

AN NAFUD EARTHWORKS CONTRACT 4.2.2 AL JAWF SECTION.

SITE SPECIFIC SAFETY PLAN

This Site specific plan is meant to be additional to the previously submitted overall Al Khodari Plan to address issues from List 2 of the meeting notes of the meeting held at the PMC offices on the 8th August.

To be distributed to all Supervisors and Managers and PMC consultants

No	Activity	Responsibility
1.0	Objective	
1.1	To develop site specific plans for the above project to ensure the safety and security of all personnel.	HO Dammam
2.0	Scope	
2.1	This plan is to provide direction in developing and implementation of programs and procedures that comply and are consistent with company aims for the principles of safe working practices on site.	HO Dammam
3.0	Procedures	
3.1	<ul style="list-style-type: none"> • Procedures will be developed for the following items: • Road Construction Procedures. • Personal Protective Equipment. • Journey Management • Driving Procedures, Speed Restrictions • Housekeeping & Environment • Transportation Across Sand • Remote Area's • Fire Prevention • Medevac Procedure • Security • Safety Inductions • Tool Box Talks • Emergency Response • Night Working • First Aid • Construction Plant & Equipment • Workshops • COSSH • Other procedures that may occur due to specific instances that the sites deem fit to produce to suit given circumstances. • 	Project Manager

4.0	Road Construction procedures	
4.1	<p>Generic Safety Method Statements</p> <p>The basic method of embankment construction will remain the same for all three sites. A generic method statement will be prepared to cover each aspect of construction including embankment in both cut and fill.</p> <p>This will cover and include but not limited to:</p> <ul style="list-style-type: none"> • Earthworks • Sub Grade • Sub Ballast • Drainage structures 	Site Managers
4.2	<p>For each operation a site specific risk assessment will be carried and mitigations will be applied to ensure the lowest risk possible. The appropriate parts of method statements that are applicable will be read to the men each shift to ensure and understanding of the tasks in hand and the men will sign to accept the safe system of working.</p> <p>The safety officers will advise the site managers and all operators of any breaches and will be empowered to stop the works if required.</p>	Safety Officers

5.0	PPE	
5.1	<p>Each aspect of construction plus all supporting tasks, workshops, fuel handling, servicing etc will have a Risk assessment made to cover each operation. Mitigating factors shall be applied one of which is deciding which PPE shall be used.</p> <p>As a minimum each person on construction shall be issued with:</p> <ul style="list-style-type: none"> • Hard Hat, • Hi Vis Vest, • Boots, • Safety glasses, • Dust masks, • Ear defenders • Gloves. <p>Other PPE will be issued if required suitable for the task on hand. It will be the site manager's responsibility to ensure that the PPE aspects of his risk assessment are complied with. He may also give dispensation from the above if it is not required (Office workers, cooks etc)</p>	Site Manager
6.0	Journey Management	Project Manager to design the exact system to suit the project
6.1	<ul style="list-style-type: none"> • Being a construction site with many vehicles traveling on an hourly basis journey management can only be confined to offsite vehicles entering or leaving site. This would include initial mobilization or replacements of both equipment and personnel. PM to make an evaluation on what is required to ensure safe journeys. 	
7.0	Driving Procedures, Speed restrictions	Project Manager, EMD head of Department.
7.1	<ul style="list-style-type: none"> • It is essential that a risk assessment is carried out to plan for driving procedures and restrictions. Routes require to be examined for appropriate place for warning and speed signs and these must be rigorously implemented. • With such a large number of vehicles defensive driving courses should be held as well as competency courses to ensure drivers can do their work safely. It cannot be overemphasized that with so many vehicles on site the greatest care needs to be taken to ensure the safety of all the work force and to protect not only people but to ensure the safety of company property. • Warning signs will need to be in English and Arabic as a minimum • All signs to be explained as part of the various training course. 	
8.0	Housekeeping and Environment	Camp Boss, PM, Nurse, SO
8.1	This can be divided into site and camp and workshops.	

