

STANDARD SPECIFICATION No.

6-82-0001 Rev.2

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FORMAT NO. : HSE-5 REV MONTHLY HEALTH SAF			DEDODT	
MONTHLY HEALTH, SAF (To be submi	itted by each Contractor)	ENTAL (HSE)	REPORT	
Actual work start Date:	For the Month o	f:		
Project:	Report No:	-	6	
Name of the Contractor:	Status as on:			
Name of Work:	Job No :			
The second	shall generate the	reports thro	ugh web b	asedpackage
(www3.eil.co.in/eilhse)only.		UPTO PREVIOUS		
ITEM		MONTH	THIS MONTH	CUMULATIVE
1) Average number of Staff & Workmen				
(average daily headcount, not man days) 2)Total Man-hours worked				
3) Number of site personnel undergone HSE Induction	an			
4) Number of HSE meetings organized at site				
	1			
5) Number of HSE awareness programmes conducte	d at site			
6) Number of Tool Box Talks conducted			νā	
7) Number of Loss Time Injuries (LTI)	Fatalities	* £		
	Other LTI			
8) Number of Non disabling injury (Non-LTI)				
9) Number of First Aid Cases			2	
10) Number of Near Miss Incidents				
11) Number of Dangerous Occurrences				
12) No. of unsafe acts/ practices detected	1		1	
13) No. of disciplinary actions taken against staff/ we	orkmen			
14) Man-days lost due to injury				n ²⁰ sás ¹⁴
15) LTI Free man-hours i.e. LTI free man-hours cou (enter date:)				×
16) Frequency Rate (No. of reportable LTI per 10lac	s man-hours worked)			
17) Severity Rate (No. of man days lost due to LT worked)	I per 10lacs man-hours	-		
18) No. of activities for which HIRAC Completed				
19) No. of incentives/ awards given			,	
20) No. of occasions on which penalty imposed by E	IL/ Owner			
21) No. of Audits conducted				l.
22) No. of pending NCs in above Audits				
23) Compensation cases raised with Insurance				
24) Compensation cases resolved and paid to workm	en		1	
25) No of Vehicular Accident cases				
26) No of fire/Explosion cases				
27) Whether workmen compensation policy taken		<u> </u>	Yes	No
28) Whether workmen compensation policy is valid	,		Yes	No
29) Whether workmen registered under ESI Act, as a	unnlicable		Yes	No
30) Whether HIRAC Registered under EST Act, as a 30) Whether HIRAC Register prepared and updated	PPriodolo		Yes	
31)Whether Environment Aspect Impact Register pr	renared and undated		Yes	No
32) Whether Legal Register prepared and updated	opared and apuated		Yes	No
Remarks if any			105	No

Date:

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Prepared by Safety Officer Approved by Site Head / Resident Construction Manager (Signature and Name)

To: -

- RCM EIL

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FORMAT NO. : HSE-6 REV 1

PERMIT FOR WORKING AT HEIGHTS (ABOVE 2.0 METER)

(In duplicate to be issued daily for site and for office)

Permit No	Name of Main Contractor	
Name of work executing a	gency / sub agency / vendor:	
Date	Exact Location of work	
Nature of work	Duration of work (from) (to)	
Number of workers cover	d within this permit	
(List enclosed with name	gate pass numbers.)	

SI. No.	lo. Items / Subjects		compliance s / No)
1	Work areas / Equipment's inspected		
2	Work area cordoned off		
3	Adequate lighting is provided		
. 4	Precautions against public traffic taken		
5	Concerned persons in & around have been alerted & cautioned		
6	Hazards / risks involved in routine / non-routine task assessed and control measures have been implemented at specific task		
7	ELCB provided for electrical connection & found working		
8	Ladder safely attached / fixed		
9	Scaffoldings are checked and TAGs are found used correctly		
10	Working platforms are provided and are found sound /safe for use		la.
11	Safe access & egress arrangements (e.g. ladders, fall arresters, life-lines etc.) are satisfactorily incorporated		
25.00	a. Openings on platform / floors are effectively cordoned / covered		c c
12	b. Safety Nets are provided wherever required		
	Use of following safety gadgets by people working at area under this permit, is checked and found satisfactory - Safety helmet	- * 4	
13	Safety harness (full body) with double lanyard Safety Shoes		
	Safety gloves Safety goggles		
14	Housekeeping of work area found satisfactorily tidy / clean & clear		
15	Adequate measures have been taken for works being continued at the ground level, when simultaneous works are permitted overhead at that very location.	•	6
16	Materials are not thrown from heights on to ground		
17	Medical examination of workers are made & found satisfactory		
18	Responsible job engineer / supervisor found physically present at work spot for overall administration of work as well as safety of people.		×

Above items have been checked & compliance has been found in place. Hence work is permitted to start / continue at the above-mentioned location. Work shall not start till identified lapses are rectified.

Additional Precautions, if any

Work Permit Receiver Contractor Job Supervisor Verification By Work Permit issuer Contractor Safety Officer Contractor Engineer/RCM

AT THE END OF THE DAY/WORK:

All works at height are completed & workmen have returned safely from work location at (time)...... (date).....

