

Appendix (1)

Sudan University of Science & Technology

Collage of Graduate studies and Scientific Research

Civil Engineering Dep.

Questionnaire about The effect of safety precautions in construction performance

Respondents Profile (optional):

Put (√) sign In the right place :-

- Name :

-Education Level:

Secondary () Graduate () Post Graduate ()

- Age:

20-30 () 30-40() More than 40 ()

- Organization

Government () Consultant () Contractor ()

- Career Name:

Project Manager () project Engineer ()

Architect () owner Representative ()

- Years of Experience:

1-5 years () 5-10 years () More than 5 years ()

- Number of projects that you participated in it:

None () 1-5 () 5-10 () More than 10 ()

Scale 1 : At Organization Level

Put (√) sign In the right box according to their signification :-

1= Very disagree, 2= Disagree, 3= Neutral, 4= High agree, 5= Very high agree

| No. | Factors | 1 | 2 | 3 | 4 | 5 |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| A | At The Organization Level | | | | | |
| 1 | Safety and Health are the upper management responsibility in your Organization | | | | | |
| 2 | Your organization upper management devote time to discuss safety issues with company safety coordinator | | | | | |
| 3 | Are there informal safety inspections made by the company safety coordinator | | | | | |
| 4 | We hold programmed Meetings between the field safety representatives, craft workers and sub contactors to discuss safety issues | | | | | |
| 5 | We have training program for new foremen and safety coordinators to make them aware of safety issues | | | | | |
| 6 | We distribute safety booklets that has big effect in making workers aware of safety issues | | | | | |
| 7 | In our organization we care about appointing a trained safety representative on the work site to ensure safety performance | | | | | |
| 8 | We devoted adequate hours to train workers on safety means | | | | | |
| 9 | We put punishments for a workers who breaks safety regulations and we put Monetary Incentives Non-Monetary Incentives for workers who do his job in a safety manner and follow the safety instruction | | | | | |
| 10 | We allocate special places for worker's to smoke on the site | | | | | |
| 11 | We always correcting workers unsafe actions | | | | | |
| 12 | We insure our workers by company compensation insurance | | | | | |
| 13 | The company is allocating amount of money from company capital for its attention to issues of occupational safety and health | | | | | |
| 14 | Our Safety Managers are trained in occupational safety | | | | | |
| 15 | Increasing of the company volume will reduce its attention to the safety of workers | | | | | |
| 16 | We have department to monitor the Occupational Safety and Health | | | | | |
| 17 | In the project planning step, we care about putting a clear plan for safety at construction sites | | | | | |
| 18 | Putting regard to the safety issues in the tender stage may reduce the opportunities for competition | | | | | |
| 19 | We discuss safety responsibilities with the owner and consultant | | | | | |
| 20 | We claim and ask Contractors to develop a plan for safety in projects at the tender stage | | | | | |

Scale 2 : At Project Level

Put (✓) sign In the right box according to their signification :-

1= Very disagree, 2= Disagree, 3= Neutral, 4= High agree, 5= Very high agree

| No. | Factors | 1 | 2 | 3 | 4 | 5 |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| B | At Project Level | | | | | |
| 1 | We protect the public from risks which they may exposed to it by fencing off the working area. | | | | | |
| 2 | When work finishes, we make sure that Site entrances are secured. | | | | | |
| 3 | When work finishes, we make sure that the fence Perimeter is intact and functional. | | | | | |
| 4 | When work finishes, we make sure that Flooded areas, excavations, openings are covered or protected by barriers. | | | | | |
| 5 | When work finishes, we make sure that all site plant and remaining vehicles are immobilized. | | | | | |
| 6 | When work finishes, we make sure that the access to scaffolding is removed or blocked. | | | | | |
| 7 | When work finishes, we make sure that the all piled and stacked materials is safe. | | | | | |
| 8 | We make sure that all structures being worked on stable, safe and not overloaded. | | | | | |
| 9 | We make sure that the site is tidy and meeting an acceptable standard of housekeeping. | | | | | |
| 10 | We organize the operation of collecting and disposing of waste regularly. | | | | | |
| 11 | We offer adequate lighting in main and common areas, in addition to task lighting. | | | | | |
| 12 | We regularly make checks to ensure that scaffolds are only erected and altered by competent persons and the safe access available to platform levels in all cases. | | | | | |
| 13 | We make sure that all scaffolds inspected at least weekly by a competent person and the results recorded, and always following substantial alteration or damage. | | | | | |
| 14 | We make sure that all scaffold bracing and support members in place. | | | | | |
| 15 | We make sure that all scaffolds appropriately braced or secured to structure appropriately to prevent collapse. | | | | | |
| 16 | We make sure that the stored materials evenly distributed on the scaffold platforms and not excessive stored materials evenly distributed on the scaffold platforms and not excessive. | | | | | |
| 17 | We make sure that the ladders checked for defects before use and in good condition. | | | | | |
| 18 | We make sure that the ladders secured before use to prevent slipping. | | | | | |
| 19 | We make sure that the equipment properly erected by competent person to comply with suppliers' instruction. | | | | | |
| 20 | We train the operators of the machinery and equipment. | | | | | |

