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**APPENDIX A: - CALCULATION OF RII VALUE FOR MANAGEMENT COMMITMENT ELEMENTS AND BARRIERS**

	<b>Management Commitment Elements</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	$\sum(W \times n)$	<b>Mean</b> $\frac{\sum(W \times n)}{N}$	<b>RII</b> $\frac{\sum(W_n)}{AN}$	<b>Rank</b>
1	Training programme on health and safety	16	17	7			169	4.23	0.845	9
2	Health & safety meetings	7	9	11	8	5	125	3.13	0.625	23
3	Leadership and support for health and safety	21	13	6			175	4.38	0.875	6
4	Pro-active performance measurement	16	14	10			166	4.15	0.830	12
5	Establishing safety rules at the site	2	9	6	13	10	100	2.50	0.500	25
6	Safety policies and system review	2	8	4	15	11	95	2.38	0.475	26
7	Compliance with regulations related to health and safety	2	7	7	11	13	94	2.35	0.470	27
8	Safety operational targets and proper time management	17	14	8	1		167	4.18	0.835	11
9	Safety inspection and risk identification	12	11	11	6		149	3.73	0.745	13
10	Supervision and monitoring	12	9	14	5		148	3.70	0.740	14
11	Budget allocation for health and safety implementation	15	18	7			168	4.20	0.840	10
12	Safety committee meetings	18	14	8			170	4.25	0.850	8
13	Clear line of authority and accountability	10	12	11	7		145	3.63	0.725	15
14	Motivation from the management to encourage safety	11	9	9	11		140	3.50	0.700	18
15	Proper communication with the different level of workers	10	11	13	5	1	144	3.60	0.720	16
16	Involvement of management with the workers	10	7	12	11		136	3.40	0.680	20
17	Follow safety rules and lead by example	12	6	10	12		138	3.45	0.690	19
18	The management's awareness on safety and health	11	10	10	8	1	142	3.55	0.710	17
19	Safety requirements to be included in the planning stage of construction	26	10	4			182	4.55	0.910	2
20	Implementation of safety practices rather than strict to the theoretical aspects	19	15	6			173	4.33	0.865	7
21	Proper record keeping in ISO standards for future reviews	2	8	9	11	10	101	2.53	0.505	24
22	Management needs to establish a system to respond safety issues without delay	28	9	3			185	4.63	0.925	1
23	Health, Safety & Environmental (HSE) personnel to be considered during the budget allocation	22	12	6			176	4.40	0.880	5
24	Health and safety inspections of the senior management to be pre-planned	9	8	12	9	2	133	3.33	0.665	21
25	Management needs to spend money reasonably on hygienic facilities	8	10	7	10	5	126	3.15	0.630	22
26	Review the close out actions of the regular safety and health inspections	25	9	6			179	4.48	0.895	3
27	Management to consider the personal protective equipment as a last resort	23	12	5			178	4.45	0.890	4

	<b>Barriers Need to Overcome</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	$\sum(W \times n)$	<b>Mean</b> $\frac{\sum(W \times n)}{N}$	<b>RII</b> $\frac{\sum(W_n)}{A}$	<b>Rank</b>
1	Management is reluctant to following the safety rules	16	10	12	2		160	4.00	0.800	14
2	Poor Budget allocation for Health, Safety & Environmental (HSE)	16	18	6			170	4.25	0.850	7
3	Poor compliance with health and safety regulations	7	12	9	11	1	133	3.33	0.665	18
4	Lack of awareness of safety requirements	13	21	6			167	4.18	0.835	9
5	Provision of less qualified safety officers	5	9	13	11	2	124	3.10	0.620	21
6	Poor senior management support	18	20	2			176	4.40	0.880	4
7	Provision of inadequate resources	19	17	4			175	4.38	0.875	5
8	Ineffective management policies	7	15	12	6		143	3.58	0.715	15
9	Lack of proper organizational structure		11	10	14	5	107	2.68	0.535	26
10	Lack of team work	14	23	3			171	4.28	0.855	6
11	Lack of clear lines of authority and accountability	6	7	14	13		126	3.15	0.630	19
12	Lack of Involvement with safety issues and late response	6	6	13	15		123	3.08	0.615	22
13	Less support from any of the partners (such as client, public and government)		6	17	11	6	103	2.58	0.515	29
14	Lack of positive attention	5	12	6	17		125	3.13	0.625	20
15	Not adapting the innovations		9	13	12	6	105	2.63	0.525	27
16	Weakness in the communication interface	3	10	12	15		121	3.03	0.605	24
17	Reactive rather than proactive management	4	11	9	15	1	122	3.05	0.610	23
18	Lack of a proper system to identify the hazards and risks	10	8	15	7		141	3.53	0.705	16
19	Safety is considered as a cost not an investment	16	17	4	3		166	4.15	0.830	10
20	Complexity in the safety legislation and regulations		7	18	14	1	111	2.78	0.555	25
21	Management hesitant to take on safety responsibilities	12	22	5	1		165	4.13	0.825	11
22	Management does not provide realistic targets to the workers	24	14	2			182	4.55	0.910	1
23	Use of unskilled labour without considering safety requirements	10	10	9	11		139	3.48	0.695	17
24	Purchasing of low quality materials and equipment	14	15	10	1		162	4.05	0.810	12
25	Lack of a proper control system for sub-contractors		5	16	17	2	104	2.60	0.520	28
26	Lack of required guidance provided from the enforcement bodies		5	13	18	4	99	2.48	0.495	30
27	Negative mind set of the management towards demonstrating safety leadership	22	14	4			178	4.45	0.890	2
28	Lack of management support in making the training needs	14	20	6			168	4.20	0.840	8
29	Inadequate time to prepare method statements and risk assessments	11	21	6	2		161	4.03	0.805	13
30	Management always be as production oriented.	21	15	4			177	4.43	0.885	3

**APPENDIX B: MANAGEMENT COMMITMENT ELEMENTS:**

**T- TEST OUTPUT**

<b>One-Sample Test</b>					
	Test Value = 3				
	t	df	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
Training programme on health and safety	10.564	39	1.225	.99	1.46
Health & safety meetings	.615	39	.125	-.29	.54
Leadership and support for health and safety	11.747	39	1.375	1.14	1.61
Pro-active performance measurement	9.066	39	1.150	.89	1.41
Establishing safety rules at the site	-2.550	39	-.500	-.90	-.10
Safety policies and system review	-3.204	39	-.625	-1.02	-.23
Compliance with regulations related to health and safety	-3.284	39	-.650	-1.05	-.25
Safety operational targets and proper time management	7.895	39	1.150	.86	1.44
Safety inspection and risk identification	4.318	39	.725	.39	1.06
Supervision and monitoring	4.246	39	.700	.37	1.03
Budget allocation for health and safety implementation	10.494	39	1.200	.97	1.43
Safety committee meetings	10.184	39	1.250	1.00	1.50
Clear line of authority and accountability	3.748	39	.625	.29	.96