(Sig. Contractor Engineer)

इंजीनियर्स इंडिया लिमिटेड	ENGINEERS
(भारत सरकार का उपक्रम)	(A Govt of India Undertaking)

STANDARD SPECIFICATION FOR STANDARD SPECIFICATION No. **HEALTH, SAFETY &** ENVIRONMENTAL MANAGEMENT AT CONSTRUCTION SITE

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FORMAT NO. HSE-7 REV 1 :

CONFINED SPACE ENTRY PERMIT Sr. No. _____

Project site	0
Name of the work	
Name of Contractor	
Exact location of work	

Date Nature of work

	Safety	Requirements PC	DSITIVE ISC	DLATI	ON OF THE V	/ESSEL	IS MA	NDAT	ORY	2
(A)) Has the eq	uipment been ?								
Y	NR		Y NR				Y N	R		
		ted from		wate	r flushed &/or			rad	iation so	ources
		er/steam/air		stear	ned			rem	noved	
	□ isolat	ted from liquid or			ways open &				per ligh	ting
	gases				lated			pro	vided	
		essurized &/or			inert gas flow					
	drain	1		arran						
		ed/ blinded/		adeq	uately cooled					
		Residual Hazards								
		sive chemicals			oustible gas/ lie				S / toxic	
		steam / frost						ctricity /		
		steam / most		mgn	number			1011	izing rad	ination
	Protection	Maggurag								
				ear n	lug / muff			0.00	ales / fr	ace shield
	U	ctive clothing			/ gas / air line	mask			sonal ga	
		nded air			dant with SCB			reso	-	
	0	blower /AC		mask					ipment/	team
	□ Fire f	fighting		safet	y harness & lif	feline			nmunica	
		gements						equ	ipment	
	n				5 					
	Author	ization / Renewal (I	t is safe to en	nter the	e confined space	ce)				
	No. of				Signature			Ti	me	Signature
	persons	Name of persons	Work Per		Verification by	Work p issu			4	
	allowed	allowed	Receiver(Con Supervise		Contractor Safety officer	Contra		From	То	Workman
			Supervise		Salety officer	Engineer	r/RCM		-	
							2			
8	Permit	Closure :			•					
	(A) I	Entry 🛛 was clos	ed 🗆 st	opped	\Box will co	ontinue o	n			
	(B)□ S	site left in a safe cor	ndition L H	Housek	eeping done					
	(C)Mu	Ilti lock removed	□kev	/ transf	erred					
	(c)ind			transi	circu					
	🗖 Ensi	ured all men have co	ome out	Man-v	vays barricade	d				
		: 6								
	Remark	ks, if any:								

oject : ame of the work :	HSE-8 REV 0 ADIATION WORK PE	DMIT		
oject : ame of the work :	ADIATION WORK PE	MIT		
ame of the work :		XMIII		
ame of the work :		Sr. No. :		
	3. [*]	Date :		
ame of site contractor :		Job No.:		
ocation of work :				
ource strength :				
ordoned distance (m) :				
ame of Radiography agency :		Approve	d by Owner/EIL	
the of Radiography agency .		Арргоче		
o. of workers engaged :				
ist enclosed with name & gate pass nu	mbers.)			с., р. I.
ne following items have been cheer ermit:	cked &compliance shall	be ensured during c	urrency of the	
0.	Item description			Done
Lighting arrangements for wor Warning signs/ flash lights inst Cold work permit taken (if app PPEs like film badges, dosimet	alled licable)	d		
dditional precautions, if any				
Radiography Agency's BARC/AER	B authorized Supervisor)			
ermission is granted.				
ammit is valid from		lata ta		
ermit is valid from A		Jate 10		-
Signature of permit issuing authority ame : Design		Date:		
ermit renewal:				-
ermit extended up to Additional required, i	f any precautions a	ign of issuin uthority with date (c te contractor)		
ate Time	8			
	5 m			
1V				
/ork completed/ stopped/ area clear	rad at II af D			



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FORMAT NO.

DEMOLISHING/DISMANTLING WORK PERMIT

Project Name of the work Name of contractor Sr.No. : Date : Job No.:

Name of sub-contractor :

No. of workers to be engaged: (*List enclosed with name & gate pass numbers.*)

Line No./ Equipment No./ Structure to be dismantled

:

Location details of dismantling/ demolition with sketch : (clearly indicate the area)

HSE-9 REV 1

The following items have been checked &compliance shall be ensured during currency of the permit:

S. No.	Item description		Done	Not Applicable
	Services like power, gas supply, water, etc. disconnect	cted		
	Dismantling/ Demolishing method reviewed & appro	wed		
	Usage of appropriate PPEs ensured			
	Precautions taken for neighboring structures			
	First-Aid arrangements made			
	Fire fighting arrangements ensured			
	Precautions taken for blasting			
	c Permit Receiver	Verifica	tion by C	ontractor
Con	tractor's Supervisor/Engineer)	(Contract	or's Safet	y Officer)
Perm	ission is granted.			
Wor	k Permit issuer-Client)		æ	
Nam	A	n an E		
Date				
Com	pletion report:			
Dism	antling/ Demolishing is completed on	Date at	Hı	S.
Mate	rials/ debris transported to identified location] Tagging cor	npleted (a	s applicable)
Servi	ces like power, gas supply, water, etc. restored]		
Pern	nit issuing authority-Client)			
CON	TRACTOR'S NAME			
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FORMAT NO.