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| 21 | We commit our workers to wear Helmet protection. | | | | | |
| 22 | Have all cranes operators been specifically instructed in the identification of weight and center of gravity before lifting a load? | | | | | |
| 23 | Are all Crane operator usually is aware of crane design loads. | | | | | |
| 24 | Have all slingers or banksmen been specifically instructed in the identification of weight and center of gravity before lifting a load? | | | | | |
| 25 | Is all plant and equipment being used appropriately the right equipment for the job? | | | | | |
| 26 | Is all plants and equipment in good repair? | | | | | |
| 27 | Is a maintenance log maintained to record any defect and the date of their repair as well as preventive maintenance? | | | | | |
| 28 | We put site traffic plan to identify separate workflow pedestrian and vehicle routes with details given to driver where necessary. | | | | | |
| 29 | We usually make sure that the vehicles properly loaded, with protection against falling loads. | | | | | |
| 30 | We enforce a specific speed limits for the vehicle drivers within the site. | | | | | |
| 31 | Has safe access by ladders been provided to all excavations? | | | | | |
| 32 | Are all excavations protected where necessary to prevent people, materials or vehicles falling in or causing them to collapse? | | | | | |
| 33 | We protect nearby structures from being affected by an excavation | | | | | |
| 34 | We inspect all excavations by a competent person before each shift and after any event likely to compromise stability, with the result recorded | | | | | |
| 35 | Is there 1m of clear space at the edges of all excavations, between the edges and spoil heaps or materials stacks ? | | | | | |
| 36 | We put a site emergency plan, detailing steps required to evacuate the site in case of fire, and for confined space rescue | | | | | |
| 37 | We put a site emergency plan, detailing steps required to evacuate the site in case of fire, and for confined space rescue | | | | | |
| 38 | Are appropriate numbers of fire extinguishers present and marked? | | | | | |
| 39 | We made arrangement to remove waste regularly, and for storing it in bins prior to removal | | | | | |
| 40 | Is there an effective smoking ban where flammable materials are used, stored or installed? | | | | | |
| 41 | Are appropriate precautions in place to guard against striking underground services during the work? | | | | | |
| 42 | Have all temporary circuits been fitted with residual current devices? | | | | | |
| 43 | Are all cables and leads protected from damages? | | | | | |
| 44 | We have an appropriate system in place to ensure that the temporary electrical supply system is checked by a competent person at appropriate intervals | | | | | |
| 45 | Are all electrical tools and equipment subject to document | | | | | |

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| | examination and testing regime? | | | | | |
| 46 | We identify all hazardous substances and we assess their Potential risks | | | | | |
| 47 | We have appropriate precautions in a Storage areas of hazardous materials include signs, limitations on access and use of protective clothing and equipment | | | | | |
| 48 | The company is providing all possible social care facilities for all workers | | | | | |
| 49 | The company offers for its workers special areas on the site to allow them to rest and to prepare their food in the break | | | | | |
| 50 | We provide small toilets for workers in workplaces | | | | | |
| 51 | We provide an adequate supply of drinking water for the workers at the work site | | | | | |
| 52 | The company make an adequate assessment for the first aid requirements and provide appropriate facilities | | | | | |
| 53 | We develop a plan of work to reduce the noise inside and outside locations | | | | | |
| 54 | We provide ear protection headphones for each worker in the areas of noise | | | | | |
| 55 | We define a appropriate personal protective equipment for all workers in each location depending on the nature of his work and provided theme.g. helmet, eye protection, hearing protection, respiratory protective equipment, gloves, safety footwear, protective outdoor clothing for adverse environments including dusty, wet, or dirty conditions | | | | | |
| 56 | We make checks for all personal protective equipment if it is in good condition and properly maintained | | | | | |
| 57 | We have arrangements for replacement of worn or lost equipment | | | | | |

Remark : Your answer will be treated confidently, and will be used for academic purpose.

"Thank you for your corporation"

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