Motivation from the management to encourage safety	2.687	39	.500	.12	.88
Proper communication with the different level of workers	3.509	39	.600	.25	.95
Involvement of management with the workers	2.199	39	.400	.03	.77
Follow safety rules and lead by example	2.336	39	.450	.06	.84
The management's awareness on safety and health	2.959	39	.550	.17	.93
Safety requirements to be included in the planning stage of construction	14.470	39	1.550	1.33	1.77
Implementation of safety practices rather than strict to the theoretical aspects	11.482	39	1.325	1.09	1.56
Proper record keeping in ISO standards for future reviews	-2.464	39	-.475	-.86	-.09
Management needs to establish a system to respond safety issues without delay	16.368	39	1.625	1.42	1.83
Health, Safety & Environmental (HSE) personnel to be considered during the budget allocation	11.898	39	1.400	1.16	1.64
Health and safety inspections of the senior management to be pre-planned	1.704	39	.325	-.06	.71
Management needs to spend money reasonably on hygienic facilities	.703	39	.150	-.28	.58
Review the close out actions of the regular safety and health inspections	12.428	39	1.475	1.23	1.72
Management to consider the personal protective equipment as a last resort	12.838	39	1.450	1.22	1.68

## APPENDIX C: BARRIERS TO BE OVERCOME:

### T- TEST OUTPUT

One-Sample Test					
	Test Value = 3				
	t	df	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
Management is reluctant to following the safety rules	6.583	39	1.000	.69	1.31
Poor Budget allocation for Health, Safety & Environmental (HSE)	11.180	39	1.250	1.02	1.48
Poor compliance with health and safety regulations	1.801	39	.325	-.04	.69
Lack of awareness of safety requirements	11.008	39	1.175	.96	1.39
Provision of less qualified safety officers	.572	39	.100	-.25	.45
Poor senior management support	14.994	39	1.400	1.21	1.59
Provision of inadequate resources	13.029	39	1.375	1.16	1.59
Ineffective management policies	3.797	39	.575	.27	.88
Lack of proper organizational structure	-2.010	39	-.325	-.65	.00
Lack of team work	13.471	39	1.275	1.08	1.47
Lack of clear lines of authority and accountability	.902	39	.150	-.19	.49
Lack of Involvement with safety issues and late response	.443	39	.075	-.27	.42
Less support from any of the partners (such as client, public and government)	-2.888	39	-.425	-.72	-.13

Lack of positive attention	.710	39	.125	-.23	.48
Not adapting the innovations	-2.360	39	-.375	-.70	-.05
Weakness in the communication interface	.162	39	.025	-.29	.34
Reactive rather than proactive management	.291	39	.050	-.30	.40
Lack of a proper system to identify the hazards and risks	3.127	39	.525	.19	.86
Safety is considered as a cost not an investment	8.145	39	1.150	.86	1.44
Complexity in the safety legislation and regulations	-1.854	39	-.225	-.47	.02
Management hesitant to take on safety responsibilities	9.844	39	1.125	.89	1.36
Management does not provide realistic targets to the workers	16.421	39	1.550	1.36	1.74
Use of unskilled labour without considering safety requirements	2.602	39	.475	.11	.84
Purchasing of low quality materials and equipment	7.851	39	1.050	.78	1.32
Lack of a proper control system for sub-contractors	-3.252	39	-.400	-.65	-.15
Lack of required guidance provided from the enforcement bodies	-3.920	39	-.525	-.80	-.25
Negative mind set of the management towards demonstrating safety leadership	13.536	39	1.450	1.23	1.67
Lack of management support in making the training needs	11.049	39	1.200	.98	1.42
Inadequate time to prepare method statements and risk assessments	8.101	39	1.025	.77	1.28
Management always be as production oriented.	13.350	39	1.425	1.21	1.64

## APPENDIX D: T- TABLE AND CRITICAL T-VALUE

**t Table**

cum. prob one-tail two-tails	$t_{.50}$	$t_{.75}$	$t_{.80}$	$t_{.85}$	$t_{.90}$	$t_{.95}$	$t_{.975}$	$t_{.99}$	$t_{.995}$	$t_{.999}$	$t_{.9995}$
	0.50	0.25	0.20	0.15	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
df	1.00	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01	0.002	0.001
1	0.000	1.000	1.376	1.963	3.078	6.314	12.71	31.82	63.66	318.31	636.62
2	0.000	0.816	1.061	1.386	1.886	2.920	4.303	6.965	9.925	22.327	31.599
3	0.000	0.765	0.978	1.250	1.638	2.353	3.182	4.541	5.841	10.215	12.924
4	0.000	0.741	0.941	1.190	1.533	2.132	2.776	3.747	4.604	7.173	8.610
5	0.000	0.727	0.920	1.156	1.476	2.015	2.571	3.365	4.032	5.893	6.869
6	0.000	0.718	0.906	1.134	1.440	1.943	2.447	3.143	3.707	5.208	5.959
7	0.000	0.711	0.896	1.119	1.415	1.895	2.365	2.998	3.499	4.785	5.408
8	0.000	0.706	0.889	1.108	1.397	1.860	2.306	2.896	3.355	4.501	5.041
9	0.000	0.703	0.883	1.100	1.383	1.833	2.262	2.821	3.250	4.297	4.781
10	0.000	0.700	0.879	1.093	1.372	1.812	2.228	2.764	3.169	4.144	4.587
11	0.000	0.697	0.876	1.088	1.363	1.796	2.201	2.718	3.106	4.025	4.437
12	0.000	0.695	0.873	1.083	1.356	1.782	2.179	2.681	3.055	3.930	4.318
13	0.000	0.694	0.870	1.079	1.350	1.771	2.160	2.650	3.012	3.852	4.221
14	0.000	0.692	0.868	1.076	1.345	1.761	2.145	2.624	2.977	3.787	4.140
15	0.000	0.691	0.866	1.074	1.341	1.753	2.131	2.602	2.947	3.733	4.073
16	0.000	0.690	0.865	1.071	1.337	1.746	2.120	2.583	2.921	3.686	4.015
17	0.000	0.689	0.863	1.069	1.333	1.740	2.110	2.567	2.898	3.646	3.965
18	0.000	0.688	0.862	1.067	1.330	1.734	2.101	2.552	2.878	3.610	3.922
19	0.000	0.688	0.861	1.066	1.328	1.729	2.093	2.539	2.861	3.579	3.883
20	0.000	0.687	0.860	1.064	1.325	1.725	2.086	2.528	2.845	3.552	3.850
21	0.000	0.686	0.859	1.063	1.323	1.721	2.080	2.518	2.831	3.527	3.819
22	0.000	0.686	0.858	1.061	1.321	1.717	2.074	2.508	2.819	3.505	3.792
23	0.000	0.685	0.858	1.060	1.319	1.714	2.069	2.500	2.807	3.485	3.768
24	0.000	0.685	0.857	1.059	1.318	1.711	2.064	2.492	2.797	3.467	3.745
25	0.000	0.684	0.856	1.058	1.316	1.708	2.060	2.485	2.787	3.450	3.725
26	0.000	0.684	0.856	1.058	1.315	1.706	2.056	2.479	2.779	3.435	3.707
27	0.000	0.684	0.855	1.057	1.314	1.703	2.052	2.473	2.771	3.421	3.690
28	0.000	0.683	0.855	1.056	1.313	1.701	2.048	2.467	2.763	3.408	3.674
29	0.000	0.683	0.854	1.055	1.311	1.699	2.045	2.462	2.756	3.396	3.659
30	0.000	0.683	0.854	1.055	1.310	1.697	2.042	2.457	2.750	3.385	3.646
40	0.000	0.681	0.851	1.050	1.303	1.684	2.021	2.423	2.704	3.307	3.551
60	0.000	0.679	0.848	1.045	1.296	1.671	2.000	2.390	2.660	3.232	3.460
80	0.000	0.678	0.846	1.043	1.292	1.664	1.990	2.374	2.639	3.195	3.416
100	0.000	0.677	0.845	1.042	1.290	1.660	1.984	2.364	2.626	3.174	3.390
1000	0.000	0.675	0.842	1.037	1.282	1.646	1.962	2.330	2.581	3.098	3.300
<b>Z</b>	0.000	0.674	0.842	1.036	1.282	1.645	1.960	2.326	2.576	3.090	3.291
	0%	50%	60%	70%	80%	90%	95%	98%	99%	99.8%	99.9%
	<b>Confidence Level</b>										

## **APPENDIX E: - INTERVIEW GUIDELINE**

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The information drawn together from this interview will only be used in accomplishing the dissertation for the award of Master of Science Honors degree in Occupational Health and Safety Management. To maintain confidentiality, the actual names of the organizations and the interviewees will not be revealed in this report or any other document related to this study.

