JOB HAZARD ANALYSIS

Reference:
Work Order #_____ Work Permit #_____ Work Planning #_____ Procedure #_____ Other_____

Written by *(Print)*:_____ *Date:*_____ *Division/Branch/Org:*_____

Description of job/work to be performed:

Location of job/work to be performed:

Hazard (Check-off and **Describe** the source of the hazard)	**Control Measures** (Write # of Control(s) in Box)	**See Back**
☐ Chemicals	☐ MSDS's Available ☐ Training Provided	
☐ Ergonomic Issues (Repetitive Motion, Lifting, Physical Stresses, etc.)	☐ Contact IH for briefing	
☐ Ionizing Radiation *[Health Physics-HP]*	☐ Radiation Work Permit (RWP)	
☐ Non-Ionizing Radiation (Lasers, Magnetic Fields (EMF), RF, etc.)	☐ Contact IH for high power lasers/EMF/RF ☐ Laser Safety Training	
☐ Environmental Impacts (Environmental Release, Hazardous Wastes, etc.) *[M&ES]*	☐ Contact M&ES for guidance	
☐ Noise	☐ Hearing Protection	
☐ Sharp objects/tools		
☐ Walking / Working Surfaces (Slips, Trips, Falls)		
☐ Falls / Elevated Work (6' above surface)	☐ Fall Protection Training	
☐ Ladders / scaffolds / manlifts	☐ Inspection ☐ Training	
☐ Cranes / rigging / Forklifts	☐ Trained/Qualified Personnel	
☐ Welding / cutting / grinding / open flame	☐ Hot Work Permit *[ESU]*	
☐ Impairing a Security / Fire System *[ESU]*	☐ Contact Security	
☐ Hot Surfaces / Cryogenics	☐ Cryogenic Training	
☐ Heat or Cold Stress		
☐ Steam		
☐ Electrical [h] *[Electrical Safety]*	☐ Lockout/Tagout ☐ Arc Flash Analysis [h] ☐ GFCI ☐ Trained Personnel	
☐ Confined Space / Oxygen Deficiency	☐ Confined Space Permit	
☐ Machinery / Machine tools	☐ Machine Guards ☐ Chip Guards	
☐ Hand Tools / Power Tools	☐ GFCI	
☐ Eye Hazards	☐ Safety Glasses ☐ Goggles	
☐ Falling Objects	☐ Hard Hats	
☐ Potential / Stored Energy (Springs, instability, capacitors, batteries, fans, hydraulics)		
☐ Foot Hazard	☐ Safety Shoes	
☐ Trenching / Digging	☐ Digging Permit	
☐ Wall / Floor Penetrations	☐ Penetration Permit	

For questions about these topics, contact Industrial Hygiene (IH) except where noted in *[brackets]*.
IH = 2533, 2531, %546, 639. HP = 2311, 2315. M&ES = 3380. ESU/Security = 2536, Electrical Safety = 3740

☐ Access / Escape / Communications Concerns	
☐ Biological (Bodily fluids, Insects, Poison plants)	
☐ Vehicle Use / Fuel / Exhaust	
☐ Illumination (inadequate lighting)	
☐ Working Alone (Requires IH Approval)	☐ IH Must Review/Approve ☐ Contact Security
☐ Pressure / Vacuum (cylinders, pressure tests)	☐ Compressed Gas Training
☐ Others:	

Comments:

Control Measures (Write the number of the appropriate control next to the hazard to which it applies)

Engineering Controls	*Administrative Controls*	*Personal Protective Equipment (PPE)*	
01 - Platforms, Scaffolds	**12** - Procedures	**23** - Hard Hats	**29** Safety Glasses/Goggles
02 - Use less hazardous chemicals	**13** - Specific training for job/location	**24** - Face Shields	**30** - Coveralls
03 - Machine Guards, Chip Guards	**14** - Worker Rotation, Rest Breaks	**25** - Safety Shoes	**31** - Boots / Booties
04 - Ventilation (fume hoods, elephant trunks, local exhaust systems)	**15** - Permits (Confined Space, RWP, Hot Work, Digging, Penetrations, Flame)	**26** - Ear Plugs/ Muffs	**32** - Gloves (leather, kevlar, neoprene, nitrile, voltage rated)
05 - Fall Protection (Guardrails, toe boards)	**16** - Signs & Labels, Warning alarms ("high level")	**27** - Respirator / Dust Mask	**33** - Full Body Harness & lanyards
06 - Engineered Equipment Design	**17** - System or Job Walk down	**28** - Lab Coat / Apron	**34** - Flame retardant / flash resistant clothing
		35 – Electrically insulated Mat / Tools	
07 - Noise enclosure, absorption, mufflers	**18** - Safety watch, Buddy System	*Emergency Equipment:*	
08 - Vibration dampeners	**19** - Lockout/Tagout	**36** - Fire Extinguishers	**40** - Retrieval Gear.
09 - Temporary lights	**20** - Spill Containment	**37** - Telephones/Radios	**41** - First Aid Equip,
10 - Welding Screens	**21** - Barricades	**38** - Sprinkler System	**42** - Alarms
11 - Mechanical lifting aids	**22** - Training / Qualification / Certification	**39** - Eye Washes & Safety Showers	

Human Performance Tools for an Enhanced Pre-Job Brief:
Situational Awareness – Job Site Review – Questioning Attitude – Stop When Unsure – Effective Communication

Task Review using SAFER
Summarize Critical Steps - Anticipate Errors - Foresee Consequences - Evaluate Controls - Review Previous Experience

Human Performance Tools During Work:
Self-Checking – Peer Checking – Flagging – Independent Verification

Identify and eliminate or mitigate Error Precursors:

Task Demands	**Work Environment**	**Individual Capabilities**	**Human Nature**
Time Pressure	Distractions/Interruptions	Unfamiliarity with Task / First Time	Stress
High Workload	Changes / Departure from Routine	Lack of Knowledge	Habit Patterns
Simultaneous, Multiple Tasks	Confusing Displays or Controls	New Technique not used before	Assumptions
Repetitive monotonous actions	Workarounds / OOS Instruments	Imprecise Communication Habits	Complacency / Overconfidence
Irrecoverable Acts	Hidden System Response	Lack of Proficiency / Inexperience	Mindset (tuned to see)
Interpretation Requirement	Unexpected Equipment Conditions	Indistinct Problem-Solving Skills	Inaccurate risk perception
Unclear Goals, Roles, Responsibilities	Lack of Alternative Indication	"Hazardous" Attitude for Critical Task	Mental Shortcuts
Lack or Unclear Standards	Personality Conflicts	Illness/Fatigue	Limited Short-Term Memory

☐ **Industrial Hygiene Review Required | IH Signature:** _____ **Date** _____

☐ **Other Review Required | Who?** _____ **Signature:** _____ **Date** _____

☐ **Cog. Individual or RLM Approval Required | Signature:** _____ **Date:** _____

Personnel Briefed on this JHA (print): _____   _____   _____

_____   _____   _____   _____

_____   _____   _____   _____

_____   _____   _____   _____

SEND Original or Copy to: Industrial Hygiene (Required)