HSE-10 REV 0

DAILY SAFETY CHECKLIST

(To make use of before start of day's work)

Project Sr.No. : Name of the work Date Name of contractor Job No.:

Description of Job decided to perform : -

•

Use of PPE / Safety Gadgets

SI. No	PPEs	Compliance (Yes / No)	SI. No	PPEs	Compliance (Yes / No)
1	Safety Helmets	* a	6	Face Shield	×
2	Safety Shoes		7	Full body harness	
3	Hand Gloves		8	Fall Arrest System	
4	Dust Musk	a	9	Safety net	
5	Safety Goggles		10	Horizontal life-line made of steel wire, (dia not less than 8.0 mm.)	

(Serial No. 1 & 2 are compulsory for everyone. Specify & ensure use of other safety gadgets as required for the job)

Identify following important unsafe conditions: -

SI. No	Conditions	Yes / No
1	Access to work site / emergency escape clear	
2	Soil / Loose earth kept away from excavated pit / slope / ladder provided	
3	Electrical wire / welding lead lying entangled on ground / welding m/c. booth accessible	9
4	Elevated work platform / open ends are protected	
5	Ground area cordoned off before lifting works or erection at height / ground area checked & cordoned-off before start of height works	10 I I
6	Structural members / erected pipes / wooden boards/pieces etc. are safely anchored at heights and are not likely to fall down on people when working beneath	
7	Ladders tied-up on tall steel structures, long before are removed to get rid of their use	
8	Any Other	

- "No" Indicate actions taken, if status of any of the above items is found
- Specific Safety guidelines 1 precautions, if any (communicated thro' TBT)
- Above conditions and PPE compliances are checked by undersigned and correct status are indicated after verification

Prepared by **Contractor Site Engineer** Verification By **Contractor Safety Officer**

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FORMAT NO. : HSE-11 REV 0

HOUSEKEEPING ASSESSMENT& COMPLIANCE

(Sheet 1 of 2)

Project:Sr.No. :Name of the work:Date :Name of contractor:Job No. :Name of contractor: Fortnightly

SI. No.	Subjects of Review	Satisfactory/ Yes	Non satisfactory/No	Remarks	Action
1.	Cleanliness at the Main entry / access of site				
2.	Ground condition / floor areas free from water-				
	logging / oil spillage				
3.	Ground & elevated floors free from rubbish /			-	
	wastes / accumulated debris / scraps.		×		
4.	Manholes / openings are covered / fenced				
5.	Trenches are barricaded / walkways are in place		-		
6.	Drains are cleaned / not choked / not occupied	× 6 °.			
0.	by dumped materials				25
7.	Sufficient CAUTION boards / instructions				
0.00	displayed				
8.	Construction machinery are maintained & parked in orderly manner.				
9.	Movement of site people are not obstructed				
1	because of dumping / storing of construction				4
	materials	* ×			
10.	Access / egress to Electrical Distribution	Π.			
	Boards / Panels clear from wires / cables /				
	earth-strips etc.				-
11.	Electrical panel rooms / sheds / MCC / Control				
	rooms / Substations etc. are clean & tidy and	-			
	not used for storing dress / clothes, tiffin-box				
	or bicycles.	-			
12.	Passage behind Elec. panels are free for access			6	
13.	Fire extinguishers / fire-buckets are accessible without any difficulty.			5.	
14.	Stair-steps, platforms & landings are clear &				2
	tidy				
15.	Sheds / rooms & work areas have got sufficient				
	illumination as well as ventilation			a:	
16.	Cables / Wires / welding leads are routed /				(in)
	hanged appropriately & are not creating unsafe	2			
	condition.				
17.	Stacking / storing of insulation materials or				
	their packing.		X		
18.	Removal or cleanliness of left-over sand,				
	concrete, brick-bats, insulation-materials,				
10	excess earth, wastes etc.				
19.	Storing / stacking of sand, metal chips, re-				
20	bars, steel pipes, valves, fittings etc.				
20.	One escape route at ground & minimum two				
	escape routes at elevation available,				

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SI. No.	Subjects of Review	Satisfactory/ Yes	Non satisfactory/No	Remarks	Action
21.	Captions / Posters / Slogans on various safety instructions are displayed legibly in local language			2	
22.	Cable trenches are water-free or regular arrangement for taking out accumulated water exists.				3
23.	Windows of rooms / offices are regularly cleaned				a
24.	Facilities for cycle sheds, drinking water, washing, rest-rooms etc. are maintained in tidy manner.				· · · · · · · · · ·
25.	Toilet, Urinals, Canteen / kitchen / pantry etc. are maintained & free from obnoxious smell.				r.
26.	Construction tools / tackles are stored systematically - the items are tagged / tested / certified by competent third party.				
27.	Sufficient numbers of Dust-bins / Waste-bins found at site and are regularly emptied.				

Additional remarks, if any -

Inspected by Contractor Engineer

Verification By Contractor Safety Officer



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FORMAT NO. : HSE-12 REV 0

INSPECTION OF TEMPORARY ELECTRICAL BOOTH / INSTALLATION

Project	:		Sr.No. :
Name of the work	:	14	Date :
Name of contractor	:		Job No.:
Sub Station No:/Boot	h No		Location:

