## **Environmental and Social Monitoring Report**

Project Number: 38928

December 2013

PAKISTAN: New Bong Escape Hydropower Project Laraib Energy Limited Environmental and Social Issues Compliance Report (October 2013 to December 2013)

Prepared by Laraib Energy Limited for the Asian Development Bank

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New Bong Escape Hydroelectric Power Project

# **Environmental and Social Issues Compliance Report**

**Quarterly Report** 

Oct 01, 2013 - Dec 31, 2013

**Laraib Energey Limited** 

Islamabad

### **ENVIRONMENTAL AND SOCIAL COMPLIANCE**

### 1. Incidents of Violations or Non-Compliance

- The following information regarding incidents of violations or non-compliance has been recorded
  - (i) Nature of non-compliance
  - (ii) Violation or non-compliance based on environmental standards and regulations
  - (iii) Recorded dates and authorities
  - (iv) Media or community reactions (if any)
  - (v) Corrective actions, deadlines, identification of responsible parties
- 2. Incidents of violation and non compliance along with its corrective actions in the form of ESOHS Corrective Action Plan (ESOHS CAP) are attached as "Exhibit-27". The following is the status of ESOHS CAP as of Dec 30, 2013.

•	Total number of observations	52
•	Number of Issues closed	46
•	Number of Issues In Progress	01
•	Number of Issues open	05

### 2. Incidents of Environmental and Safety Accidents

### 2.1. Environmental Accidents and Mitigation

1. No Environmental accident has been reported in this quarter.

### 2.2. Health and Safety Accidents and Mitigation

1. The summary of accidents encountered from Oct to Dec 2013, are as follows;

Total Safe Man Hours	Fatality	Lost Work Injury (LTI)	Medical Treatment (MT)	First Aid (FA)	Restricted Work Injury (RWI)	Near Miss	UA/UC	
256621	00	00	00	00	00	02	08	

### 2.3. Near Miss:

Two near misses are reported in this quarter.

1. During annual maintenance a scaffolding clamp fall from 245 elevations luckily No one hit by the falling object, No injury reported.

2. Worker from the contractor was moving from the narrow plank to the base where they were actually working and lost his balance and in the process of stabilizing himself lost his helmet which fell down to the canal. Fortunately there was no injury or loss of property reported.

### 2.4. Incident Property damage

1. No accident occurred during this quarter.

### 2.5. Report of Unsafe Acts/Unsafe Conditions

Eight unsafe acts/ unsafe conditions (UA/UC) are reported in this quarter.

- 1. One of Contractor (Andritz) Supervisor was observed working without safety Helmet in machine hall.
- 2. Opening found uncovered / without barrication in electrical panel near machine hall.
- 3. During the stop log activity both at headrace and tail race ends involving gantry crane operation, an unsafe condition was observed. As the covers are removed there is a strong possibility that a worker involved in the activity may fall into the water down below due to unguarded opening.
- 4. The opening for drainage pit at El. 227 was found without a proper cover / guardrail necessary for the safety of passers-by as well other maintenance staff busy in different sort of Jobs.
- 5. The safety shoes provided to an employee are oversized which make it difficult for her to wear them while working in the Red Zones of NBE HPP. Use of oversized safety shoes is an unsafe condition having the potential to cause an accident.
- 6. Dust removal mat at the entrance of LEL site office is not properly balanced. As corrective action it replace with new one which is balanced and stable.
- 7. Visitors entered in red zone without PPEs. As a corrective action immediately the visit coordinator asked to leave the area and ensures that visitor must visit only green zone.
- 8. Contractor employees working on NBE gates without safety jacket. As a corrective action works has stopped temporarily and advise their supervisor to ensure the compliance of life jacket and next time plenty should be applicable in case of violation.

### 3. Trainings:

### 3.1. External Training;

All external trainings have to be carried out after the approval of ESOHS Manager LEL.

### **Effective Safety Supervision**

Trainer: Mr. Kaleem Khan, Senior Manager Hubco

Venue: Conference Room NBE HPP

Date: 21st November 2013

Participants: TNBRP AJK staff (06) & LEL staff (03)



### Basic Civil Defense Training - 10 Days Training

> Trainer: Chief Instructors(03), Civil Defence, Mirpur AJK

**Training Date:**  $19^{th} - 29^{th}$  November 2013

### **Training Participants:**

■O&M Staff TNBRP AJK (17)

■Security Staff Karakoram Security (05)

### **Training Material:**

25 Books were made available, one for each participant.

### **Participant's Evaluation:**

A test was taken at the end of training session.

### **Certification:**

Successful participants were awarded with Training Completion Certificates.



Basic Civil Defence



Basic Fire Safety



Fire Safety Training



Emergency Response & Evac 1



Emergency Response & Evac 2



First Aid / CPR 1



First Aid / CPR 2



Fire Drill



Civil Defence Training Paper



Certificate Award Ceremony



Certificate Award Ceremony



Certificate Award Ceremony

### Introduction to DuPont® Safety Management System

Trainer: Mr. Kaleem Khan, Senior Manager Hubco **Venue:** Conference Room, Laraib Site Office, NBE HPP

Date: 11<sup>th</sup> December 2013

Participants: TNBRP AJK staff (03) & LEL staff (08)

### Awareness Session - QMS 9001, EMS 14001 and OHSAS 18001

Trainer: Farhad Ali Shahzad, CEO FAS International

Venue: Conference Room, NBE HPP, Mirpur AJK.

**Training Date:** 31<sup>st</sup> December 2013

### **Training Topics:**

1. Quality Management System QMS 9001:2008

2. Environmental Management System, EMS 14001:2004

3. Occupational Health & Safety Management System OHSAS 18001:2007

### **Training Participants:**

■ Finance (01),

- HSE (02),
- Maintenance (12),
- Operation (03),
- Support Services (04)

### **Participant's Evaluation:**

A verbal test was taken at the end of each training session.









### 3.2. In-House EHS Trainings

Following EHS Trainings were conducted by contractor in this quarter;

### Permit to Wok (PTW) System

Training sessions regarding Permit to Work (PTW) system were conducted for Operation as well as Maintenance staff in this month.

### **Operation Staff**

Trainer: Bilal Khan

Venue: Control Room

**Date:** 6<sup>th</sup> November 2013

### Participants: Shift C

Trainer: Bilal Khan

Venue: Control Room

**Date:** 19<sup>th</sup> November 2013

Participants: Shift A

### Maintenance Staff

Trainer: Bilal Khan

Venue: Conference Room NBE HPP

Date: 7<sup>th</sup> November 2013

Participants: Maintenance staff



### Permit To Wok (PTW) System – Revised Procedure

Training sessions regarding Permit to Work (PTW) system were conducted for Operation as well as Maintenance staff in this month.