### **BACKGROUND INFORMATION**

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Project Name :

Respondent Name :

Designation :

Date :

### **INTRODUCTION**

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1. Do you have safety staff to monitor, guide and make aware the safety aspects?
2. What are the factors that motivate you to consider/comply health and safety management at your project?

### **ABOUT MANAGEMENT COMMITMENT**

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1. Do you think that your project has implemented the positive safety culture?
2. Do you have a safety policy?
3. Do you have safety targets fixed? How much you get success in achieving those targets?
4. Has the management committed and provide adequate support in the safety requirements in order to fulfill the requirements of safe system of work?
5. What are the few actions of the senior management does towards visible leadership and commitment among the employees?
6. What are the ways that the management involves with the workers?
7. Do you have any methods to identify the hazard of work place?
8. Do you have a system to follow up the health and safety functions regularly?

9. Is your project in compliance with the local regulations?
10. Are the documents and records are maintained in a manner so that it could be used as an evidence as required?
11. Do you participate in safety meetings, trainings and safety inspections?
12. What are the proactive actions taken by the senior management in order to control the accidents, incidents or near misses?
13. Do you think that the employee's including senior management is having enough awareness in health and safety?
14. Are you satisfied with the competency level of the site personnel?
15. Does the senior management support towards provision of information, instruction and training to the employees.
16. Do you feel that the current budget allocation for HSE is adequate?
17. How is your communication levels and relationship with employees in relation to HSE?
18. Is there any clear line of authority and accountability or distribution of responsibility within the project site?
19. Does the management motivate/encourage safety improvements? Examples?
20. Does your project have any procedure to take action against those who do not follow the safety rules at site? State briefly.
21. Do you think that the senior management has provided the required resources to carry out the tasks smoothly and safely in order to comply with the health and safety requirement?
22. How often you review the safety policies, safety management system and site procedures and rules?
23. What are the control measures you follow whenever the hazards are ignored?
24. Have you implemented any program to build-up team work?

25. What are the difficulties you faced in addressing the HSE issues that came across in your project?
26. What are the actions you took in the past in order to overcome the laps and barriers in regards to health and safety?
27. Is that true that the senior management staffs are reactive rather than proactive in health and safety actions?
28. Do you have any suggestions to overcome the barriers and/or improve the HSE at your project?
29. “Safety is an investment not a cost” Do you agree with this statement?
30. Any other comments you would like to make?

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I would like to thank you for the information given and time you have dedicated to this research. If you are interested to know the outcome of this research, it would be my pleasure to share it with you.

## APPENDIX F: - QUESTIONNAIRE GUIDELINE

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### Developing a Framework to Establish the Safety Culture in Construction Industry through Management Commitment

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#### Questionnaire brief

The aim of this research is identify the elements of management commitment and to propose a framework to establish the safety culture in Construction industry. Results of this questionnaire are expected to accomplish the following objectives of the research;

- Identify the existing level of management commitment towards establishing the safety culture in construction projects
- Identify the barriers to overcome in implementing the management commitment

The questionnaire contains two sections as follows;

- Section A: Focuses on establishing the existing levels of management commitment
- Section B: Focuses on establishing the barriers to implement management commitment

#### Confidentiality statement

The information drawn from this questionnaire will be anonymously used in accomplishing the dissertation for the award of Master of Science in Occupational Safety and Health Management. All collected data will be handled with strict confidentiality. The actual names of the organisations and the respondent details will not be revealed in the report or any other document related to this study.

Thank you in advance for your participation. Your valuable time and expert opinion is highly appreciated.

#### ***Researcher;***

*A.Haleemdeen*

*Post Graduate Student*

*M.Sc. in Occupational Safety and Health Management*

*Department of Building Economics,*

*University of Moratuwa.*

*E-mail – oshas13@hotmail.com*

*Tel – 075 3510149*

**Respondent details (Optional)**

Name of the respondent : - .....

Designation : - .....

Years of experience : - .....

**Organization details**

1. Name of the Organization : - .....

2. What is the approximate number of employees in your organization?

Less than 100     100-300     More than 300

3. Type of the organization

Building construction

Infrastructure construction

Others. Please specify) .....

4. Do you have a separate department for health and safety management?

Yes     No

5. What are the factors encouraged you to consider on the health and safety management implementation?

Moral interest     Social reasons

Financial interest     Legal requirements

To keep the accident rate at zero level

Others (Please Specify) .....

6. Does your organization have a safety policy?

Yes     No

7. Are you satisfied with the current health and safety management of your project?

Satisfied     Not Satisfied     Need to Implement

## SECTION A - EXISTING ELEMENTS OF MANAGEMENT COMMITMENT

This section attempts to determine the level of existing management commitment from the senior management in construction industry. Please tick (√) your degree of agreement, if the same is applicable/implemented currently at the construction projects.

*Note: You are required to consider a construction project that you are currently involved in indicating your answers. Please use the following scale in indicating your degree of agreement:*

Very Low	Low	Moderate	High	Very High
1	2	3	4	5

No	MANAGEMENT COMMITMENT ELEMENTS	Degree of agreement				
		Very Low	Low	Moderate	High	Very High
1	Training programme on health and safety	1	2	3	4	5
2	Health & safety meetings	1	2	3	4	5
3	Leadership and support for health and safety	1	2	3	4	5
4	Pro-active performance measurement	1	2	3	4	5
5	Establishing safety rules at the site	1	2	3	4	5
6	Safety policies and system review	1	2	3	4	5
7	Compliance with regulations related to health and safety	1	2	3	4	5
8	Safety operational targets and proper time management	1	2	3	4	5
9	Safety inspection and risk identification	1	2	3	4	5
10	Supervision and monitoring	1	2	3	4	5
11	Budget allocation for health and safety implementation	1	2	3	4	5
12	Safety committee meetings	1	2	3	4	5
13	Clear line of authority and accountability	1	2	3	4	5

No	MANAGEMENT COMMITMENT ELEMENTS	Degree of agreement				
		Very Low	Low	Moderate	High	Very High
15	Proper communication with the different level of workers	1	2	3	4	5
16	Involvement of management with the workers	1	2	3	4	5
17	Follow safety rules and lead by example	1	2	3	4	5
18	The management's awareness on safety and health	1	2	3	4	5
19	Safety requirements to be included in the planning stage of construction	1	2	3	4	5
20	Implementation of safety practices rather than strict to the theoretical aspects	1	2	3	4	5
21	Proper record keeping in ISO standards for future reviews	1	2	3	4	5
22	Management needs to establish a system to respond safety issues without delay	1	2	3	4	5
23	Health, Safety & Environmental (HSE) personnel to be considered during the budget allocation	1	2	3	4	5
24	Health and safety inspections of the senior management to be pre-planned	1	2	3	4	5
25	Management needs to spend money reasonably on hygienic facilities	1	2	3	4	5
26	Review the close out actions of the regular safety and health inspections	1	2	3	4	5
27	Management to consider the personal protective equipment as a last resort	1	2	3	4	5

**SECTION B – BARRIERS TO OVERCOME IN IMPLEMENTING  
MANAGEMENT COMMITMENT**

This section determines the barriers that affect the implementation of the management commitment in construction industry. Please tick (√) your degree of agreement.