	<ul style="list-style-type: none"> • Site is relatively straight forward due to the nature of the works however provision must be required for any non perishable items and equipment service items (Oil, air filters etc) being collected and taken to the appropriate place for disposal. Borrow pits though will need to be returned to as near their original state as is possible. • Special attention is required on concreting works to ensure materials used in the formation of concrete are not left or discarded on site. This applies to other materials such as rebar, tying wire etc. • Camp with a large number of personnel must be particularly vigilant to dirt and disease caused by waste and a regime is required to be in place to combat this. The Camp boss will work closely with the safety officer and the nurse to ensure the plan is in place and maintained. Equally import will be the reinstatement back to its original condition after use. • Hygiene is of paramount importance and sufficient toilet and bathing facilities need to be put in place and cleaning and other materials provided • Workshops will provide the majority of hazard waste and local provision for the disposal of this will be planned for and implemented. • Finally all sites whether camp construction or workshops will need to be returned to the same condition as they were before use. 	
9.0	Transportation across the Sand	
9.1	<ul style="list-style-type: none"> • The basic rule here is that wherever possible vehicles should use existing roads or tracks or access service roads wherever it is possible or practicable. • Sand driving needs specialist knowledge and in the main specialist vehicles. If there is no other way such as exploration or delivering men and equipment to remote area's a definitive set of procedures is required. Drivers need to be trained and assed as to their competency. Equipment needs to be checked and examined as to suitability. A leader is required to travel with as a minimum a communication device to contact for help and assistance if required. It is also preferable that there is more than one vehicle. • Night driving in sand should not be allowed except in an emergency. 	PM, SO
10.0	Remote area's	
10.1	<ul style="list-style-type: none"> • Living and working in remote and desert areas brings its own unique problems. The ability of staff to understand the problems and danger of this is not always sufficient. There has to be an education process in the site induction to bring these to the fore. • Simple knowledge of drinking sufficient water, covering up from the sun and avoidance of dust etc are just a few points to consider. 	PM, SM

	<ul style="list-style-type: none"> Understanding of who to communicate with and the procedure for doing so must be emphasized to all employee's but especially drivers who may travel long distances in their duty. Other aspects of remote areas such as medevac etc are covered in their own chapter. The secret to being in a remote area is forethought and planning, 	
11.0	Fire Prevention	PM, SM, SO
11.1	<ul style="list-style-type: none"> An emergency alarm system will be but in place after a fire risk assessment has been completed. Safe routes will be made and a muster point established. Numbers and types of fire fighting appliances will be assessment and put into place. Wardens will be nominated to account for all individuals. Consumables such as fuels, oils and workshop waste will have their own set of procedure to cope with fire Signs will be used extensively to warn, prevent and educate Because of the remote location there is no fire service which makes the Fire and emergency procedure extremely important Signs will be erected for warning and information. 	
12.0	Medevac Procedure	PM, SM, Nurse, SO
12.1	<ul style="list-style-type: none"> In each major location there will be a specialized 4 wheel drive ambulance vehicle. In the event of a trauma the patient will be stabilized by the nurse and a consultation with the company doctor made. The patient will then be transferred to the nearest available hospital. A pre planned rout will be used and this will be posted in the clinic and in the vehicle. Trials will take place using this route and the timings recorded. All emergency telephone numbers will be posted on notice boards and the emergency procedure folder. 	
13.0	Security	PM, SM
	<ul style="list-style-type: none"> Security is broken down into two parts Security of the camps Security of the equipment The camps will be surrounded by a security sand bund 1.5m high. There will be a gate or barrier that can be opened and closed and this will be manned 24 hours a day. All vehicles entering the camp will have an issued gate pass if belonging to the project or a temporary pass if delivering stores and equipment etc. Men will also have a gate pass which will show their name, number and the date they have had the safety induction. All visitors will be recorded Equipment will have dedicated local security guards who will maintain a day and night patrol to maintain the watch on the equipment and ensure no willful damage is caused. There will be contact numbers in the emergency Procedures 	