### Operation Staff

Trainer: Bilal Khan

Venue: Control Room

Date: 12<sup>th</sup> December 2013

■ Participants: Shift B

Trainer: Bilal Khan

Venue: Control Room

**Date:** 18<sup>th</sup> December 2013

Participants: Shift D

Trainer: Bilal Khan

Venue: Control Room

Date: 19<sup>th</sup> December 2013

Participants: Shift A

Trainer: Bilal Khan

Venue: Control Room

Date: 23<sup>rd</sup> December 2013

Participants: Shift C

### Safe Driving and Kitchen Safety

Training session was conducted on Kitchen Safety and safe Driving by ESOHS Officer LEL and attended by all available concerned staff.







### 4. Emergency Response Plan for LEL Office

Laraib energy ESOHS team has developed a complete emergency response plan for Laraib office in which responsibilities of each individual have been defined. Evacuation Plan and Laraib office ERP is attached as "Exhibit 28".

## 4.1. Emergency Response & Evacuation Drills

### 4.1.1. Manual Operation of NBE Gates

- Training on manual operation of NBE Gates was conducted previously in the month
  of June. Muhammad Abbas, Charge man Mech. conducted the training. Six security
  personnel including security manager attended the training.
- Mock drills on monthly basis have been scheduled for manual operation of NBE Gates in case of emergency. First mock drill was carried out on 31<sup>st</sup> October 2013 after a refresher session conducted by Mr. Waseem, Technician (Mechanical) on 30<sup>th</sup> October.
- Six security guards participated in the drill. Observations regarding the safe access and safe manual operation of the gates were communicated to the security staff immediately after the drill.



### 5. Toolbox Talks:

Maintenance Log books along-with Toolbox Records have been developed that are being conducted by relevant Supervisor (Senior Engineer / Charge man).

A training session on "How to Conduct Safety Tool Box Talks (TBTs)" was organized by HSE department in October. The purpose of the session was to familiarize the relevant staff with the requirements of TBTs for necessary further compliance. Maintenance staff including Charge man from all sections attended the session.

### 6. Safety Awareness Programs

### 6.1. Health & Safety Leaflet for Staff, Contractors and Visitors

Health and Safety Leaflet gives a brief description of necessary HSE Policies and Procedures being followed at NBE HPP. Health and Safety Leaflet prepared earlier was provided to the members of SMC for their input / feedback.

Health and Safety Leaflet has also been provided to CEO FAS International for comments - comments still awaited.

The leaflet is currently being used for our guests visiting the plant site and it narrates the emergency response procedure and steps to be taken during any sort of emergency like Fire etc.

### 6.2. Health & Safety Posters

HSE department develops and communicates Job Specific and Activity relevant Notices / Posters. This is a very effective tool and promotes health and safety

awareness for employees, visitors and the general public.

Health and Safety is our number one priority and we believe that 'one accident is too many' so we highlight HSE issues through good health and safety posters in designated locations.

Laraib energy limited also promote HSE culture through poster and sign boards with clearly indicates the commitment of management towards safety.



### 6.3. EHS Bulletin

Safety and Health Bulletins is one of OSHA's tool used to inform internal staff and the public of significant occupational health and safety issues concerning hazard recognition, evaluation, and control in the workplace and at emergency response sites.

### Legislation:

OSHA Instruction CPL 02-00-065
 OSHA 29 CFR 1926
 OHSAS 18001:2007 Best Practices

EHS Department issues monthly bulletin to all departments along with display on noticeboards as well. HSE Bulletin for the month of December 2013 was on "Fog Safety".

Laraib ESOHS department circuited a bulletin on Gas Heater safety in the month of December to improve the awareness level of the people, not only at work place but they should implement the HSE at every forum. Both bulletins are attached as "Exhibit 29".

### 6.4. Safety Dialogue

Safety dialogues on topics like Lockout/Tagout procedures, importance of PPEs while working on the plant site, hearing protection and proper use of safety gears are being carried out frequently with the staff.

### **6.5. Contractor EHS Compliance:**

HSE team of TNBRP AJK with cooperation and guidance of ESOHS team LEL is fully committed to develop, promote and sustain a true safety culture at New Bong Escape Hydroelectric Power Plant (NBE HPP).

Compliance with all HSE requirements by the EPC Contractor and its sub-contractors during the Annual Maintenance at NBE HPP is one of the major targets for ESOHS team (TNBRP & LEL).

In order to achieve this objective and continue with our activities with Zero LTI during the Annual Maintenance at NBE HPP, we have taken following steps till date

Meeting with Sambu Management regarding HSE Compliance during the Annual Maintenance at NBE HPP dated 17<sup>th</sup> December 2013

Awareness Session on HSE Requirements for Contractors (Sambu & Andritz) dated 24th December 2013

HSE Induction of all available staff from Sambu & Andritz dated 24th December 2013.

During all above sessions, HSE requirements like Permit to Work, Confined Space Entry Requirements, Hot Work Permit, Job Safety Analysis, Toolbox Talks etc. were discussed in detail with all attendees to which they agreed.

Andritz, the sub-contractor of Sambu, has shown its Commitment towards Safety by hiring a qualified Safety Office, Mr. Abid Ali. He attended the Awareness session of 24th December 2013 and is in close contacts with the HSE team of TNBRP AJK.

Mandatory PPEs like safety helmet, safety shoes, gloves and goggles etc. are also being emphasized-on for all contractors' personnel. The observations during different site visits regarding activities performed by Contractors like Sambu, Andritz are communicated to the concerned on-spot, for necessary remedial actions.

### 6.6. Safety Management Committees (SMC)

Laraib Energy formed three internal HSE committees including 'D' level committee, safe operation committee and corporate HSE committee. Purpose of these committees is to highlight the gaps of existing HSE system at different forums and start the journey towards the world class HSE standard. Organogram of committees are attached as "Exhibit 30".

### 7. EHS Audits / Inspections:

Laraib Energy ESOHS team has started the complex audit to ensure the HSE compliance in complex area as well as the residential area. In these audits all Laraib management would be involved. Audit calendars are attached as "Exhibit 31".

### 8. ISO Project - Development of QMS, EMS and OHSMS

FAS International has been hired by TNBRP AJK as a consultant in order to achieve its goal of Certification within the intended time period, i.e, 23<sup>rd</sup> March 2014. The road map for this certification process has been developed by FAS International and activities as per map (with slight amendments) are in progress. Activities map is attached as *"Exhibit 32"* 

Awareness Sessions have been conducted for some of our staff on 31<sup>st</sup> December 2013. Management and rest of the staff shall be covered in next two sessions.