*Note: You are required to consider a construction project that you are currently involved in indicating your answers. Please use the following scale in indicating your degree of agreement:*

Very Low	Low	Moderate	High	Very High
1	2	3	4	5

No	BARRIERS NEED TO OVERCOME	Degree of agreement				
		Very Low	Low	Moderate	High	Very High
1	Management is reluctant to following the safety rules	1	2	3	4	5
2	Poor Budget allocation for Health, Safety & Environmental (HSE)	1	2	3	4	5
3	Poor compliance with health and safety regulations	1	2	3	4	5
4	Lack of awareness of safety requirements	1	2	3	4	5
5	Provision of less qualified safety officers	1	2	3	4	5
6	Poor senior management support	1	2	3	4	5
7	Provision of inadequate resources	1	2	3	4	5
8	Ineffective management policies	1	2	3	4	5
9	Lack of proper organizational structure	1	2	3	4	5
10	Lack of team work	1	2	3	4	5
11	Lack of clear lines of authority and accountability	1	2	3	4	5
12	Lack of Involvement with safety issues and late response	1	2	3	4	5
13	Less support from any of the partners (such as client, public and government)	1	2	3	4	5

No	BARRIERS NEED TO OVERCOME	Degree of agreement				
		Very Low	Low	Moderate	High	Very High
15	Not adapting the innovations	1	2	3	4	5
16	Weakness in the communication interface	1	2	3	4	5
17	Reactive rather than proactive management	1	2	3	4	5
18	Lack of a proper system to identify the hazards and risks	1	2	3	4	5
19	Safety is considered as a cost not an investment	1	2	3	4	5
20	Complexity in the safety legislation and regulations	1	2	3	4	5
21	Management hesitant to take on safety responsibilities	1	2	3	4	5
22	Management does not provide realistic targets to the workers	1	2	3	4	5
23	Use of unskilled labour without considering safety requirements	1	2	3	4	5
24	Purchasing of low quality materials and equipment	1	2	3	4	5
25	Lack of a proper control system for sub-contractors	1	2	3	4	5
26	Lack of required guidance provided from the enforcement bodies	1	2	3	4	5
27	Negative mind set of the management towards demonstrating safety leadership	1	2	3	4	5
28	Lack of management support in making the training needs	1	2	3	4	5
29	Inadequate time to prepare method statements and risk assessments	1	2	3	4	5
30	Management always be as production oriented.	1	2	3	4	5

I would like to thank you for the information given and time you have dedicated to this research. If you are interested to know the outcome of this research, it would be my pleasure to share it with you

## APPENDIX –G: MANAGEMENT COMMITMENT’S INVOLVEMENT IN CONSTRUCTION PROJECTS

Project director, project manager, safety manager and other site personnel involving in safety award ceremony, toolbox talk, committee meeting and encouraging training programs

### PROJECT – A



## PROJECT B

Senior Management Site Inspection



Monthly Safety Awarding Ceremony



Morning Toolbox Talk



Morning Exercise



HSE Committee Meeting



Morning Task Briefing

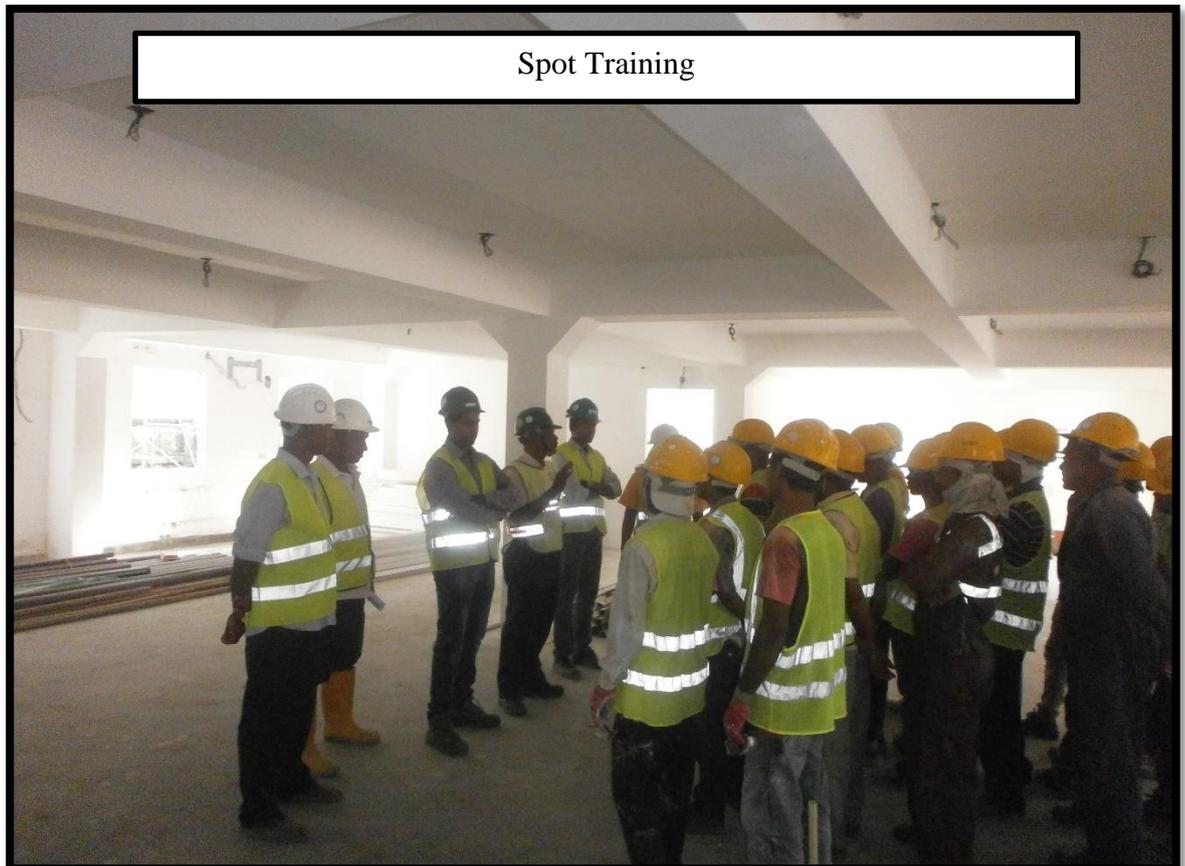


**PROJECT C**

Morning Toolbox Talk



Spot Training



## APPENDIX H: - MANAGEMENT COMMITMENT TOOLS ARE PRACTICED IN COMPLIANCE WITH HSE SYSTEM

### Item #01 - HSE promotional activities

Monthly Safety and Environment Report No. 06  
Jan 2015

H/

-house rules were translated in two languages, English, Sinhalese.