SL NO	SUBJECTS	OBSERVATION (YES /NO)	ACTION TAKEN
1	Switchboards installed properly are in order and protected from rain & water-logging.	×.	
, 2	Adequate illumination provided for switchboard operation during night hours & the lamps are protected from direct human contact.		
3	Voltage ratings, DANGER signs. Shock-Treatment- Chart displayed in the installation / booth		
4	Fire extinguisher (DCP or CO ₂) & Sand Bucket kept in close vicinity of Switchboards		
5	Valid License & Competent Electrician / Wireman available & name/ license no. displayed at booth / installation.		
6	General housekeeping in & around booth / installation found in order.		
7	Cable-route-markers for U/G cables provided.		
8	Monthly inspection report of Electrical hand tools available in booth / installation.		
9 °	Electrical Panel door to be in closed condition and Insulated Mat to be provided in front of panel.		
10	Rubber hand gloves available/ used by Electricians		
11	Availability of CAUTION boards for shutdown & / or repairing works.		
12	All incoming & outgoing feeders have proper MCCB / 'HRC fuses / Switches.		
13	Switchboards "earthed" at two distinctly isolated locations.		
14	Switchboards have adequate operating space at the front face & at the rear face too.		
15	All connections provided through 30mA ELCB.		1
16	Testing records of all ELCBs available at site		ii.
17	Only industrial type plugs & sockets are used.		
18	Temporary connections are 3-core double insulated & free from cuts & joints and 3 rd core is earthed at both ends		
19	Socket boards are properly mounted on stand & protected from water ingress.	9	
20	Electrical equipments operating above 250V have two earthing / double earthing.		
21	All incoming / outgoing cables are properly glanded& terminated with "lugs".		5
22	Switch-boards are of industrial variety / type.		
23	Sketch for installation / connection (SLD) made & pasted& other safety labels/display boards	-	
24	Labeling of incoming / outgoing feeders made.		
25	All hand lamps are protected from direct contact.		
26	All electrical cable / joints are in safe condition		

Inspected by Contractor Engineer Verification By Contractor Safety Officer

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INSPECTION FOR SCAFFOLDING

(Sheet 1 of 2)

Proje	ct : Sr.No. :	·			
	e of the work : Date :				
	e of contractor : Job No.:				
SI.					Actions
No	Description	Yes	No	N.A.	taken
1	Whether work permit is obtained to take up work at height above 1.5 Mts?				•
2	Whether atmospheric condition is "stormy" or "raining" and works at heights have been permitted?				
3	Whether steel pipes scaffoldings are used for units /off-site areas?				
5	Whether scaffolding has been erected on rigid/firm/leveled surfaces /				
- 4	ground? Whether "foot-seals" or "base-plates" are used beneath the up- rights (vertical steel pipes)	*			
5	Whether scaffold construction is as per IS specification with toe-board and hand-rails (top-rail as well as mid-rail)?				- · · ·
	Whether distance between two successive up-rights are less than 2.5 Mts				
6	(height of scaffold & load carrying capacity governs the distance between two uprights)				
7	Whether all uprights are extended at least 900 mm above the top most working platform (to enable fitting of handrails)?	12			
8	Whether vertical distance of two successive ledgers is satisfactory? (varying between 1.3 Mts. To 2.1 Mts)				
9	Whether the peripheral areas of working at height are cordoned-off? (for avoiding accident to people arising out of dropped / deflected materials)		1		· · ·
10	Whether platform is provided? Is it safely approachable?				× .
. 11	Whether end of scaffold platform / board are extended beyond transoms? (125mm to 150 mm)		÷		
	Whether CE / IS approved quality and worthy conditioned full-body safety				
12	harness (with double lanyard & karabiners) are used while working at heights?				24 m 2
13	Whether life-line of safety harness is anchored to an independent secured support capable of withstanding load of a falling person?	_			
14	Whether the area around the scaffold is cordoned off to prohibit the entry of unauthorized person / vehicle?				
15	Whether clamps used are of good condition, of adequate strength and free from defects?				
16	Whether ladder is placed at secured and leveled surface?				
17	Whether water-pass and oil-spills are avoided around the scaffold structure?				
18	Whether ladder is extended 1.5mts. above the landing point at height?				
19	Whether more than one access/egress provided to the scaffold?	1		1	
20	Whether ladder used are of adequate length and overlapping of short ladders avoided?				
21	Whether metallic ladders are placed much away from near-by electrical transmission line?				
22	Whether rungs of ladder are inspected and found in good order?				
23	Whether fall-arresters provided on both the access/egress routes?				
24	Whether diagonal (cross) bracings are provided at regular interval on the scaffold?		-		
25	Whether working platform on the scaffold has been made free from "jolt" or "gap"?				
26	Whether tools or materials are removed after completion of the day's job at heights?				
27	Whether a valid Permit for Work (PFW) is obtained before taking up work over asbestos or fragile roof?				
28	Whether sufficient precaution is taken while working on fragile roof?				



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STANDARD SPECIFICATION FOR HEALTH, SAFETY & ENVIRONMENTAL MANAGEMENT AT CONSTRUCTION SITES

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HSE-13 REV⁰

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SI. No	Description	Yes	No	N. A	Actions taken
29	Whether provision is made to arrange duck ladder, crawling board for working on fragile roof?		~		
30	Whether scaffold has been inspected by qualified civil engineers prior to their use?			-	
31	Whether the scaffolding has been designed for the load to be borne by the same?				
32	Whether the erection and dismantling of the scaffolding is being done by trained persons and under adequate supervision?			2	r. I
33	Whether safety net with proper working arrangement and life-line has been provided?				2
34	Whether TAGS (Green for acceptable and Red for incomplete/unsafe scaffolds) are used on scaffolds?				
35	Whether sufficient illumination is provided in and around the scaffold and access?				
36	Whether emergency rescue / response arrangements are made in place		×.		