### 8.1. Quality Management System QMS 9001:2008

New Bong Escape Hydroelectric Power Complex Quality Management System is to be based on the requirements of ISO 9001:2008. All departments have to establish their own Quality procedures that will be later on discussed during Gap Analysis as per the schedule.

### 8.2. Environmental Management System EMS 14001:2004

New Bong Escape Hydroelectric Power Complex Environmental Management System is to be based on the requirements of ISO 14001:2004. Gap Analysis for the current Policy / Procedures and Practices with the standard's requirements shall be done as per the road map mentioned above.

### 8.3. Occupational Health & Safety Management System OHSAS 18001:2007

New Bong Escape Hydroelectric Power Complex Occupational Health and Safety Management System shall be based on the requirements of OHSAS (Occupational Health & Safety Assessment Series) 18001:2007, as finalized by TNBRP AJK's management.

Gap Analysis for the current Policy / Procedures and Practices with the standard's requirements shall be done as per the road map mentioned above.

### 9. CSR Activities

Following activities have been done in this quarter;

### 9.1. Cash Prize for Volley Ball Tournament:

Laraib energy limited contributed in volley ball tournament which was organized by the local villager in Mangla and Laraib's Community liaison officer distributed the cash prize among the finalists. This new has covered by a local news paper. Cutting is attached as "Exhibit 33".

### 9.2. Water distribution System for Ablution/Wuddu at Mosque

Laraib energy devotes a water distribution pipe for ablution in local village (Nakki) mosque.

			<b>ESOHS RECOMME</b>	NDED ACT	TION ITEMS/ CORRECTIVE A	ACTION P	LAN			
Source	No	Location	Finding	Reference/Da te	Action Required	Target Date	Priority	Responsibility	Status	Remarks
LEL Comments	103C	Landscaping	Rain cuts and damage water trenches obseved in different areas of landscaping	Inspection by LEL Feb 13,2013	ensure the good maintenance practice including repairing of rain cut, watering, triming and repairing of water trenches.	On going Activity	High	Manager HSE	Close	Done by Sambu/ TNBRP
LEL Comments	2	Precurment	Some workers of TNBRP were found working without Life Jackets and Safety Harniss.	Inspection by LEL May 15,2013	Precurment of life jackets and safety harniss is mandatory.	15-Jun-13	High	Manager HSE	Close	-
LEL Comments	3	Outside Power House	This is observed that there is no sufficient arrangment for night shift security guards	Inspection by LEL May 16,2013	Provision of mosqioto repelent is very necessary in these wheather condition.	28-May-13	High	Manager HSE	Close	-
LEL Comments	4	Machine Hall	Naked wire of vaccume cleaner have pluged directly.	Inspection by LEL May 26,2013	Arrange the 2 pin shoes and the attached with vacume cleaner wire	Immediate	High	Manager HSE	Close	-
LEL Comments	5	Power House	Lock out /Tag out sytem are found missing	Inspection by LEL May 26,2013	Prepare a LOTO procedure and implement accordngly.	15-Jun-13	Medium	Manager HSE/Operation	Close	-
LEL Comments	6	Headrace area	A lot of trash accomulated at stoplog area.	Inspection by LEL Jun 17,2013	Clean up the entire area safely.	20-Jun-13	Medium	Manager HSE	Close	-
LEL Comments	7	Headrace area	Dead animals was floating at headrace and creating a lot bad smell.	Inspection by LEL Jun 17,2013	Arrange a crane and proper PPEs for the safe escape of dead animal from water surface of headrae.	21-Jun-13	High	Manager HSE	Close	-
LEL Comments	8	Overhead Crane	Oil leakage from slings of overhead canes.	Inspection by LEL Jun 17,2013	Indentify the root cause and fix the issue as soon as possible.	21-Jun-13	Medium	Manager HSE	Close	-
LEL Comments	9	PPEs Non Compliance	A TNB's worker observed without safety shoes at 245 elevation.	Inspection by LEL Jun 26,2013	Arrange & provide safety shoes to him and ensure the 100 % PPEs compliance . Picture of this guy is alredy share with HSE department TNB	28-Jun-13	High	Manager HSE	Close	-
LEL Comments	10	245-Elevation	Safety railing of unit 3 found missing.	Inspection by LEL Jun 26,2013	This is an unsafe condition may leads to a major accident so portable raing is already available to secure the area.  Ensure the conpliance.	Immediate	High	Manager HSE	Close	-
LEL Comments	11	245-Elevation	Security guard is deputed at 245- elevation to check the PPEs of all contractors, sub contractors, consultants and client but during my today's survey it was observed that many employee were working at 245-elevation without PPEs.	Inspection by LEL Jun 26,2013	Keep the strict check and ensure the compliance and conduct daily inspection, surprize audits and training regading importance of PPEs and other safe work practices.	Immediate	High	Manager HSE	Close	_
TNBRP comments	12	Procedural Voilation	Some worker not of Andritz and Sambu observed working without PTW.	Inspection by TNB Jun 26,2013	This is a clear procrdural voilation , all contractor must be follow the company procedure and this should be implemented immedialy.	Immediate	High	Management	Close	Panni sb circulate an email regarding compliance of PTW procedure to all concerns.