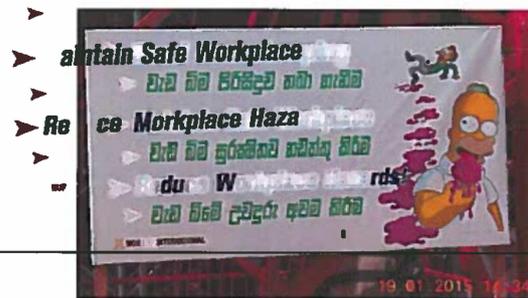
#### 5. Safety Promotion

##### 5.1 Promotional Activities Conducted

- Safety Signboards were displayed on the site.
- OHSE posters were displayed on the site.
- Safety Induction Courses for all workers, supervisory staff and WHI staff were conducted.
- PPE inspections were conducted.
- Mass Toolbox meeting was conducted.
- Safety Talk on selected topic was conducted.

##### Safety Banners Displayed

##### ➤ Good Housekeeping



Daily Tool Box Meeting & Safety award



Safety Inspections

## Item #02 – HSE meeting

Health, Safety & Environmental Meeting # 04 (Monthly Meeting)			
Date	: 18/03/2015	Time	: 03.15 pm
Location	: TRAINING CENTER	Distribution: To:	All Attendees & the Action
<p><u>Agenda:</u></p> <ol style="list-style-type: none"> <li>1) Health, Safety and Environmental Management System</li> <li>2) Accident and Incident</li> <li>3) Safe System of Work</li> <li>4) Welfare Provision</li> </ol>			
Item No	D	Action By	Date
<p>The Project Director chaired the meeting and said that this is an important meeting and all the nominated members need to attend without fail. All the policy decisions in HSE are made in this meeting.</p>			
1.1	The canteen agreement need to review – The price revision will be done and the agreement will be ready within the next two weeks and the time schedule for tea and lunch should be displayed. The server have to	Mr. Gamunu	
1.2	Subcontractor/Man power supply – Supervisors to be always at site with their workers monitoring their activities. If there is any problem in labour	Subcontractor/Man power	info
1.3	The people who are enter into the site under influence of drugs and alcohol, severely punished through the site violation system	All	Info
1.4	First aider should be check the patient thoroughly and find out the actual reason for the disease or injury before send him to the hospital unless it is emergency.		
<b>CURRENT MATTERS / ISSUES</b>			
2.1	HSE Manager briefed on the importancy having the HSE meeting quoted the Local Legislation- the Factories Ordinance No 45 of 1942 requirements to have the same regularly at site as scheduled. Further he mentioned the top management, middle management	ALL	Info

2.2	Personal protective equipment issue: the person who use the PPE including full body harness need to store the items in a proper way. The fine system will apply against the violator who misuse the PPE and store it	All	Info
2.3	The task briefing should be done every day morning 8.00am to 8.15am by each foreman and supervisor among their team. HSE officer also need to attend to support and point out unsafe conditions and unsafe acts which they forgot to mention. The summary of the	All	Info
2.4	Changing room for labours should be arranged and the damaged plywood of the canteen floor have to replace as soon as possible	Mr. Gamunu	
2.5	Immediate response person is foreman/ supervisor. If any task continued to another shift (after 6.30 pm) they should be available until the completion. All the workers also have to be aware "what is the task and	All	Info
2.6	All the lifting accessories should be handle and stored properly. Riggers must consider this issue and they are the responsible person to the lifting accessories.	Mr. Praveen	Info
2.7	Power tools and circular saw should be use according to the manufacture guidance and make sure the size of	Mr. Praveen	Info
2.8	Housekeeping was improved very much and it has to be maintain. Do the housekeeping 10-30 minutes before handover to next shift people. Good housekeeping	Mr. Viney, Mr. Prabhakar an & All	Info
2.9	Scaffolding materials brought and placed here and there all over the site premise. Those materials should kept properly without obstructing the access and other activities within two weeks	Mr. Manjula	
3.0	Improper lighting in slope tower B-2 and B-1 slabs. Provide adequate lighting for people moving and also control the mosquito spreading and urination.	Mr. Praveen	

**Prepared by : HSE Officer**

**Next Meeting will be held on 09.04.2015 @ 3pm.**

**Item #03 – HSE Inspection report**

**HEALTH, SAFETY & ENVIRONMENTAL INSPECTION**

<b>LOCATION</b>	<b>COLOMBO-02</b>	<b>INSPECTED BY:</b>	<b>DATE :20.04.2015 TO 25.04.2015</b>	<b>TIME: SHIFT</b>
<b>SECTION:</b>	<b>ALL</b>	<b>ACCOMPANIED BY:</b>		<b>REPORT NO : 19</b>
<b>CHECK LIST</b>				
1. HOUSE KEEPING	√	7. FIRE	13. EXCAVATION	√
2. MATERIALS STORAGE	√	8. WORKING PLATFORMS	14. FILLING PROCESS	19. ACCESS ROAD/ACCESS STAIRS
3. SANITARY FACILITIES		9. LADDERS/STAIRS	15. P.P.E.	√
4. KITCHEN/HYGIENE		10. EMERGENCY VEHICLES	16. COSHH	20. CYLINDER HANDLING
5. DISPOSAL OF WASTE	√	11. PLANT ENTRANCE	17. LOADING/UNLOADING	21. WELFARE
6. ELECTRICITY	√	12. SIGNAGE	18. STORES	√
<b>OBSERVATIONS:</b>		<b>ACTIONS REQUIRED, PARTICULARLY UNDERLYING MANAGEMENT OR SYSTEM INADEQUACIES:</b>		<b>CLOSE OUT (NAME/DATE)</b>
01 Working at height without safety harness, platform and access		<p>Proper working platform and life-line with access is required to carry out this kind of activities</p> <p>Risk of fall from height and fatal injuries</p> <p>To control this kind of risk relevant site engineers commitment needed. Ensure that the work area is safe with adequate resource to do the task</p> <p>Statues <b>High risk</b></p>		Mr. Suresh Mr. Rampravesh yadav
02 Unsafe chipping (water tank area)		<p>Proper working platform with access is required</p> <p>Risk of fall injuries</p> <p>Ensure that the work area is safe to do the task</p> <p>Statues <b>Medium risk</b></p>		Mr. Marvin

<p>03 Improper placement and use of ladder</p>	<p>Ladder should be place in safe angle (70°-75°). Hand rail is required for steel travel way ladders</p> <p>Risk of slip and fall injuries</p>	<p>Mr. Rampravesh yadav Mr. Anil</p>
<p>Statues</p>		<p><b>Medium risk</b></p>
<p>04 Concrete pouring activity without safe working platform</p>	<p>Safe working platform with edge protection should be provided for concrete pouring activity</p> <p>Risk of personnel falling from height and fatal injuries</p>	<p>Mr. Gayan G K Mr. Marvin Mr. Suresh</p>
<p>Statues</p>		<p><b>High risk</b></p>

FAILURE TO 'CLOSE OUT' WITHIN THE STIPULATED PERIOD WILL RESULT IN CALLING INQUIRY.