Inspected by Contractor Engineer

Verification By Contractor Safety Officer

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FORMAT NO. : HSE-14 REV 1

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PERMIT FOR ERECTION / MODIFICATION & DISMANTLING OFSCAFFOLDING

Project Name of the work Name of contractor Nature of activities

Date : Job No. :

Sr.No. :

Duration: From......To......

SL. No.	SUBJECTS / ITEMS	DONE	NOT DONE	REMARKS
1	Specific task of Erection / Modification / Dismantling of scaffolds, identified & TAGGED accordingly (before as well as after carrying-out	- -		
2	jobs). People engaged in doing the job are identified & are certified by Job Engineer of Main Contractor as experienced / trained.			Names to be noted
3	Concerned persons are alerted by the Job Engineer of Main Contractor in connection with possible hazards & what the workmen MUST do / MUST not do.			
4	Verification by Job Engineer of Main Contractor made for confirming that all persons permitted to carry-out the jobs are making use of Helmet, Safety Shoes, Goggles, Gloves & Double lanyard safety harness and other relevant PPEs.	~		
5	Area of work is effectively cordoned-off / barricaded / illuminated.			
6	For taking-up / lowering down Scaffolding members / clamps / couplings etc. appropriate ropes / pulleys/ chains etc. have been arranged for use (not to throw any item) & the same have been verified as "fit for purpose".			
. 7	Items / members of scaffold, being lowered are removed from the area & stacked correctly.		2	
8	Ropes, chains, pulley blocks etc. being used for lifting or lowering scaffold items, are inspected by the Job Engineer & their certifications as well as physical conditions have been found O.K, before signing this PERMIT.			
9	Safety Net / Life-line / Fall Arresters etc. are arranged in position and Job Engineer has found working conditions favorable for activities to start.			
10	Scaffold erection or dismantling tasks are being supervised by Experienced Engineer / Competent person.			
11	Only competent & experienced people have been selected / engaged in Scaffolding erection, modification or dismantling tasks.		U.	
12	Adequate & effective actions for traffic and movement of people around the cordoned-off area taken to avoid inadvertent incident	3		
13	Working platforms are protected with handrails & toe-boards.		1 - 31 2	
14	Access & Exit (for reach & escape) are safe for use by people.			
15	Tools, tackles to be used for above jobs are verified by job Engineers of Main contractor as genuinely good and tied-up at height (to prevent their fall).		** **	
16	Site important Telephone Nos. are made known to everyone			
17	SOP (Safe Operating Procedure) for the specific task is made & followed too.			
18	Emergency vehicle has been arranged at work locations.			

• This permit for work shall be available at specific work location all the time.

• After completion of work, permit shall be returned to safety cell of main contractor, without fail.

- This Permit shall be issued maximum upto (Monday to Sunday).
- Additional Precautions, if any

ACCORD OF PERMISSION (to be ticked) - YES ()/ NO () Work Permit Receiver Verification By Work Permit issuer Contractor Job Supervisor Contractor Safety Officer Contractor Engineer/RCM



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FORMAT NO. : HSE-14 REV 1

(sheet 2of 2)

Everyday Site working conditions & performance of workmen shall be assessed / checked by Contractor Site Engr. and Safety Officer shall verify the same.

	Name / Sign.	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Site	5							
Engr.								
Safety Off.		9						

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FORMAT NO. :

HSE-15 REV 1

PERMIT FOR HEAVY LIFT/CRITICAL ERECTION

Project • Name of the work • Name of contractor : Nature of activities : Location of work Equipment/Structure to be erected:

Sr. No. : Date : Job No.: Duration: From......To..... Name /Type of crane : Wt. of equipment/ structure to be erected

SL.	Description of Item	CON	i i		
NO.		Yes	No	Not applicable	Remark
1)	Is the crane type suitable for lift or as per erection procedure?				
2)	Is the crane have the correct number of counterweights fitted?			× 24	
3)	Availability of Load Certification of crane from authorized agency.	a		2	
4)	Is the load chart of crane available in carne cabin/or with Crane operator?	5 K			v
5)	Is the device to check the Wind speed in crane is working? Is the safety features in crane are working?		5		
6)	Availability of Load certification of slings and other accessories from authorized agency				
7)	Availability of Licensee/certificate for crane operator from authorized agency.		2 - P		
8)	Availability of approved HIRAC for the subject activities.			n <u>1</u>	
9)	Availability of approved erection/rigging procedures.				
10)	Availability of temporary gratings/ platforms for critical lifting(as applicable)			* * * * * *	
11)	Tool Box conducted before erection?				÷.,
12)	Has the area been cordoned off?				
13)	Are the authorized persons during erection are identified?			5	
14)	Does each person identified for erection understand their roles and responsibilities?				
15)	Is the ground on which crane will rest or outrigger support are correct?			- ¹	
16)	Is hard stand requirement (if any) complied?	- 5e 1			2
17)	Is the communication system (viz walkie-talkies, etc. are working properly?				8.
18)	If more than one crane is lifting the load, is an Intermediate rigger will supervise the lift?		~		
19)	If there is other obstruction within the operating radius of the crane, have correct precautions been taken to prevent collision?				±2
20)	All the persons are wearing the requisite PPE?	100 100 100	·		