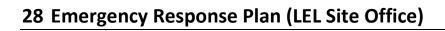
			<b>ESOHS RECOMME</b>	NDED ACT	TION ITEMS/ CORRECTIVE	ACTION P	LAN			
Source	No	Location	Finding	Reference/Da te	Action Required	Target Date	Priority	Responsibility	Status	Remarks
LEL Comments	13	245-Elevation	Wire plug-in directly without using the 2 pin shoe.	Inspection by LEL July 2nd,2013	Immediately arrange a 2 pin shoe and installed before starting the activity.	Immediate	High	TNBRK HSE Manager	Close	-
LEL Comments	14	Intake	Stoplog gate opening of Unit 4 found without cover and railing and warning sign board also found missing at upstream stoplog area.	Inspection by LEL July 2nd,2014	Cover the open area / if any maintenance work is in-progress, block the access with scaffolding, install warning board and employee must wear life jackets and safety harness before execution of any activity.	Immediate	High	TNBRK HSE Manager	Close	
LEL Comments	15	Water Treatment Plant	Stagnant water observed in water treatment plant at 245-elevation.	Inspection by LEL July 2nd,2015	First of all rectify any leakage if observed in water treatment plant and then clean up the entire area.	ı	Medium	TNBRK HSE Manager	Close	TR has been raised for uneven surface of water treatment floor to Sambu by TNBRP.
LEL Comments	16	LandScaping & Plantation	Landscaping and plantation of entire power house badly affected by last 2-3 days rain.	Inspection by LEL July 2nd,2016	Expedite the maintenance activity of landscaping	1	Medium	TNBRK HSE Manager	Close	
LEL Comments	17	Machine Hall	Poor housekeeping observed at 245-elevation creating the slip, trip and falling hazard.	Inspection by LEL July 2nd,2017	Clean up the entire area to avoid any undesired incident.	Immediate	Medium	TNBRK HSE Manager	Close	
TNBRP comments	18	WareHouse	The Chemicals provided by EPC Contractor without Proper Labeling (Manufacturer Name, Chemical Name,concentration) etc.	Inspection by TNB Jun 26,2013	Contractor asked to fullfill the standard requuirements.	-	Medium	1-EPC Representative 2- Head of Maint. 3-Warehouse Officer	Open	A reminder will be send to EPC contractor in coming week.
TNBRP comments	19	PPEs Non Compliance	A Contractor workers observed without safety shoes at 245 elevation.	Inspection by TNBRP July 02,2013	Arrange & provide safety shoes to all the contratcor staff and Contractor / TNBRP ensure the 100 % PPEs compliance .	Immediate	High	EPC Representative / Manager EHS	Close	
TNBRP comments	20	WareHouse	Improper storage arrangements for oils / paints etc	Inspection by TNBRP July 02,2013	All such items in the warehouse need to be stored in a proper manner as they are hazardous in nature	21-Jul-13	High	TNBRP	Close	
TNBRP comments	21	Plant Main Entrance (Security)	Entry Pass System for Complex	Inspection by TNBRP July 02,2013	All Companies must be followed the entry pass and issue employment cards to all their employees working at NBE HPP	Immediate	High	EPC/OE/TNBRP	Close	Issue is still open due unavailability of empoyees list of Androtz and Sambu.
LEL Comments	22	270 Elevation	Some workers observed working in unsafe manner without PTW.	Inspection by LEL July 17,2013	Stop the activity and arrange a certified crane for the execution of work.	Immediate	High	EPC/OE/TNBRP	Close	
LEL Comments	23	Power House	Awarness session regarding accident reporting needed to be conducted for O&M contractor.	Inspection by LEL Aug 08,2013	A full training session needed to conducted by LeL with the coordination of TNB HSE deptt.	31-Aug-13	Medium	Officer ESOHS LEL/Manager EHS TNB	Close	

			ESOHS RECOMME	NDED ACT	TION ITEMS/ CORRECTIVE	ACTION P	LAN			
Source	No	Location	Finding	Reference/Da te	Action Required	Target Date	Priority	Responsibility	Status	Remarks
LEL Comments	24	Power House	Scoffolding erected by sambu near transformer dyke is not safe for working.	Inspection by LEL Aug 08,2013	Complete scoffolding inspection needed to be carried out by a competent person and after rectification of all discrepencies employees alow to use otherwise it may cause an accident.	31-Aug-13	High	TNBRK HSE Manager	Close	
LEL Comments	25	NBE Gates	Local people are fishing near NBE gates which are on high risk.	Inspection by LEL Aug 08,2013	TNB security should stopped the all local to enter in the identified. Because section 144 are still appliable. CLO meet with SDM and disscuss the matters and slove it ASAP.	Immediate	High	Manager Security/ CLO	Close	
LEL Comments	26	Power House	Construction worker was observed working at height without coupling the harness with scoffolding pipe .	Inspection by LEL Aug 17,2013	conduct a tool box talk on safe working at heaight and keep strickt check on all activities of power house.	31-Aug-13	High	TNBR HSE Manager	Close	
LEL Comments	27	Power House	Hight of Emergency light hanger at diffrent elevation is not suitable and have the potential to cause serious injury.	Inspection by LEL Aug 22,2013	Fix all hangers above six feet height	31-Aug-13	High	TNBRP HSE Manager	Close	
LEL Comments	28	Landscaping	Landscaping & plantation of power are not maitaining properly.	Inspection by LEL Aug 28,2013	Entire landscaping needs proper triming immediatly.	Onging Process	High	TNBRP HSE Manager	in-progress	-
LEL Comments	29	Elevation 245 (Machine Hall)	Termination cables of Diesel generator was found without cover.Theseasre high voltage cables which could be dagrous when diesel generator was operational.	Inspection by LEL Sep 08,2013	Cover with (Rubber) terminal insulator. Or communicate with maitenance department taking the proper remedial measure.	10-Oct-13	-	TNBR HSE Manager	Close	
LEL Comments	30	Elevation 245 (Machine Hall)	A lot of waste observed at unit 2 and unit three.	Inspection by LEL Sep 09,2013	Communicate to concernd department and cleaning and house keeping of this area	16-Sep-13	-	TNBR HSE Manager	Close	
LEL Comments	31	Headrace area	Some gardner are working without gloves and safety shoes	Inspection by LEL Sep 10,2013	Provide gloves and safety shoes to avoid the bio hazards.	12-Sep-13	-	TNBR HSE Manager	Close	
LEL Comments	32	Procedure	Some comments in risk assessment procedure is highlighted and communicated to TNB.	Inspection by LEL Sep 16,2013	Address all comments and submitt the final procedure.	24-Sep-13	High	TNBR HSE Manager	Close	
LEL Comments	33	Firefighting Equipment	Inspection tags found missing on portable fire extinguisher	Inspection by LEL Sep 23,2013	Prepare, inspection tags for all extinguisher and inspect frequently	15/10/2013 10/11/2013	Medium	Medium	Close	PO has been issued
LEL Comments	34	Elevation 227	Open main hole obseved without barication.	Inspection by LEL Sep 23,2013	Baricade if working on it and cover if no work remaining.	08-Oct-13	Medium	Medium	Close	This activity has been included in risk reduction project , which will be initiated on 01 Nov, 2013.