INSPECTOR:	RECIPIENT:	DISTRIBUTION:	
Print Name:	Print Name:		CLIENT
HSE Officer		√	CONSULTANT
		√	
		√	
Signature:			
Date:		√	
Reviewed by:		√	
HSE Manager		√	
		√	
		√	
Signature:	Signature:	√	
Date:	Date:		
			HSE File
			√

**Item #04 – Corrective/ closeout action report**

\*[Appendix 6.4]



<b>Corrective Action Request</b>	CAR No.	2015-003
	Date	20.04.2015
<input type="checkbox"/> Internal <input type="checkbox"/> Supplier <input checked="" type="checkbox"/> Subcontractor	Page	01 OF 02

You are hereby informed that the following unsafe act/condition was observed and rectification for corrective actions shall be implemented by

**(A) Detail to be completed by originator**

Description of Non-conformity    Accident(Minor, Significant, Major)    Near Miss    Safety Violations    Work Stop  
 Others : HSE -2015 Audit Finding(16.04.2015)

Responsible Company :   Area :   BD # 06   Supervisor Name & ID No.

Findings:  
 Improper Access management  
**Refer to attachment #01**  
 Proper access Should be provided.

Prepared by: (Issuer/Originator) 	Checked by 	Approved by 
--------------------------------------	----------------	-----------------

**(B) Details to be completed by responsible function**

Root Cause Analysis is required  Yes  No  
 Root Cause of Problem    Design    Material    Human    Machine    Method / Process    Others  
 Summary of the Root Cause Analysis  
 Participants of Root Cause Analysis

Action taken to prevent recurrence  
 We removed the ladder to the foundation for T/C #6 immediately. So as to avoid similar findings will manage care. Backfilling also has been completed by now.

Prepared by (Subcontractor Site Manager) 	Checked by (HKN.IV District Manager) 	Approved by (HKN.IV HSE Manager) 
---	---	---

**(C) Detail to be completed by verification and**

Verified Close-out by Originator	
<input checked="" type="checkbox"/> Accept <input type="checkbox"/> Reject	Name/Signatory/Designation/Department

Reason for Rejection:

**Item #05 – HSE training**

Main Contract

Prepared by:	Reviewed by:	Approved by:
SYDNEY		

**HSE TRAINING REPORT**

U.K. LANKA.

(2015.04.02) rev.0

DATE	04/04/2015 ✓	TIME	1.30 PM
Trainer	MR TERRANCE SYDNEY	Issued company	

**Training Agenda**

1. PROPER ACCESS/EGRESS SHALL BE PROVIDED FOR PERSONNEL TO WORK AREA.
2. ALL PERSONNEL SHALL WEAR THE MANDATORY PPE
3. KEEP ONLY REQUIRED MATERIAL AT WORK SITE
4. KEEP THE ACCESS (LKM/IS) STOCK EXTRA MATERIAL AWAY FROM WORK PLACE

**Attendance**

NAME	ID NO.	SIGN	NAME	ID NO.	SIGN
Dhama	918025770V				
R.P. Aith	882471260V				
MJP Reiris	650494350V				
B. C. J. Soy	60312857X				
K. A. L. Prabhu	663310127V				
D. D. S. P. U. H. H. H.	680740763V				
S. M. N. W. N. D. S.					
T. A. M. S. U. D. H. I. K. A.	920601014V				

**Item #06- Work area check list**

<b>ISSUE: 00</b>	<b>DATE: 16.02.2014</b>	<b>REV.: 00</b>	<b>L-HSE-F-015</b>
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Project:

Date :

SI. #	Item Description	STATUS																REMARKS
		YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	Proper <b>house keeping</b> is maintained and general condition of walk way areas is acceptable.																	
2	Regular clearing of generated rubbish																	
3	sing boards are properly installed																	
4	properly removed cables / obstracle in the walk way area																	
5	access / egress to work areas are always maintained clear and unobstructed.																	
6	Passages / walkways / stairways are always kept clear and well lit.																	
7																		
8	Adequate lighting provided for the work areas/walkways																	
9	fogging programe done internal/Abans																	
10	All cables and water boilers are properly installed																	
<u>Any other items:</u>																		
<u>Comments / Observations if any:</u>																		

Inspected by:

**Item #07- HSE Commitment meeting**

<b>MINUTES OF MONTHLY HSE COMMITMENT MEETING</b>				[Redacted]		
PROJECT:		[Redacted]				
SUBJECT:	Agenda NO. 08	Ref No:	Minute of HSE Comm. Meeting #08			
Purpose:	Co-ordinate on-site H&S issues with the Management.					
Venue:	[Redacted]					
Date:	8 <sup>th</sup> May 2015.	Time:	10:30am – 11:30am			
Distribution:	Project Director, Sr. Project Manager, All Attendees.	Issue Date:	8 <sup>th</sup> May 2015.			
<b>ATTENDEES:</b>						
[Redacted] Management team to include where possible Departmental heads, Subcontractors, Site Manager & HSE Manager						
No	Name	Position	No	Name	Position	
	[Redacted]			<b>Sub-Contractor : Sam Ku Lanka</b>		
01	[Redacted]	Project manager	07	[Redacted]	Project Manager	
02	[Redacted]	QA/QC Coordinator	08	[Redacted]	Safety manager	
03	[Redacted]	HSE Manager	09	[Redacted]	HSE Officer	
04	[Redacted]	Deputy Manager-HSE				
	<b>Sub-Contractor : Nawaloka</b>					
05	[Redacted]	Project Manager				
06	[Redacted]	HSE Engineer				
Previous MOM	Previous MOM accepted as a true record by all present. If no, state comments here.				Yes	No
					o	
No.	Item				Action by	
1.0	<p>[Redacted] has discussed these topics during the meeting through the presentation, (Presentation Attached) <b>Safety Moment, HSE Statistics, HSE Findings, Near Miss, Medical Treatment Cases, First Aid Cases, Other Business</b></p> <p style="text-align: center;"><b>1. Safety Moment-</b></p> <p><b>Hierarchy of hazard control system-</b>It is a system used to minimize or eliminate exposure to hazards. The "Hierarchy of Controls" should be used at all times when implementing controls to eliminate the hazard or reduce the risk of a hazard causing loss / damage / injuries.</p> <p>The hierarchy of hazard controls is a list which emphasises controlling a hazard at the source.</p> <p style="text-align: center;"><b>2. HSE Statistics, Findings &amp; Trend analysis</b></p> <p>HSE Accident Statistics, Joint Inspection Finding, Joint inspection Finding Trend- Company wise &amp; unsafe condition/act wise, Near miss cases, Medical treatment</p>					

**Item #08 – Daily co-ordination meeting**

Main Contract

**HSE Daily coordination Meeting**

(2015.03.30) rev.0

DATE	04/04/2015	TIME	4.30 pm
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ATTENDEE

NAME	COMPANY	SIGNATURE	NAME	COMPANY	SIGNATURE

Meeting agenda

Issue	Finding / Request	Corrective action	Remark
SYDNEY	WORKERS ARE REQUESTING # NAWALOKA. Fromet-officer REQUESTING provide toilet facilities	1. K H safety engineer said I will discuss with K H N	VERY SOON
		Safety manager Regarding toilet facilities - portable or sweet water which they shall provide to hot.	MR LEE THIS AFTERNOON
Sydney	Maintain & continuously go through with training for the workers.	- Daily Training Program Every day will be conducted	By Sydney
NAWALOKA MR. WALTER	MR REQUESTED FOR NAWALOKA MANAGEMENT TO PROVIDE WATER 155105 FOR WORKER	waiting for	By ROBERTS NAWALOKA
	AREA NO. 701'S WERE NOT OPEN	TO BE DISCUSSED MR LEE: EXTRA TOILET TO PROVIDE	MR LEE
SYDNEY			daily improved
SUMKULANKA MR WALTERS	Did not ATTENDED for meeting		but not respect
SYDNEY	Prud'ching # 2 IS AVAILABLE BUT NO ANY PROPER ACCESS #	proper access should arrange immediately & proper walkway to be provide immediately	action required immediately K H N

