Section - 4 - EHS practices

Sr. No. 4.

Hazard Identification, Risk Assessment And Risk Control Register (HIRA)

Maintenance

Activity	Sub-Activities	E	R / NR	Hazard	Risk	Present control	Legal	Probability	Consequence	Resultant	Risk level	Sig. Hira No.	Priority No.	Objective No.	Additional Controls – Operational Control: E	S	EC	W	P	OCP No	MP No
	Air filter cleaning /Replacement by air		NR	Bur / dust may enter in the eye	Eye injury / Irritation	OCP		2	2	4	M										
				Dust formation in atmosphere	Eye injury / Irritation	OCP		2	2	4	M										
				Air pipe may hit during cleaning	Body injury	OCP		1	2	2	L										
Compressor Operation & Maintenance	Oil filter / Oil seperator Replacement		NR	Oil spillage & so sllipary area	Operator may fall & injure	OCP		1	2	2	L										
	Compressor running		R	Operator may touch Hot parts during inspection	Body parts may burn & injure	OCP		1	2	2	L										
	Oil level checking/top up if reqd.		R	Oil spillage & so sllipary area	Operator may fall & injure	OCP		1	2	2	L										
	Oil change after 4000 hrs of run		NR	Shifting of weighted oil can /drum	Operator feel incomfortable	OCP		1	2	2	L										
				Oil spillage during shifting / top up & so sllipary area	Operator may fall & injure	OCP		1	2	2	L										
						OCP															
	Cleaning of machines		R	Dust may enter into eyes	Eye irritation /Injury	OCP		2	2	4	M										
	Cleaning of dust collector bags & tank		R	Dust may enter into eyes	Eye irritation /Injury	OCP		2	2	4	M										
				Dust may enter in nose	Inhilation problem	OCP		2	2	4	M										
Shot Blasting machine	Oiling/greasing of moving parts		R	Slippary area due to spillage of oil /grease	Bodu injury	OCP		1	2	2	L										
	Repaire of m/c parts Mech.& Elec.		R	Parts may fall on leg / body	Bodu injury	OCP		1	2	2	L										
				Any sharp edges / corners or rusted parts could cut the hand	Bodu injury	OCP		1	2	2	L										
						OCP															
Callibration activity	Use of pressure gauges/teflon tapes etc		R	Leakage / spillage of WATER	Operator may fall & injure	OCP		1	2	2	L										
						OCP															
						OCP															
Conveyor	Use of tag-o rags		R	Any sharp edges / corners or rusted parts could cut the hand	Bodu injury	OCP		1	2	2	L										
	Use of gear oil/high temp. oil		R	Spillage of oil	Body injury	OCP		1	2	2	L										
						OCP															
	Going to hoist from ladder with tools		R	Operator may fall from height	Bodu injury / death	OCP		2	3	6	H										
	Greasing of all gears		R	May fall due slippary area due to water spillage	Bodu injury	OCP		1	2	2	L										
Hoist / Craines	Oil top up in gear box		R	May fall due slippary area due to water spillage	Bodu injury	OCP		1	2	2	L										
	Repair of hoist		R	Any sharp edges / corners or rusted parts could cut the hand	Bodu injury	OCP		1	2	2	L										
	Cleaning / Maintenance of hoist		R	Operator may fall from crane	Bodu injury	OCP		1	3	3	L										
				Tools may fall from height	Bodu injury	OCP		1	3	3	L										
						OCP															
Maint. Documentation	Continuous seating		R	Back pain /body pain	Body PAINS	OCP		1	3	3	L										
	Continuous working on computer		R	Continuous eye contact at computer	Eye irritation	OCP		1	3	3	L										
						OCP															
	Checking of capacitor current / motor current		R	Chances of electric shock	Bodu injury / Death	OCP		1	3	3	L										
	Dynamic balancing of blower by outside party		NR	Chances of fingure trapping into running parts	Hand injury	OCP		1	3	3	L										
Preventive &	Dielectric strength checking for 40-60kv I min of transformer oil		NR	Chances of electric shock	Bodu injury / Death	OCP		1	3	3	L										

For Chartered Techno Services

Proprietor

Hazard Identification, Risk Assessment And Risk Control Register (HIRA)

Maintenance

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Predictive maint activities	Dielectric strength checking for 40-60kv I min stabiliser oil		NR	Chances of electric shock	Bodu injury / Death	OCP		1	3	3	L										
	Checking of coolant leakages		N	Chances of falling due to Spillage of Coolant	Body injury	OCP															
	Oil top up work			Chances of falling due to Spillage of oil	Body injury	OCP															
						OCP															
Statutory testing	Testing of Lifting equipments		NR	May fall from height	Bodu injury / Death	OCP		1	3	3	L										
				Weights may fall on legs /body	Lg / body injury	OCP		1	3	3	L										
	Hyd testing of Pressure vessels		NR	High press.water may enter into eye	Eye irritation /Injury	OCP		1	3	3	L										
						OCP															
Conveyor Maint.(m/c shop)	Oil top up in gearbox		R	Slippery arae due to spillage of oil	Body injury	OCP		1	2	2	L										
	Repaire of conveyor belt		R	Hand fingure may trap in belt	Hand / body part injury	OCP		1	3	3	L										
	Checking of motor & sensors		R	Chances of electric shock	Bodu injury / Death	OCP		1	3	3	L										
						OCP															
Maint. of Hyd.lifters / trollies	Replacement of parts during maint. of m/c		R	Heavy parts may fall on legs	Leg / Body part injury	OCP		1	3	3	L										
		E		Any sharp edges / corners or rusted parts could cut the hand	Hand / body part injury	OCP		2	2	4	M										
	Oil top up/ change work		R	Slippery arae due to spillage of oil	Body injury	OCP		1	2	2	L										
						OCP															
Jumbo-vehicle	Water top up in batteries		R	Slippery arae due to spillage of water	Body injury	OCP		1	2	2	L										
	Battery connection tightening / checking		R	Chances of electric shock	Bodu injury / Death	OCP		1	3	3	L										
			R	Chances of Fire	Fire accident	OCP															
						OCP															
						OCP															
						OCP															

	R		Routine	P	Probability	OCP		RISK LEVEL		L	Low			H	High						
	NR		Non-routine	C	Consequences	OCP				M	Medium			E	Emergency						

Rating	POO		
			Ill Health
1	UNLIKELY	Injury not calling for any first aid treatment	Illness having momentary discomfort
2	LIKELY	Injury calling for first aid treatment	Illness due to acute exposure or hospitalisation for more
3	VERY LIKELY	Injury leading to temporary / permanent disability	Illness due to chronic exposure having last long effect

POO - Probability of Occurrence

MATRIX

Risk	1	2	3
3	3/M	6/H	9/E
2	2/L	4/M	6/H
1	1/L	2/L	3/M

Probability →

Abb	Description	Input For
E	Elimination	MP
S	Substitution	MP
EC	Engineering Control	MP
W	Warnings/Signage/Admin Controls	OCP
P	Personal Protective Equipments	OCP

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