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FORMAT NO. : HSE-16 REV 1

PERMIT FOR ENERGY ISOLATION & DE-ISOLATION

Project :	Sr.No. :							
Name of the work :	Date :							
Name of contractor :	Job No.:							
ENERGY ISOLA								
	oHrsDate							
Nature of job to be done:								
AreaLocation:								
	REDEODMING AUTHODITY							
PERMIT VALIDATION	PERFORMING AUTHORITY							
I hereby authorize thepersonnel(performer)	The work and precautions will be carried out under my							
to isolate the above equipment/energy source from all	overall responsibility.(Testing/execution engineer)							
sources of power and handover the equipment/energy	*							
source for maintenance/repair.	0. Data							
the first much solve	Signature: Date:							
Issuing authority	Name:							
Client/Contractor RCM (as applicable)								
Signature: Date:								
Name:								
	· · · · · · · · · · · · · · · · · · ·							
SAFETY PRECAUTIONS FOR CLEARANCE	NORMALISING AFTER CLEARANCE							
1. Notify workers of intent to de- energize	1. Notify workers of intent to re- energize							
2. Obtain lock, tag or locking/tagging devices	2. Conduct visual inspection to confirm that the danger zone is clear of workers							
3. Shut down, de-energize, dissipate any	dunger zone is creat of workers							
residual energies.	3. Conduct visual inspection to confirm that tools							
4. Apply lock ,tag and locking and/or tagging	,equipment's danger zone is clear of workers							
devices	4. Reposition the safety devices(interlocks,							
5. *Any other job specific precautions	valves, guards, covers ,sensors, as applicable,							
6. Verify effectiveness of lockout by	etc.)							
attempting to restart. —	5. *Any other job specific normalizing details							
7. Proper PPE is ensured	6. Remove lock, tag and locking and/or tagging							
	devices.							
I certify that the energy source mentioned above is	/. Re chergize. —							
isolated from all sources and is safe to start the work.	8. Confirm system is operating properly& safely							
	I certify that the energy source mentioned above is							
Tag No: Lock No:	isolated from all sources and is safe to start the work.							
Issuing authority	Tag No: Lock No:							
Client/Contractor RCM (as applicable)	Issuing authority							
Signature: Date:	Client/Contractor RCM (as applicable)							
Name:	Signature: Date:							
(*to be included by contractor in consultation with	Name:							
issuing authority)	(*to be included by contractor in consultation with							
	issuing authority)							
ENERGY DE-ISOLA								
PERMIT VALIDATION	PERFORMING AUTHORITY							
I hereby authorize thepersonnel(performer)	I hereby certify that the equipment/energy source							
to de- isolate the above equipment/energy source from	mentioned above has been de-isolated and is ready for							
all sources of power and handover the equipment/energy	normal operation.(Testing/execution engineer)							
source for normal operation.								
Levies with with	Cignoturo: Data:							
Issuing authority	Signature: Date:							
Client/Contractor RCM (as applicable)	Name:							
Signature: Date:	Counterries of her lass in a static							
Name:	Countersigned by Issuing authority							

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FORMAT NO. :

:

:

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PERMIT FOR EXCAVATION (depth 2m and above)

HSE-17 REV 1

(Sheet 1of 2)

Project Name of the work Name of contractor Job Description Size of excavation

Sr.No. : Date Job No.: Location:

SL.		COMP			
NO.	Description of Item	Yes	No	Not applicable	Remarks
1)	Suitable and sufficient risk assessments and method statements has been carried to ensure that the work shall be undertaken in accordance with specification and standard.				*
2)	Are plans/details of underground services available and the same has been reviewed?				
3)	Has survey done to locate the services/obstacles etc.		2 2		
4)	Has the live services (electrical, water line, air line, telephone line, etc)has been disabled for carrying out the job.				
5)	Is adequate barriers/fences to protect the excavation are in place?				
6)	Is Adequate warning signs are in place?				
7)	Is Assessment of ground conditions done and remedial action(if any) taken?				1
8)	Safe access / egress (e.g. ramp / steps / ladders etc.) provided for site workmen & supervisors.				
9)	Is the excavation work being undertaken in proximity of structure, etc. ?If Yes, it's effect is considered?		+		
10)	Availability of competent person for supervising the excavation work?		ň.,		
11)	Adequate safe arrangement to prevent collapse of edges (e.g. shoring / strutting / benching / sloping etc.) made at site.				
12)	Hard barricades (at least 1.0M away from edge & for excavation near site access roads) with warning signs/caution boards are provided				
13)	Accumulation / passage-ways of water at periphery of excavation / trench stopped/ restricted.				
14)	Is the equipment being used for excavation has been checked for adequacy and is in good working condition having all the safety features?				
15)	Age & fitness of workmen ensured by medical test before engagement in job ?				-
16)	Arrangement of Monitoring of possible oxygen deficiency or obnoxious gases done & action taken?		8		

PERMIT GRANTED -Yes / No

(List enclosed with name & gate pass numbers.)

Name & Signature of Site Engr.