**Item #09 –Special trainings**



Location: HSE Induction room

Date & Time : 01.04.2015

Duration : 10.00 am/pm - 10.30 am /pm

Title: Safe welding Practices & General site Safety

No.	Company	Name	Position	Signature
1	Nawaloka	D.A Chandana Silva	welder	Chandana
2	Nawaloka	k.vinathan	worker	k.vino
3	Nawaloka	J.Puthirakasari	worker	J.P.
4	Nawaloka	M.P Damith	worker	M.P.
5	Nawaloka	K.S. AMIDA	worker	ch
6	Nawaloka	MG Soelban	worker	MG
7	Nawaloka	N.A. Ruwan	Welder	N.A.
8	Nawaloka	G. Woutersz	HSEO	G.W.
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

✓ Speed training

# Item #10- Site Safety Inspection Report



## SITE SAFETY INSPECTION

DATE 17 - 06 - 2014

Construction Manager:  Contract :   
 HSE Manager :  Report No:   
(form / initial / month / st. No)

This report follows a safety inspection of the above contract on the date stated, the items indicated by a (X) are commented upon.

1. Excavation	4. Plant & Equipment	7. Housekeeping
Adequate access provided?	Safe working condition?	Project site tidy?
Barrier in place?	Safety guard in place?	Materials storage area tidy?
Shoring /benching provided?	Reverse alarm working and audible?	Material stacked securely?
Underground utilities made safe?	Any leaks or spillage spotted?	Timber de-nailed?
Spoil stored clear of edge?	Signal man provided?	Waste containers emptied? <input checked="" type="checkbox"/>
Warning signs provided? <input checked="" type="checkbox"/>	Valid TPC for the operator/eqpnt?	Passages clear of tripping hazard?
2. Working at height	5. Lifting operations	8. Welfare facilities
Working platform provided/fully boarded?	Lifting gear in good condition?	Toilets/washing area clean?
G/rails & toe boards in place? <input checked="" type="checkbox"/>	SWL displayed?	Drinking water hygienic?
Access /egress ladders provided /secured?	Banks man present?	First aid stock adequate?
Scaffolding stable and vertical? <input checked="" type="checkbox"/>	Tag lines provided?	Rest shed provided/clean?
Bracing or ties in place?	Load not raised over people?	Smoking areas clean?
Safety harness provided & used?	Tackles color coded?	Water filter clean?
Scaffolding checked and Scafftagged? <input checked="" type="checkbox"/>	Outriggers fully extended?	No Surface Water?
	Out rigger pads used?	No Fungi growth?
3. Electric tools & supply	6. PPE.	9. Other
Safe working condition?	Hard hats worn at all times?	Flammables correct storage?
Correct socket in use?	Eye protection in use?	Adequate fire prevention?
Proper grounding provided?	Ear protection in use? <input checked="" type="checkbox"/>	Cylinders capped/stored in shade?
Condition of cables?	Safety harness in use?	Adequate warnings in place?
Grinders fitted with guard?	Hand gloves provided & used?	Flashback arrestors fitted?
Work permit system in place?	Respiratory protection (mask)?	Work Permits valid?
		Dust suppression adequate?

#	Observation & Comments, Corrective Action Required	Action by	When	Status
(02)	<p>The scaffolding that has built by Engineering In meters it has not allowed to work by the HSE Team. Because it has not built safely to work men at height. Band-rails not made - correctly.</p> <p><u>Action</u> - Today works at height has stopped:</p> <ul style="list-style-type: none"> <li>- Advised to Bring a HSE officer for the site</li> <li>- Additionally Bring a Rigger - to make the scaffolding.</li> </ul> <p>Time:- 10:45 am, 01:30 pm. Location:- Building-G Area.</p>	HSE officer	Immediately	Not Allowed to work today

Safety inspection by Name:  Signature:   
 Location : All area in site. Time : 18:53

CC: Project Manager | Construction Manager | HSE Manager | Area Superintendent/Engineer

**Item #11 – Incident/Accident Notification report**

<b>Project :</b>	
<b>Type of Incident :</b> <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Injury <input type="checkbox"/> Vehicle Accident <input type="checkbox"/> Dangerous Occurrence <input type="checkbox"/> Environmental	
Date of Incident :	Time of Occurrence :
Location of Incident :	
Name of the injured :	Injury Classification :
Name of Operator :	
Name of Witness :	
Name of Supervisor In-Charge of activity :	

<b><u>Description of the Incident :</u></b>
<b><u>Activity being performed prior to the Incident :</u></b>
<b><u>Brief description of Immediate follow-up done :</u></b>
<b><i>Reported by: Name &amp; Signature:</i></b>
<b><i>Function :HSE (OFFICER)</i></b>
<b><i>Date and time of report:</i></b>

**Note:** This Report should be initiated for reportable lost time injuries / dangerous occurrences/ Environmental incidents and shall be send within **24 hrs** to all concerned

**Item #12- HSE Evaluation Check List for Sub-Contractors**

Name of the Contractor :.....		
Legal Registration :.....		
Scope of Work :.....		
1.	Depending on the size of their scope of work, all major sub-contractors shall (Yes No N/A)	
	Submit their specific HSE plan for review and approval.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.	SPLL ultimately responsible for all sub-contractors' safety system and Compliance. Therefore, sub-contractors are required to give a written Understanding to comply with the SPLL HSE policy and Plan.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.	Once approved, sub-contractor's HSE plan will be considered as part of the site Overall HSE plan and must be complied with.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4.	SPLL will review and approve all sub-contractor method statements.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5.	Regular weekly inspection will be conducted on all subcontractors, their HSE Performance will be evaluated regularly. All issues will be addressed in the sub-contractors coordination meetings.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6.	Depending on the size of their scope of work and/or labor force, the Sub-contractor shall be requested to provide their own HSE Officer (Full time for 150 workers or more and Part Time if less than 150) and shall co-ordinate on a daily basis with SPLL site HSE Officer.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7.	All Sub-contractors shall ensure that adequate supervision is available for all tasks and that all operatives are following safe work practices.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.	All workers shall be inducted upon arrival to the site by as per the induction programme. Tool Box Talks (TBT) shall be conducted on regular bases and / or whenever necessary. Records must be available for all such trainings	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
9.	Smoking is strictly prohibited at workplace except at designated areas	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10.	Nobody is allowed to enter the site without wearing safety helmet,	

