

NATIONAL UNIVERSITY OF SINGAPORE

Doc no: CIBA/RA/Eq/001		Experiment - Based Risk Assessment Form			
Name of Department	PHYSICS	Location of Lab	S7-01-01		
Name of Laboratory	CIBA	Name of PI	Prof Frank Watt		
Name of Researcher/LO	Choo Theam Fook/Armin Baysic de Vera	Name of Activity/Experiment	Maintenance of High Voltage Accelerator		

No	Description/Details of Steps in Activity	Hazards	Possible Accident / Ill Health & Persons-at-Risk	Existing Risk Control (Mitigation)	Severity	Likelihood (Probability)	Risk Level	Additional Risk Control	Person Responsible	By (Date)
1	Opening of tank	SF6 gas	1. Too much SF6 left in the tank when opened would fill the room with gas is undesirable.	The SF6 is pumped out from the tank down to at least 0.2 mbar before opening.	1	1	1			
2	Maintenance work inside the tank	1. High voltage of > 500 volts inside terminal.	1. Electrocutation	Use insulating gloves when working on the terminal.	3	1	3	1. Always have a partner in the operation.	Choo Theam Fook	on going
3		2. Radio frequency supply from the source	2. Painful and deep seated burns on the skin.	2. Worker must get out of the tank before this operation can be carried out.			0			
4							0			
5	Powering up the terminal.	1. Electric shock.	Electric shock and injury by runing motor.	1. To prevent build up of charges the terminal is earthed and to prevent physical injury the worker must be out of the tank before starting motor.	2	1	2			
6	Closing of tank.	Physical injuries.	Crushed hand or feet.	The closing of the tank must be done with at least six people with one over seeing the operation.	2	1	2			
7							0			
8							0			
9							0			
10							0			

Conducted By Choo Theam Fook

Approved By
 Name Prof Frank Watt
 Signature _____
 Approval date 12-Apr-10

Next Revision date 12-Apr-13
 (Maximum 3 years)