Name & Signature of Area - In charge/RCM of

Contractor (Receiver)

Contractor (Issuer)

Verification by Contractor Safety Officer



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FORMAT NO. : HSE-17 REV 1

PERMIT FOR EXCAVATION

(Sheet 2of 2)

NOTES: -

- 1. Slopes or benches for excavation beyond 2.0M depth shall be designed & approved by Contractor's site head.
- 2. Excavated earth to be kept at least 1.5M away from edges
- 3. Safety helmets, Safety shoes or gum-boots, gloves, goggles, Face shield, Safety Harness shall be essential PPEs.
- 4. Permit shall be made in **duplicate** and original shall be available at site of work.
- 5. Permit shall be issued for maximum one week only (Monday to Sunday)

6. After completion of works, permit shall be closed & preserved for record purpose

SI. No.	Validity period FromTo	Working Time From <u>To</u>			Review by EIL / Owner (Remarks with date
1.					
2.					
3.		r		ас 2	
4.				μ.	
5.			-	2	
6.			17		u.
7.		¥		-	8 v

GRANT OF PERMIT AND EXTENSIONS

Additional safety instructions if any: -

1.

2.

3.



FORMAT NO. : HSE-18 REV 0

(Sheet 1of 2)

IDENTIFICATION OF ENVIRONMENTAL ASPECTS, IMPACT ASSESSMENT AND CONTROL MEASURES

S.No	Activity	-	Environmental	N/A/E	Environment Impact	Control Measures Consequences		Risk Level	Significant	Gaps/ Recommendations						
		с, ^н	Aspect		impact		Α	B	C	D	E	C F	7	G	Yes/No	Recommendations
e * *					-											· · ·
		19			10 E											2
		1										ľ			1	



STANDARD SPECIFICATION No.

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(Sheet 2 of 2)

INITIAL ENVIRONMENT REVIEW TECHNIQUE

Environmental Impacts	AP = Air Pollution	WP = Water Pollution	LC = Land Contamination	DNR = Depletion of Natural Resources	NP = Noise Pollution
-----------------------	--------------------	-------------------------	-------------------------	---	----------------------

Scale	Quantity (A)	Occurrence (B)	Severity of Impact (C)	Detection (D)	Control (E)	Legal and other requirements (F)
1	Negligible	Very Rare	Negligible visual impact	Immediately	Available & effective a	at place In compliance or not applicable
2	Low	Once a month or less	Causes Discomfort or Nuisance	Within I hour	Has in-built Second control	lary
3	Moderate	Once a day	Resource Depletion	Within 8 hours	Needs human Interve	ention
4	High	Several times a Day	Affects Aquatic Life, flora, fauna or global issue	Within 24 hours	Mechanism in place b reliable	put not
5	Excessive	Continuous	Human health effect	More than 24 hours	Absent or no effective	control Not in compliance

Risk Level - G : A x B x C x D x Ex F

Aspects with score of <u>100 and above</u> are considered as significant. Also, Irrespective of the score, <u>all legal noncompliance's</u> to be considered as significant

	Condition				
N	NORMAL				
Α	ABNORMAL				
E	EMERGENCY				



FORMAT NO. : HSE-19 REV 0 HIRAC

		Risk I	dentificatio	n		Desired Controls Gaps, If A			Risk Asso	essment		Recommended Control Actions To Reduce The Risk Level	Action By	Remarks
SN	Activity	Activity Type (R/NR)	Hazards	Condition(N/AN/E)	Associat ed Risk	Desired Control Measures	Gaps If Any	Probabi lity(P)	Impact (I)	Risk R= P*l	Risk Classific ation			
														2

Likelihood – Possibility of occurrence of risks based on present gaps (technological / operational / competence / measurement and monitoring);

UL: Unlikely, L: Likely, VL: Very Likely, FR: Frequent, C: Continuous

Impact -

SI: Slight Injury, MI: Minor Injury, MJ: Major Injury, SF: Single Fatality, MF: Multiple Fatalities

Level of consequence – Refer Guidance criteria for this i.e. possible degree of damage;

Condition- N: Normal, AN: Abnormal, E-Emergency

Activity Type: R- Routine, NR- Non Routine

RISK -

L: Low Risk, M: Moderate Risk, H: High Risk



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FORMAT NO.:

HSE-20 REV 0

Inspection of Tower Crane

Name of Contractor:	Project:
Name of Work:	Job No:
Vehicle Identification/Registration No:	Date:

Sr. No.	Description	Observation	Remarks & Suggestions
1	Serial number plate &SWL marking		-
2	Valid TPI Certificate		
3	Valid Insurance	но 1	
4	Safe access and egress are provided to the crane operator.		
5	Front glass of Operator cabin	4	
6	Operator crane cabin is provided with a locking mechanism so as to prevent unauthorised entry.		
7	A safety bar is fitted across the operator's cabin window where there is likelihood of the operator falling through it.	e	
8	Manufacturer Operating Manual and Maintenance Manual are made available.		
9	An updated Operation and Maintenance log book is available in the operator cabin.	>	
10	All mounting bolts are in good condition.		
11	Load chart provided	÷	
12	SLI available	II. _M	
13	Crane hooks have got smooth surface and no dent		
14	Hook-latch / Dog-clamp in hook is effective		16 ×
15	Over hoist limit switch		
16	Double body earthing of Tower Crane	2	
17	Jib angle indicator is provided (For Luffing Jib Tower Crane).		
18	Emergency stop button, which will terminate the operation of the crane engine, is installed in the operator cabin and correctly identified.		
19	Effective braking mechanisms for Hoisting, Derricking, Slewing, Trolley Travelling maintained:	- -	
20	Trolley Travelling limiter to prevent over-travelling of trolley is functional.	× .	
21	Limit switches to prevent over-derricking and over-lowering of jib (For Luffing Jib Tower Crane) is functional.		
22	Slewing limiter to restrict slewing of crane is functional.	a 2.	5
23	Over load Limiter to prevent overloading of crane is functional.		
24	Load Moment Limiter to prevent over-turning moment is functional.		
25	Anti-collision devices are tested to stop the tower crane's operation such that the crane-to-crane interference must be maintained at not less than 3 m.		
26	Condition of boom		
27	Counter weight placement and pins		
28	Winches, pulleys and wire ropes are in good working condition.		
29	Colour coding		
30	Leakage in hydraulic cylinder		