			ESOHS RECOMME	NDED AC	TION ITEMS/ CORRECTIVE	ACTION P	LAN			
Source	No	Location	Finding	Reference/Da te	Action Required	Target Date	Priority	Responsibility	Status	Remarks
LEL Comments	35	Power House	Taging is found missing at Machine hall and 251 El. Of power house.	Inspection by LEL Sep 28,2013	Tag the entire power house for the identification of area and equipment.	15-Oct-13	Medium	TNBR HSE Manager	Close	
LEL Comments	36	Power House	time. 28,2013 prepare a map on the basis of results		15-Oct-13	Medium	TNBR HSE Manager	Close	-	
LEL Comments	37	Power House	Noise level poster/Tags of each elevation is not available on notice board.	Inspection by LEL Oct 22,2013	Prepare a Noise Map for each section of Power House and proposed PPEs will also mention in that map.	15-Nov-13	Medium	HSE Officer LEL, TNBRP HSE Manager	Close	-
LEL Comments	38	-	Comment of MM on ESMP and OHSMP is still pending.	Inspection by LEL Oct 24,2013	Address these comment ASAP for apporoval of plans.	01-Nov-13	High	TNBRP HSE Manager, HSE Officer LEL	Close	-
LEL Comments	39	-	It was observed that Evacuation Plans of each elevation was not available.	Inspection by LEL Oct 27,2013	This is very necessary that peoples has to be aware about evacuation in any emergency situation. Prepare a plan and fix on suitable location of power house.	20/11/2013, 13/12/2013	High	TNBR PHSE Manager.	Open	-
LEL Comments	40	-	Risk Assessment of power house is still pending.	Inspection by LEL Oct 27,2013	Start the risk assessment accoding to the submitted procedure.	20/11/2013, 13/12/2013	High	TNBRP HSE Manager.	Open	-
LEL Comments	41	-	It was observed that HSE statistics received on Oct 30 was report on previous catagorization, only summry was changed.	Inspection by LEL Oct 30,2013	study the OSHA Clause 1904.7 for incident recording and change the definations in exiting formate and report accodingly.	05-Nov-13	High	TNBRP HSE Manager.	Close	Summary of incident reporting was OK as described in OSHA.
LEL Comments	42	Elevation 251, 245	Tripping Hazard due to joint repairing methodology on the floor of 245 and 251 elevation.	Inspection by LEL Nov04,2013	Fluorescent Paint should applied for warning of tripping Hazard.	10/12/2013 10/01/2014	Medium	TNBRP HSE Manager.	Open	-
LEL Comments	43	Power House	Taging is found missing on emergency calling booths, main breakers and eye & head wash shower.	Inspection by LEL Nov04,2013	Taging and posters plays a vital to improve the awarness level among employees so all identified location needed to be tagged.	27/11/2013	Medium	TNBRP HSE Manager.	Close	-
LEL Comments	44	227-Elevation	Passage way obseved block which could be very severe in emergency situation	Inspection by LEL Nov04,2013	All scoffolding pipes, planks and joints which cause blokage of passage way needed to remove.	27/11/2013	High	TNBRP HSE Manager.	Close	-
LEL Comments	45	Power House	Poor Housekeeping observed in water treatment plant and workshop.	Inspection by LEL Nov11,2013	Entire area needed to be clean and Clear.	27/11/2013	Medium	TNBRP HSE Manager.	Close	
LEL Comments	46	Overhead Crane Entry Point	Open electrical box of emergency light with naked wires was observed.	Inspection by LEL Nov11,2013	elecrical box should be closed or isolate if some work needed to be done.	26/11/2013	High	TNBRP HSE Manager.	Close	
LEL Comments	47	245-Elevation	HVAC duct Safety cover found missing in air compressor area.	Inspection by LEL Nov19,2013	Fabricate and install safety cover on identified location.	10/12/2013	Medium	TNBRP HSE Manager.	Open	Risk Reduction project has been temporary stoped due to Annual
LEL Comments	48	Work Shop	Some Gardners were observed without PPEs in work shop area	Inspection by LEL Nov22,2013	Entry should be restricted in workshop, only relevant employees allow to enter the workshop.	27/11/2013	High	TNBRP HSE Manager.	Close	

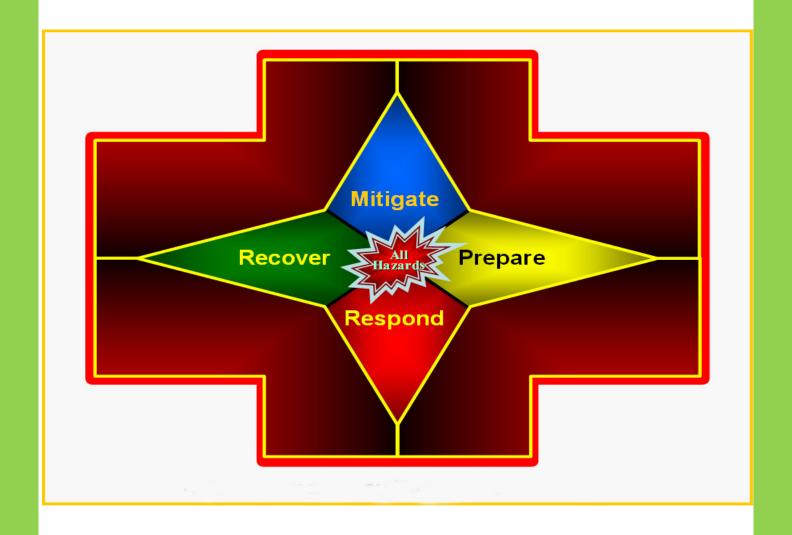
	ESOHS RECOMMENDED ACTION ITEMS/ CORRECTIVE ACTION PLAN													
Source	No	Location	Finding	Reference/Da te	Action Required	Target Date	Priority	Responsibility	Status	Remarks				
LEL Comments	49	Plant Elevator	No tag has been found inside the elevator which guide in emergency situations	Inspection by LEL Nov22,2013	Guidance poster/Tag needed to be paste in side elevator which properly giuide the user.	15/12/2013	High	TNBRP HSE Manager.	Close					
LEL Comments	50	NBE Gates	Life Jacket Tags found missing at NBE gates.	Inspection by LEL Dec 01, 2013	Life jacket Tag should be pasted on avery gate for the awareness of staff.	15/12/2013	High	TNBRP HSE Manager.	Close					
LEL Comments	51	Transformer Deck	A proper cover was not placed on Transformer oil drainage tank.	Inspection by LEL Dec 12, 2013	Proper cemented/metallic cover needed to cover the tank	22/12/2013	High	TNBRP HSE Manager.	Close					
LEL Comments	52	Transformer Deck	Cable Trench found open in transformer deck.	Inspection by LEL Dec 17, 2013	All trenched sould be cover with suitable covers.	22/12/2013	High	TNBRP HSE Manager.	Close					

Sum	mary			
Source	Total Issues	Closed	In-progress	Pending
Recommendations from EP-AJK	-	-	-	-
Recommendations from MM	-	-	-	-
LEL Comments	47	42	1	4
TNBRP comments	5	4	0	1
Reported Accidents By Contractor	-	-	-	-
Reported Unsafe Acts/Unsafe Conditions (UA/UC)	-	-	-	-
Recommendations from IFC	-	-	-	-
Total	52	46	1	5





## EMERGENCY RESPONSE TEAM (LEL SITE OFFICE) ROLES AND RESPONSIBILITIES



### SCOPE AND PURPOSE OF THE PLAN

This plan will be implemented if an emergency occurs which may cause or create a potential risk for serious injuries, fatalities, losses or damage to Laraib Energy Limited (Site Office). The procedures developed for implementation of this plan include instructions to:

- Evacuate personnel to designated safe area, count crew-members and provide security;
- Notify TNBRP's personnel, government agencies and external support services (if any required);
- Isolate and evacuate the hazard area to prevent and reduce harm to the company personnel, the environment and property;
- Establish communication centres where company personnel shall locate to manage onsite emergency activities provide direction and support to personnel.
- Undertake action to minimize property loss and equipment damage if possible.

