter 3310 Appendix T1 Operational Safety Procedure \(OSP\) and Temporary OSP Procedure](#) for instructions.)

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For Word Doc

Title:	Safe Operation of the Super Big Bite Power Supply		
Location:	Hall A	Type:	<input checked="" type="checkbox"/> OSP <input type="checkbox"/> TOSP
Risk Classification (per Task Hazard Analysis attached) (See ESH&Q Manual Chapter 3210 Appendix T3 Risk Code Assignment.)		Highest Risk Code Before Mitigation	3
		Highest Risk Code after Mitigation (N, 1, or 2):	N
Owning Organization:	Physics	Date:	01/14/2019
Document Owner(s):	Jack Segal		

DEFINE THE SCOPE OF WORK

1. Purpose of the Procedure – Describe in detail the reason for the procedure (what is being done and why).

The intent of this procedure is to provide instruction for authorized personnel to safely operate, service, and troubleshoot the Super Big Bite Power supply.

2. Scope – include all operations, people, and/or areas that the procedure will affect.

The use and safe operation of the Super Big Bite power supply to provide power for the Septum magnets.

3. Description of the Facility – include building, floor plans and layout of the experiment or operation.

Water cooled 2200 amp, 290 volt DC power supply.
Will be remotely controlled using existing software.

ANALYZE THE HAZARDS and IMPLEMENT CONTROLS

4. Hazards identified on written Task Hazard Analysis

See accompanying THA

5. Authority and Responsibility:

5.1 Who has authority to implement/terminate

Jack Segal
Ethan Becker
Joe Beaufait
Heidi Fansler
Jessie Butler

5.2 Who is responsible for key tasks

Jack Segal

Ethan Becker
Joe Beaufait

5.3 Who analyzes the special or unusual hazards including elevated work, chemicals, gases, fire or sparks (See [ES&H Manual Chapter 3210 Appendix T1 Work Planning, Control, and Authorization Procedure](#))

Jack Segal
Jessie Butler

6. Personal and Environmental Hazard Controls Including:

6.1 Shielding

None

6.2 Barriers (magnetic, hearing, elevated or crane work, etc.)

None

6.3 Interlocks

The Super Big Bite power supply faults will be interlocked back to EESSAF to prevent beam steering problems.

6.4 Monitoring systems

Once the Super Big Bite power supply has been enabled the power supply can be controlled and monitored locally; or remotely with the MEDM GUI.

6.5 Ventilation

- LCW (Low Conductivity Water)
- Free Air (fans integral to the power supplies)

6.6 Other (Electrical, ODH, Trip, Ladder) (Attach related Temporary Work Permits or Safety Reviews as appropriate.)

7. List of Safety Equipment:

7.1 List of Safety Equipment:

- Locks and Tags
- Safety Glasses
- VOM Meter
- Necessary Arc Flash attire

7.2 Special Tools:

8. Associated Administrative Controls

Log all work done in the Hall A online log, the halog webpage

9. Training

9.1 What are the Training Requirements (See [List of Training Skills](#))

To work on or about the power supply, one needs to have the necessary training to be an Electrical Worker

- Lock Tag and Try (SAF104).
- Electrical Safety (SAF603A, SAF603N1, SAF603N2).

- Fire Prevention (SAF108).

DEVELOP THE PROCEDURE

10. Operating Guidelines

Power supply should be operated within manufacturer's guidelines and agreed upon limits set for experiment.

11. Notification of Affected Personnel (who, how, and when include building manager, safety warden, and area coordinator)

Use the Hall A Tech on Call procedure.

12. List the Steps Required to Execute the Procedure: from start to finish.

See accompanying THA

13. Back Out Procedure(s) i.e. steps necessary to restore the equipment/area to a safe level.

Power down and turn off the power supply. Lock and tag out main power if authorized to do so.

14. Special environmental control requirements:

14.1 List materials, chemicals, gasses that could impact the environment (ensure these are considered when choosing Subject Mater Experts) and explore [EMP-04 Project/Activity/Experiment Environmental Review](#) below

None

14.2 Environmental impacts (See [EMP-04 Project/Activity/Experiment Environmental Review](#))

None

14.3 Abatement steps (secondary containment or special packaging requirements)

None

15. Unusual/Emergency Procedures (e.g., loss of power, spills, fire, etc.)

None

16. Instrument Calibration Requirements (e.g., safety system/device recertification, RF probe calibration)

None

17. Inspection Schedules

None

18. References/Associated/Relevant Documentation

Equipment Manuals:

https://hallaweb.jlab.org/tech/Detectors/public_html/magnets/super_big_bite/

19. List of Records Generated (Include Location / Review and Approved procedure)

None

Submit Procedure for Review and Approval (See [ES&H Manual Chapter 3310 Appendix T1 OSP & TOSP Instructions – Section 4.2 Submit Draft Procedure for Initial Review](#)):

- Convert this document to .pdf
- Open electronic cover sheet:

https://mis.jlab.org/mis/apps/mis_forms/operational_safety_procedure_form.cfm

- Complete the form
- Upload the pdf document and associated Task Hazard Analysis (also in .pdf format)

Distribution: Copies to Affected Area, Authors, Division Safety Officer

Expiration: Forward to ESH&Q Document Control

Form Revision Summary

Revision 1.5 – 04/11/18 – Training section moved from section 5 Authority and Responsibility to section 9 Training

Revision 1.4 – 06/20/16 – Repositioned “Scope of Work” to clarify processes

Qualifying Periodic Review – 02/19/14 – No substantive changes required

Revision 1.3 – 11/27/13 – Added “Owning Organization” to more accurately reflect laboratory operations.

Revision 1.2 – 09/15/12 – Update form to conform to electronic review.

Revision 1.1 – 04/03/12 – Risk Code 0 switched to N to be consistent with [3210 T3 Risk Code Assignment](#).

Revision 1.0 – 12/01/11 – Added reasoning for OSP to aid in appropriate review determination.

Revision 0.0 – 10/05/09 – Updated to reflect current laboratory operations

ISSUING AUTHORITY	FORM TECHNICAL POINT-OF-CONTACT	APPROVAL DATE	REVIEW DATE	REV.
ESH&Q Division	Harry Fanning	04/11/18	04/11/21	1.5

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