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31	Fire Extinguisher	
32	Tower crane is adequately grounded or protected against lightning.	
33	Wind anemometer is installed and is in good working condition.	
34	Aviation lamp is functional (Reqd. for 30mt and above)	
35	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator	
36	Safety Induction for Operator	
37	Others	

Signature & Name of Operator: Signature and name of Job Engineer

Signature & Name of Contractor's Safety Officer

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FORMAT NO. HSE-21 REV 0 :

Crane Inspection Checklist

Name of Contractor:	Project:	
Name of		
Work:	Job No:	
Vehicle Identification/Registration No:	Date:	

Vehicle Identification/Registration No:

Sr. No.	Description	Observation	Remarks & Suggestions
1	Crane hooks have got smooth surface and no dent	N - 2	
2	Hook-latch / Dog-clamp in hook is effective		
3	Over hoist limit switch		
4	Over Load Indicator		
5	Over Boom limit switch		
6	Boom angle indicator		
7	Colour coding	5 gr.	
8	Condition of boom	-	
9	Condition of wire rope		•
10	Rope drum / sheaves are in good working condition		
11	Swing break & lock	2	
12	Swing Alarm		
13	Over hoist break & lock		1
14	Boom break & lock (For Telescopic Boom)		9
15	Leakage in hydraulic cylinder		
16	Condition of Outrigger (For Tyre Mounted Crane)		
17	Outrigger fully extended Marking (For Tyre Mounted Crane)	3	
18	Condition of Tyre (For Tyre Mounted Crane)		
19	Wheel chokes are present and are used whenever required (For Tyre mounted)		
20	Battery & lamps		
21	Moving & rotating parts guarded		
22	Load chart provided	2	
23	Reverse horn (For Tyre Mounted Crane)		
24	Body Condition of crane		
25	Front glass of Operator cabin		
26	Both side Mirror		
27	Number Plate (For Tyre Mounted Crane)		¥
28	Fire Extinguisher		
29	Horn		
30	Windshield and wipers		
31	Working of light & Indicator		
32	SLI		
33	Spark Arrestor(For Running Refinery/ Petrochemical/Chemical Plant)		



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34	Foot-steps and hand-holds are in good working condition for exit /enter in to cabin		
35	TPI Certificate	5	
36	RC Document (For Tyre Mounted Crane)	2	
37	Fitness Certificate of Vehicle by authority		
38	Insurance		an an a' an a'
39	PUC		
40	HMV License for Operator	8 	
41	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator		
42	Safety Induction for Operator	3	
43	Others		

Signature & Name of Operator:

Signature & Name of Contractor's Concern Engineer

Signature & Name of Contractor's Safety Officer

-RFQ : Rev. A



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FORMAT NO.

HSE-22 REV 0

Hydraulic Mobile Crane- Inspection Checklist

Name of Contractor:

Project:

Name of Work:

Job No:

Date:

Vehicle Identification/Registration No:

:

Sr. No.	Description	Observation	Remarks & Suggestions
1	Identification number of Hydraulic Mobile crane boldly scribed in front and rear end of machine	·	
2	Operator has got adequate document in support of his competency (i.e. HMV driving license, knowledge & training)		
3	Marking of SWL on hook position is clearly visible		
4	Test & examination of Hydraulic Mobile crane by statutory / competent authority is carried out & document is valid		
5	Colour Coding		
6	RC Document	÷ .	
7	Fitness Certificate of Vehicle by authority		
8	Valid Insurance		
9	Valid PUC		
10	Pre Medical Check-up& Periodic Medical check-up (every 6 months) including vision test for Operator		
11	Safety Induction for Operator	-	-
12	Crane hooks have got smooth surface and no dent		
13	Hook-latch / Dog-clamp in hook is effective		
14	Over hoist limit switch		ĸ
15	Over Load Indicator		
16	SLI .		
17	Condition of boom		
18	Condition of wire rope		
19	Rope drum / sheaves are in good working condition		
20	Leakage in hydraulic cylinder		6 5
21	Tyre condition		
	<u></u>		



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22	Battery		L.
23	Moving & rotating parts guarded		×.
24	Break		
25	Parking Break		
26	Front horn		
27	Reverse horn		
28	Hydraulic Mobile Crane cabin body and frame of machine is in good order	C 4	
29	Both side Mirror		
30	Fire Extinguisher	а — — — — — — — — — — — — — — — — — — —	
31	Front glass pane of the Hydraulic Mobile operator's cabin is clean & clear (i.e. not cracked / damaged / broken)		
32	Windshield and wipers condition		
33	Working of front & back lights, turn Indicators, parking lights & fog lamps		2
34	Spark Arrestor(For Running Refinery/ Petrochemical/Chemical Plant)	•	5.
35	Wheel chokes are present and are used whenever required		
36	Foot-steps and hand-holds are in good working condition for exit /enter in to cabin		
37	Others		æ

Signature & Name of Operator

Signature & Name of Contractor's Concern Engineer

Signature & Name of Contractor's Safety Officer

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