.

#### **EMERGENCY:**

"A serious, unexpected, and often dangerous situation requiring immediate action"

### **EMERGENCY CLASSIFICATION**

This plan is implemented using the following Emergency Conditions. Normally, these scenarios are initiated at Level-1. However, if the initial problem is severe it may be initiated at Level-2 or Level-3.

### LEVEL-1

It is an Emergency state in which an incident or series of incidents may require normal operations to be temporarily suspended. There is no immediate threat to the safety of personnel, the environment, company operations and equipment. Personnel and equipment in site office can control the situation. The following criteria define a Level-1 Emergency:

- An injury/illness that needs medical aid but does not result in lost time.
- A spill or release of hazardous/ toxic substance, chemical or waste, which is contained on-site and does not exceed regulatory reporting requirements.
- Small contained fire or explosion.
- Vehicle accident (depending upon the severity).

### LEVEL-2

It is an emergency state in which an incident or series of incidents may result in serious injury, significant fire/ explosion, major equipment damage or Oil spillage in site office. There is no immediate threat to safety of personnel, the environment, the public, but external support services may be required. The following criteria define a Level-2 Emergency:

- An injury or illness requiring medical aid that may result in lost time or poses a health threat to personnel.
- Property or equipment damage.
- Any oil spillage or release of liquid waste or emission which may result in significant environmental impact constitutes a threat to life, property or community and requires regularly reporting, clean-up and disposal.
- Significant fire or explosion.
- Theft or vandalism.
- Vehicle Accident (hit-and-run, injuries/damage)

### LEVEL-3

It is an emergency state in which an incident or series of incidents may have resulted in a fatality, major fire/ explosion, oil spillage, and emissions to the environment. The following criterion defines a Level-3 Emergency:

- A fatality and/or illness which poses a health threat to personnel and public.
- Major fire or explosion.
- Major property and/ or equipment damage
- All type of oil spillage or release of liquid waste or emissions that may result in significant environmental impact constitutes a threat to life and/ or public property and requires regulatory reporting, clean-up and disposal.
- Imminent threat to the public or public property
- Bomb threat or extortion.
- Theft, vandalism or sabotage.

### **EMERGENCY RESPONSE TEAM (Site office)**

"Emergency Response Team is a group of people who prepare for and respond to any emergency incident, such as Fire, natural disaster and any catastrophic emergencies".

Laraib Energy's emergency response team plays its role in all sorts of emergencies as describe earlier. Team leader of emergency response team at site, referred to as the incident commander. If any emergency initiate in the absence of any ERT member back member will take the charge voluntarily, otherwise backup team will support the ERT. The team can coordinate external resources that may be required to handle the press and communicate to the regional management about the incident. LEL employees who are not a part of ERT will immediately report to assembly point. The team members are;

S No	Name	Designation		Contact No	E-mail
3140	Nume	Designation	Ext.	Mobile	2 111411
1	Azhar Masud Panni	Head of Operations	108	03028558999	azhar.panni@laraibenergy.com
2	Mustafa Umar Riaz	Sr. Manager Tech.	110	03005003655	umar@laraibenergy.com
3	Farrukh Ahmad	AM ESOHS	102	03008560930	farrukh.ahmad@laraibenergy.com
4	Sami Ullah Ch.	Manager Sp. Projects	104	03008561226	sami@laraibenergy.com
5	Muhammad Asif	AM Mechanical	128	03005552419	asif@laraibenergy.com
		E	RT Backup Te	am	
1	Hasnain Haider	Chief Exec. Officer	-	03008244890	hasnain@laraibenergy.com
2	Umair Arif	Admin Officer	105	03135990690	umair@laraibenergy.com
3	Muhammad Sohail	Officer ESOHS	107	03333828382	sohail@laraibenergy.com
4	Qaisar Iqbal	Electrical Engineer	107	03215690157	fma@nbe-jv.com
5	Fawad Maqsood	Electrical Engineer	103	03005552419	fawad@laraibenergy.com

### Roles and Responsibilities of Emergency Response Team

### Communication Channel.....

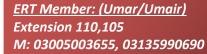
### **OBSERVER:**

- Sound the siren / Call for help.
- Extinguish small fire if trained.



### EMERGENCY RESPONSE TEAM LEADER: (Farrukh /Sohail) Extension 107, Mobile 03333828382, 03008560930

- Assess the situation and mobilize the emergency response
- Initiate the safety measures to control emergency.
- Provide help where required.
- Supervise all team members according to their roles and responsibilities.
- Utilize the team to minimize the damages.



ERT Member: (Asif/Fawad) **Extension 103,128** M: 03005552410, 03005552419 ERT Member: (Sami /Qaisar) Extension 104,107 M: 03008561226, 03005552419

- Contact TNBRP for help (Ambulance, First aider).
- **Contact Security Manager** and Manager Admin.
- Contact nearest hospital for assistance.
- Contact Rescue 1122 if situation is uncontrolled.
- Ensure that all vehicles are standby along with drivers.
- Contact HOO/ CEO to inform about the incident.

- Evacuate the injured /unconscious people if safe way is available.
- Try to salvage the important records/documents when all employees have been evacuated.
- Isolate the electricity and gas connections if possible.
- Checking the site after dealing with an incident.

Start the head count and inform rescue team about

- missing persons. Maintain up to date list of all employee and their contact details.
- Coordinate with contractor security to handle the community (outsider).
- Coordinate with ambulance drivers to shift the injured and unconscious employees.



CEO / HOO Ext: 106

- Provide the principle channel of communication.
- Define the information that to be passed to government and media.
- Coordinate with media.

