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EMI GUIDELINES

Summary Date: Jan 22nd, 2020 **Survey Date:** Jan 17th, 2020 **ATTN:** Safety Supervisor

Survey Address: 1 Safer Environment San Antonio, TX **Notes:** Reference: St. Jude EMI Specifications for SCS Devices p. 92 - 93
Table of Maximum Allowable Field Strengths shown below to be used in conjunction with all other manufacturer guidelines

EMI Field Source of Interest (EXAMPLE PLACEHOLDERS ONLY)	Distance to Field Intensity Limit (DFIL)	Field Type of Interest	Measured MAX
Tensor Tools	6"	60 Hz AC Magnetic	2 Gauss + AC
Cordless Electric Tools (Milwaukee Drill) - remarked on in Test Area 15 but can be found in many other places	6"	60 Hz AC Magnetic	2 Gauss + AC
Brake Fluid Tester - NEA (Not Easily Accessible) due to setback from edge of support table located in Test Area 16	3"	60 Hz AC Magnetic	298 mG AC
PDP (Power Distribution Panel) 24 V Lafert Motors located in Test Area 22 Pitch 20	6"	60 Hz AC Magnetic	1.5 Gauss + AC
Cooling Fans (NEA due to typical installation at 7' height)	3"	60 Hz AC Magnetic	2 Gauss + AC
All ENERGIZED transformers, electric motors / pumps and MCC electrical power panels unless they are considered NEA (Not Easily Accessible) by height or setback	6" - 1' +	60 Hz AC Magnetic	Not found in areas of test but for employee to be aware of
Motorola 2-Way Radios (Radio Frequency Energy)	Wear on hip opposite IPG implant area	RF (Radio Frequency)	By manufacturer definition / not levels
Microwave Ovens	Keep implant area 2" from door while running	RF (Radio Frequency)	30 V / m

Power frequency (50/60 Hz) magnetic field IEC 61000-4-8 377 mG Converted from 30 A/m as given in the User' manual

Radiated RF IEC 61000-4-3 10 V/m 80 MHz to 2.7 GHz 10 V/m

Spoke with Abbott representative about lack of DC magnetic field specs - this unit is designed for CONDITIONAL MRI use which has fields of 1.5 T. (or 15,000 Gauss) Consequences of exceeding field limits are relatively minor in properly functioning implants - normally at the worst they will automatically shut themselves off and can normally be restarted by the employee using a remote control. Sudden electric shocks due to EMI interference are reportedly very rare and a search in the MAUDE database did not reveal any EMI Interference or shock incidents reported at this time.