	Safety boots, safety jackets with reflective bands and all other needed personal protective equipment (PPE) to perform the task safely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	No one is allowed to work at or more than two metres height without wearing Full body harness and anchoring its lanyard to a firm support preferably at shoulder level.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Usage of eye protection equipment shall be ensured when operatives are engaged for grinding, chipping, welding and gas cutting or any other jobs as and when Site Safety team instruct to do so.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	All PPE like boots, helmet, safety jackets with reflective bands, safety harnesses etc. shall be arranged before starting the job as per recommendation of Site Safety Engineer/Co-coordinator.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Adequate illumination at workplace shall be ensured before starting the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	All rotating / moving parts of the portable / fixed machinery being used shall be adequately guarded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Ladders being used at site shall be adequately secured at bottom and top & must extend 1 metre above the upper level. Ladders shall not be used as working-platforms. Site built ladders will not be allowed. allowed to stand under suspended loads.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Horseplay is completely prohibited at workplace. Running at the site is completely prohibited, except in case of emergency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	Material shall not be thrown from height. If required the area shall be barricaded and one person shall be posted outside the cordoned off area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	No one (other than qualified electricians) is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Inserting of bare wires for tapping power from electrical sockets is completely prohibited.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	All incidents and near misses to be reported to Site in-charge / Site HSE			

	team to enable the management to take necessary steps to avoid the recurrence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	All scaffoldings / working-platforms shall be strong enough to take the expected load. The width of the working platform and fall protection arrangements shall be maintained as per recommendation of Site HSE team.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	All tools and tackles shall be inspected before use. Defects to be reported immediately. No lifting tackle to be used unless it is certified by the concerned competent person on site such as Plant and Machinery supervisor or the Safety Engineer/ Co-ordinator.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	Good housekeeping to be maintained. Passages shall not be blocked with materials. Materials shall not be stacked in unstable condition and dangerously high.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	Debris, scrap and other materials to be cleared regularly from the workplace and at the time of closing of work every day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	All Sub-Contractors shall ensure that all their staff & workmen are following SPLL and Client's HSE Guidelines in addition their own specific HSE plan and ensure full compliance to all Health, Safety & Environment (HSE) Regulations of all the local authorities concerned.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.	Adequate firefighting equipment shall be made available at workplace and persons are to be trained in firefighting techniques.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.	Main contractor's HSE team will treat sub-contractor's personnel			
30.	All the unsafe conditions / unsafe acts identified by contractors, reported by Site Supervisors and / or HSE Personnel to be corrected on priority basis.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	I agreed to comply with the above conditions/SPLL requirements.			
	Authorized person			
	Signature of sub-contractor			

**Item #13- Disciplinary Action Report**

				<i>Description:</i>	
				Disciplinary action Report.	
Issue : 02	Date:01.11.2012	Rev: 01	Form #	7	

<u>Project :</u>	<u>Date of Issue</u>	<u>Report # :</u>
Bloom Central Project		

Details of employee / company to whom the notice is issued:

Name & Roll :

Occupation :

Company :

Details of violation committed

1<sup>st</sup> Warning     
  2<sup>nd</sup> Warning     
  3<sup>rd</sup> Warning     
  Dismissal

"The employee is hereby warned that he could be dismissed if the violation is repeated after 3rd warning."

Description of violation:

.....

.....

.....

Therefore, the following disciplinary action will be taken against you:

Type of disciplinary action taken:

Written warning  
 Wage deduction:     2 hrs.     4 hrs.     1 day     2 days  
 Suspended for the period from \_\_\_\_\_ to \_\_\_\_\_ (Total \_\_\_\_\_ days)  
 Dismissal from location / Site / company

<u>Originator:</u>	<u>Approved by: PM/PD/ DGM-Safety</u>
Name :	Name
Designation :	Designation
Signature	Signature

Note: Dismissal from site has to be approved by PD and from company by VP.

.....

.....

**Item #14 – Safety Non-conformance report**

			<i>Description:</i>	
			<b>Safety N C R</b>	
ISSUE: 00	DATE: 16.02.2014	REV.: 00	FORM #.	<input type="text"/> -018

**Project :** \_\_\_\_\_ **NCR # :** \_\_\_\_\_  
**Location :** \_\_\_\_\_ **Date :** \_\_\_\_\_  
**Issued to :** \_\_\_\_\_

<b>THE FOLLOWING BREACH OF SAFETY FOR WORK UNDER YOUR CONTROL HAS BEEN RECORDED:-</b>	
<b>YOUR OPERATIVE/S WAS/WERE IMMEDIATELY GIVEN THE FOLLOWING INSTRUCTIONS:-</b>	
<b>Name:</b> _____ <b>Date :</b> _____ <b>Time:</b> _____ <b>Signature:</b> _____ <b>CC:</b> <input type="checkbox"/> Task Supervisor <input type="checkbox"/> Site Engineer <input type="checkbox"/> CM <input type="checkbox"/> File	
To be Completed by the Task incharge / Site Engineer	<b>Corrective Action Undertaken and Completed :-</b> <b>Name:</b> _____ <b>Date:</b> _____ <b>Time:</b> _____ <b>Signature:</b> _____
<b>Corrective Action Verified :-</b> <b>Name:</b> _____ <b>Date :</b> _____ <b>Time:</b> _____ <b>Signature:</b> _____ Remarks (if any) : _____ _____ _____	

## Item #15- Risk Assessment

ACTIVITY	HAZARD	CAUSES OF HAZARD	CONSEQUENCES/ IMPACT	RISK EVALUATION		RISK LEVEL	IMPLEMENTED CONTROL MEASURES	ADDITIONAL CONTROL MEASURES	RESIDUAL RISK			ACCEPT Y/N?
				L	S	H/M/L			L	S	H/M/L	

Persons in danger
•
•
Personal protective equipment
•
Information, instruction and training
•
Emergency procedures
•
•
Monitoring and review
•

Signature: \_\_\_\_\_

## RISK MATRIX

### Risk Rating (RR) – Severity x Likelihood

S SEVERITY (IMPACT)	L LIKELIHOOD	Rare Remote possibility (once every 3 years or more) 1	Unlikely Could happen but rare (typically once in a year) 2	Possible Could happen occasionally (on average quarterly) 3	Likely Could happen often (on average once a month or more) 4	Almost certain Could happen frequently (once a week or more) 5
		Insignificant	1	Low 1	Low 2	Low 3
Minor	2	Low 2	Low 4	Medium 6	Medium 8	Medium 10
Moderate	3	Low 3	Medium 6	Medium 9	Medium 12	High 15
Significant	4	Low 4	Medium 8	Medium 12	High 16	High 20
Major	5	Medium 5	Medium 10	High 15	High 20	High 25

**RISK BASED CONTROL PLAN**

<b>RISK LEVEL</b>	<b>ACTION AND TIMESCALE</b>
<b>1-4 Low</b>	Quick, easy controls should be implemented immediately and further action planned for when resources permit. Monitoring required ensuring controls are maintained. Manage through routine procedures. Go for economic improvements where possible. Incident report must be completed.
<b>5-12 Medium</b>	Aim to reduce risks but costs of prevention may be limited. Undertake a risk assessment of the situation / task and implement the appropriate actions. Actions should have a timescale and should be monitored. Where the risk involves work in progress undertake a risk assessment as soon as possible to ensure the safety of the situation or task. <b>Work should not start until the risk is reduced to an acceptable level.</b> Considerable resources may have to be allocated. Contact your Manager and Risk Manager by telephone about the actions that should be taken to reduce the risk/s. incident report must be completed. Incident must be added to service risk register.
<b>15-25 High</b>	<b>Do not commence the activity until</b> a risk assessment has been completed to ensure the safety of the situation or task. If it is not possible to reduce or eliminate the risk even with unlimited resources, work must remain prohibited. Inform your relevant Director, your Manager and the Risk Manager immediately by telephone. Incident report must be completed. Incident must be added to service risk register.