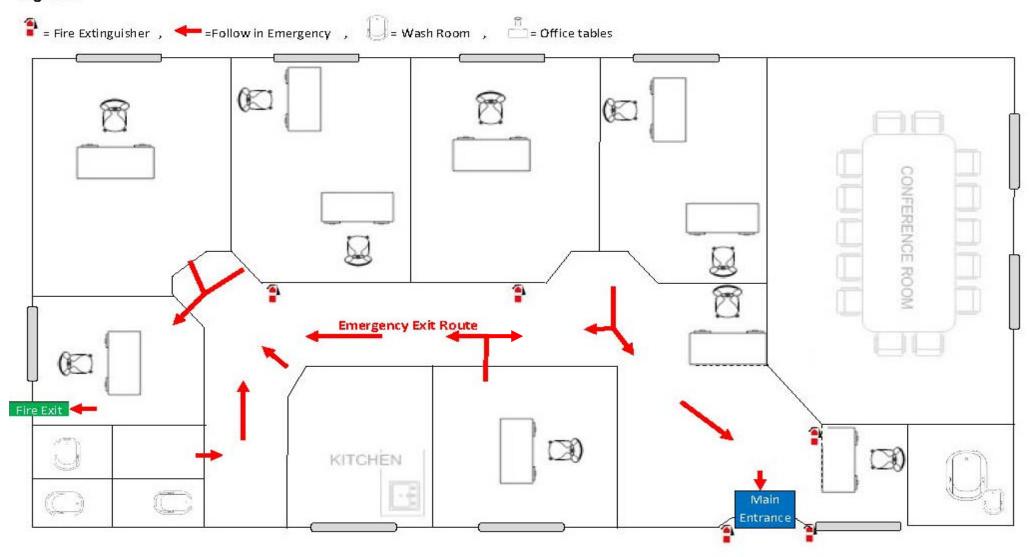


Contractor Tel:

- Emergency response team of contractor immediately mobilize for help.
- Administration will provide all available support i.e. transport, medical.
- Security Manager will provide the security to handle the outsider.

## **Emergency Evacuation Plan (LEL Office)**

### Legends:







## TNB REMACO PAKISTAN (PRIVATE) LIMITED

(Wholly Owned Subsidiary of TNB REPAIR & MAINTENANCE SDN. BHD. Malaysia)

## HSE BULLETIN

**December 20, 2013** 

## **Fog Safety**

Fog is one of the scariest things to drive in, so use extreme caution when driving in fog. Delay your trip until it clears the fog. It is important for drivers to drive as safely as possible in these weather conditions. It could save your life. If you are caught driving in fog, here is how to drive safely in fog.



### **Follow these tips:**

- Slow down gradually and drive at a speed that suits the conditions.
- Make sure the full lighting system of your vehicle is turned on.
- Use your low-beam headlights. **High beams** reflect off the moisture droplets in the fog, making it harder to see.
- If you have fog lights on your vehicle, use them, in addition to your low beams.
- Be patient. Avoid passing, changing lanes and crossing traffic.
- Use pavement markings to help guide you. Use the right edge of the road as a guide, rather than the center line.



### TNB REMACO PAKISTAN (PRIVATE) LIMITED

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- Increase your following distance. You will need extra distance to brake safely.
- Look and listen for any hazards that may be ahead.
- Reduce the distractions in your vehicle. For example, turn off your cell phone. Your full attention is required.
- Watch for any electronically operated warning signs.
- Keep looking as far ahead as possible.
- Keep your windows and mirrors clean. Use your defroster and wipers to maximize your vision.
- If the fog is too dense to continue, pull completely off the road and try to position your vehicle in a safe parking area. Turn on your emergency flashers, in addition to keeping your low-beam headlights on.

### DON'T:

- Don't stop on the traveled portion of the road. You could become the first link in a chain-reaction collision
- Don't speed up suddenly, even if the fog seems to be clearing. You could find yourself suddenly back in fog.
- Don't speed up to pass a vehicle moving slowly or to get away from a vehicle that is following too closely.

### **REMEMBER:**

- Watch your speed. You may be going faster than you think. If so, reduce speed gradually.
- Leave a safe braking distance between you and the vehicle ahead.
- Remain calm and patient. Don't pass other vehicles or speed up suddenly.
- Don't stop on the road. If visibility is decreasing rapidly, pull off the road into a safe parking area and wait for the fog to lift.
- Use your low-beam lights.







## Safety Bulletin

### **GAS HEATER SAFETY**

### **INTRODUCTION:**

A gas heater is a device used to heat a room or outdoor area by burning natural gas or liquefied petroleum gas. Gas heaters can be dangerous due both to risk of fire, and to the emissions. All Fuel burning equipments should be vented to the outside to avoid the carbon monoxide (CO) poisoning because carbon monoxide is a toxic gas, but, being colorless, odorless, tasteless, and initially non-irritating, it is very difficult for people to detect. Carbon monoxide is a product of incomplete combustion of organic matter due to insufficient oxygen supply to enable complete oxidation to carbon dioxide (CO2).

### SIGN OF TROUBLE:

A gas heater can cause serious health problems that seem to be worse, or only occur when the heating is on, may be caused by carbon monoxide from a gas heater. Symptoms of carbon monoxide poisoning include:



High levels of carbon monoxide are very dangerous and may cause people to pass out or even die. Carbon monoxide combines with hemoglobin to produce carboxyhemoglobin, which is ineffective for delivering oxygen to bodily tissues. Concentrations as low as 667 ppm may cause up to 5 carboxyhemoglobin may result in seizure, coma, and fatality. If you suspect you may be affected by Carbon monoxide, open windows and doors, turn off the appliance and go outside to fresh air.

### **NFPA REGULATION:**

- Keep anything that can burn at least three-feet away from heating equipment, like the furnace, fireplace, woodstove, or portable space heater.
- Have a three-foot "kid-free zone" around open fires and space heaters.
- Have heating equipment cleaned and Inspected every year by a qualified professional.

### YOU SHOULD ALWAYS:

- ✓ Uses stick pipe dope (not Teflon tape) on gas connection threads. Don't use oil-based compounds.
- ✓ Have plenty of ventilation never seal up doorways, windows or vents. Ventilation is very important as it allows fresh air to come in and fumes to go out.
- Check for leaks with a dish detergent solution used on all gas connections you've either made or disturbed. Never test for gas leaks with a flame. If any leaks are found, turn off the gas right away and fix them.
- ✓ Gas heaters need to be professionally installed and properly looked after; an unsafe heater can cause a house fire or pollute your home with dangerous fumes.
- ✓ See that the main burner flame settles down, does not burn yellow and doesn't smoke.
- ✓ Turnoff Gas heaters before going to bed.

### WHAT YOU SHOULD NOT DO:

- Never use a gas heater in a bathroom, bedroom or caravan. Toxic gases may cause serious health problems in these situations.
- ✓ Never use or store solvents, aerosols or pressure pack cans near a gas heater – even if the heater is turned off, the pilot light may still be on.
- Never dispose of rubbish such as tissues, cotton buds or other things in a gas fire – this can affect combustion and produce dangerous pollutants.
- ✓ Never use an outdoor appliance inside (this includes barbeques and patio heaters).