	folder for all required staff in case of a security breach.	
14.0	Safety Inductions <ul style="list-style-type: none"> Each person entering or working on site shall receive a safety induction. The exact nature of this will depend on site requirements but as a minimum will show: <ol style="list-style-type: none"> 1. Fire escape routes 2. Muster Areas 3. Fire points 4. Emergency procedures 5. Where PPE is required 6. Danger Areas 7. Prohibited Areas 8. Walking routes 9. Meaning of warning and cautionary signs 	PM,SM,SO
15.0	Tool Box Talks <ul style="list-style-type: none"> As a process of education and information tool box talks are invaluable in getting that information across to all staff. This applies equally to office, workshop or site staff. A system of tool box talks will be set up so each week a different topic suitable for the recipients will be made. Many such talks are available and a list will be prepared. These talks will need to be given in several different languages to suit the make up of the workforce nationalities. They will be given mainly by the supervisors but management personnel should also give them especially to highlight breaches. 	All
16.0	Emergency Response. <ul style="list-style-type: none"> An Emergency response procedure will be written to ensure that the appropriate manager or supervisor is contacted. These procedure are site specific but will follow the general guidelines shown in other areas of this document such as: <ol style="list-style-type: none"> 1. Security 2. Fire 3. Medevac 	PM, SM, SO
17.0	Night Working <ul style="list-style-type: none"> Night working should be avoided where possible especially where working at heights is concerned. General embankment works where carried out should ensure a system of lights is sufficient at the working areas All vehicle and equipment should have flashing lights and speed restricted to ensure safe driving. Men working outside vehicles or equipment cabs must have proper reflective clothing, torches and any other aids required after the risk assessment. 	PM, SM, SO
18.0	First Aid <ul style="list-style-type: none"> Before work starts a first aid course will be set up to ensure all 	PM, Nurse

	<p>foremen and supervisors have knowledge of the basics of first aid.</p> <ul style="list-style-type: none"> • A first aid kit will be carried in each of their vehicles and this information will be communicated to all men at the induction. • In addition to the basic first aid there will be a fully stocked clinic established at major locations where patients will be brought for a decision on any further treatment. • The fully trained medical nurse will also treat most non urgent medical requirements. 	
19.0	<p>Construction Plant and Equipment</p> <ul style="list-style-type: none"> • Special regard is to be made to ensure the safety of all who come into contact or use the heavy construction equipment. • Specific evaluations to be made for competency of operators • Spotter or banks man are to be used to control both the equipment and also dump trucks bring materials to ensure no accidents occur. • Special care and attention required in deep cut and fill areas to ensure level platforms are provided to enable materials have stability and prevent them overturning. 	PM, SM
20.0	<p>Workshops</p> <ul style="list-style-type: none"> • It is intended that when numbers and sizes of workshops are finalized a special procedures manual for workshop safety will be written. • Due to the specialized nature of this it is outside the scope of this safety plan although many elements of this plan will be incorporated. 	PM W/S Manager
21.0	<p>Hazardous Materials (COSHH)</p> <ul style="list-style-type: none"> • On construction sites and in workshops there are many hazardous materials that require control. • Additionally the safe handling of such materials needs to be taught or explained to those who use them. • Some examples are as follows: <ol style="list-style-type: none"> 1. Diesel 2. Petrol 3. Oil 4. Grease 5. Additives 6. Cement 7. Aggregates (Dust) 8. Cleaning fluids 9. Insect sprays 10. Products for cleaning Human Waste 11. Kitchen cleaners. <p>All of these and many more come with instruction leaflets which should be explained to the users. The identification of these substances should be made at the risk assessment stage and the mitigations (Gloves, barrier creams, masks etc) put into practice</p>	SO W/S Manager
22.0	<p>This list is by no means definitive and is a guide to the basics. Those items that are site specific will be written on site and a procedures manual built up to cover site specific needs</p>	