### WHEN TO CHECK YOUR GAS HEATER:

Your heater needs to be checked if:

- There is a yellow or sooty flame.
- The pilot light goes out unexpectedly, or 'pops' or 'bangs' when lighting.
- The walls become too hot to touch while the heater is on.
- There are soot stains around the heater.

### **THINGS TO REMEMBER:**

◆ If you service your heater regularly and use it correctly, it should be safe and economical to use.





Laraib Energy Limited



**COMMITTES** 

## **HSE Committees**



## HSE Committees

### **D Level Committee**

•Purpose of this committee is to addresses the activities related to personnel safety issues. Personnel safety is all the activities that prevent incidents from occurring, which focus on the human element and the interface between people and their work environment.

### Corporate HSE Committee

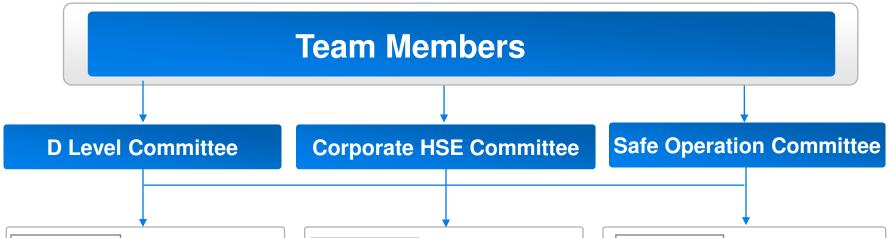
- •The Corporate HSE Committee's primary role is to provide strategic guidance to the overall HSE improvement initiatives.
- •The Committee would provide visible personal leadership, commitment, support, accountability and follow-through for all HSE programs.

## Safe Operation Committee

- •SOC is the top level safety committee, directly reports to the CEO.
- •SOC is the final review authority for Safety, Environment & Industrial Hygiene matters related to a plant site and may only be over-ruled by CEO or Corporate HSE Committee.

## **HSE Committees**







Sr. Manager Chairman

**Secretary Assistant Manager HSE** 

### **Members:**

- Officer HSE
- Electrical Engineer
- Officer HR.



**CEO** Chairman

Secretary
Sr. Manager HSE (HUBCO)

### **Members:**

- Head of Operations
- Chief Finance Officer
- Sr. Manager Tech.
- Manager HR



HOO Chairman

Secretary
Sr. Managor

Sr. Manager Tech.

### **Members:**

- Manager Special Projects
- Assistant Manager HSE
- Assistant Manager Mech.

## Thank You

Remember ABC, Always be Careful....

## 31 Audit Calendars

### Management Safety Audit (MSA) Schedule

	December,13			.3		Jan	,14			Feb	,14			Mai	r,14			Apr	,14			May	,14			Jun	,14	
	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
CEO																												
НОО																												
SMT																												
Mech																												
C&I																												
MSP																												
Adm																												

Full Plant	
EL 245+241	
El 251	
El 255	
El 265+270	
Transformer Deck and Yard	



Audi	t Plan for Kitchens 2	014													
Sr.	Location	Audit Type						Time	Line						Remarks
No	Location	Addit Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Remarks
1	LEL Staff	Kitchen Audit	1	2	3	4	1	2	3	4	1	2	3	4	
2	Residence	Personal Hygiene	1	2	3	4	1	2	3	4	1	2	3	4	
3	Residence	House keeping	1	2	3	4	1	2	3	4	1	2	3	4	
4		1/:+ ab a a A d:+	1	1	_	1	Λ	2	2	1	4	2	_	1	
4	LEL Site Office &	Kitchen Audit	4	3		1	4	3	2	1	4	3	2	1	
5	Kitchen	Personal Hygiene	4	3	2	1	4	3	2	1	4	3	2	1	
6	Kitchen	House keeping	4	3	2	1	4	3	2	1	4	3	2	1	
7	TAIDDD CIL. Office	Kitchen Audit	2	4	1	3	2	4	1	3	2	4	1	3	
8	TNBRP Site Office	Personal Hygiene	2	4	1	3	2	4	1	3	2	4	1	3	
9	& Kitchen	House keeping	2	4	1	3	2	4	1	3	2	4	1	3	
10	TNBRP Staff	Kitchen Audit	3	1	4	2	3	1	4	2	3	1	4	2	
11		Personal Hygiene	3	1	4	2	3	1	4	2	3	1	4	2	
12	Residence	House keeping	3	1	4	2	3	1	4	2	3	1	4	2	

Colour Code	Description			
1	First Week of the Month			
2	Second Week of the Month			
3	Third Week of the Month			
4	Fourth Week of the Month			

Phase-1	Visit Schedule at TNB-New Bong Site for ISO Project  Month: December 201								
	Mon	Tue	Wed	Thu	Fri	Sat	1		
	-				-3.11	14-Dec			
week 1		31-Dec	1-Jan				1		
Phase-2							Month: January 201		
	Mon	Tue	Wed	Thu	Fri	Sat	1		
week 2	p. North	2000		E MOOR	10-Jan	11-Jan			
week 3	1 1			11	17-Jan	18-Jan			
week 4	7 9				24-Jan	25-Jan			
week 5	9			30-Jan	31-Jan		1		
Phase-2							Month: February 201		
	Mon	Tue	Wed	Thu	Fri	Sat			
week 6				6-Feb	7-Feb		i		
week 7				12-Feb	13-Feb		1		
week 8	1			per attacks	20-Feb	21-Feb			
				150					
Phase-3							Month: February 201		
	Mon	Tue	Wed	Thu	Fri	Sat			
Week 1	2 3			26-Feb	27-Feb	28-Feb	J		
Phase-3							Month: March 201		
	Mon	Tue	Wed	Thu	Fri	Sat			
week 2	<b>1</b>	77.70	Contractor	J	7-Mar	8-Mar			
week 4		Cer	tification 8	lody Final A	idit				
		The lates of							
_	-			areness, inte sis, SOPs, in			Lindle		
7	- 8			on at FAS O					
			n Body Auc		The property	m, 451,101	mada etc.		
		46141116441							
31-Dec	Certificatio	ns Awarene	ss Session	Team-1					
10-Jan	Certifications Awareness Session Team-2								
18-Jan	Certifications Awareness Session Team-3								
30-Jan	Internal Auditor Training (Class Room)								
31-Jan		Internal Auditor Training (Practical)							
				Secuarity Gu	ards)				
20-Feb	First Aid, Fi	re and Safe	ty Training	To All Staff	24.000				
20-Feb 21-Feb									
		ne voice i i in							
		2001/Caroca - 4285		]					

## **33 CSR Activity**



